McKinsey Quarterly

60th birthday edition

The FUTURE of GROWTH

2025 #2

Published since 1964
by McKinsey & Company,
3 World Trade Center,
175 Greenwich Street,
New York, New York 10007.

Cover photography
by Andrew B. Myers

Portrait illustrations
by Oriana Fenwick

Iconography
by Tim Boelaars

McKinsey Quarterly meets the Forest Stewardship Council (FSC) chain-of-custody standards.

The paper used in *McKinsey Quarterly* is certified as being produced in an environmentally responsible, socially beneficial, and economically viable way.

Printed in the United States of America.

2025 #2

McKinsey Quarterly

The growth imperative

"Most executives wake up in the morning wanting to grow their companies. It's more fun. It's better for their employees. It's what investors and shareholders want. And it's more exciting than leading a company that's being run for efficiency."

—Senior Partner Jill Zucker

Welcome to this special issue, the third in our series celebrating *McKinsey Quarterly*'s 60th birthday. In this edition, we focus on growth—the key to ensuring that companies deliver sustainable value.

As Chris Bradley, Rebecca Doherty, Nicholas Northcote, and Tido Röder explain in "10 rules of growth," "one of the surest signs of a thriving enterprise is robust and consistent revenue growth. That has not been easy to accomplish over the past 15 years." What does it take to ensure growth during bad times as well as good? The stories in this issue look at this question from multiple angles, from rising opportunities to the levers that can help you take advantage of them.

New McKinsey research highlighted by the authors of "Achieving growth: Putting leadership mindsets and behaviors into action" suggests that most companies aren't making the necessary moves to drive growth. At companies that outperform, however, leaders use a five-pronged approach when attacking the growth challenge: They prioritize growth, act boldly, maintain a customer-centric view, attract and nurture talent, and execute with rigor.

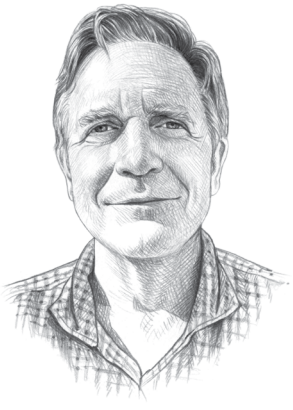
Looking forward, growth-oriented companies that take a full-bore approach will be poised to take advantage of industry momentum and innovation. Extensive research by the McKinsey Global Institute reveals the industries that have captured a disproportionate share of value and growth in the past and the ones that are likely to do so in the future. As you'll see in "The next big arenas of competition," these are the places where the future of business will be decided.

Innovation within growing industries is also crucial. Our special insert, “Revolutionary innovations that propel growth,” highlights eight breakthroughs that are likely to drive growth in the years ahead. Breakthroughs don’t all have to be technological—improvements in business models, customer experience, and processes such as manufacturing or distribution can upend industries as well. (“Revolutionary innovations” is featured on McKinsey.com in a vibrant interactive treatment.) Our issue doesn’t ignore the tactics required for companies to reach their growth goals. Stories on personalized marketing and revenue growth management offer practical advice for every growth-oriented leader.

Taken together, our stories suggest the kind of holistic blueprint needed for consistent growth. I hope and believe that you will gain valuable insights from this edition.

You might also enjoy the digital edition of *McKinsey Quarterly*, which is available via a free membership and includes bonus articles that we couldn’t accommodate in the print edition. It’s easy to sign up at McK.co/MQMembership. And, of course, I hope you’ll continue your learning on McKinsey.com, where you can go deeper into any subject we cover in the print *Quarterly*.

For 60 years, *McKinsey Quarterly* has provided meaningful, practical advice to the most senior leaders around the world. We are pleased to continue the tradition with this special issue.

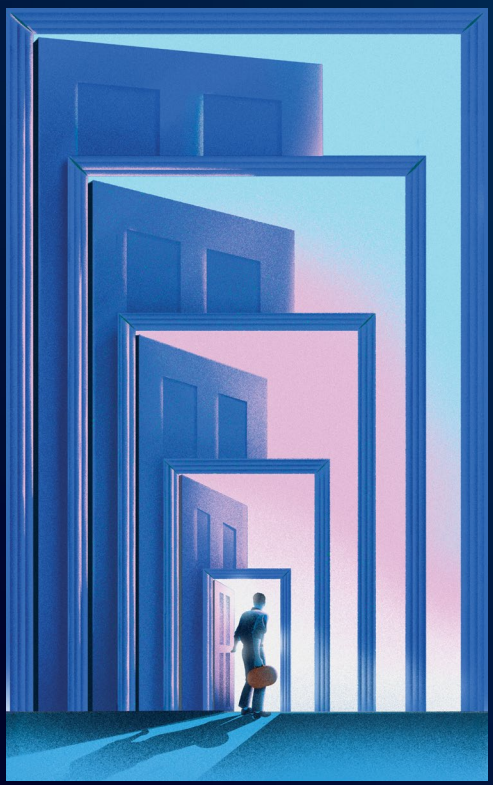


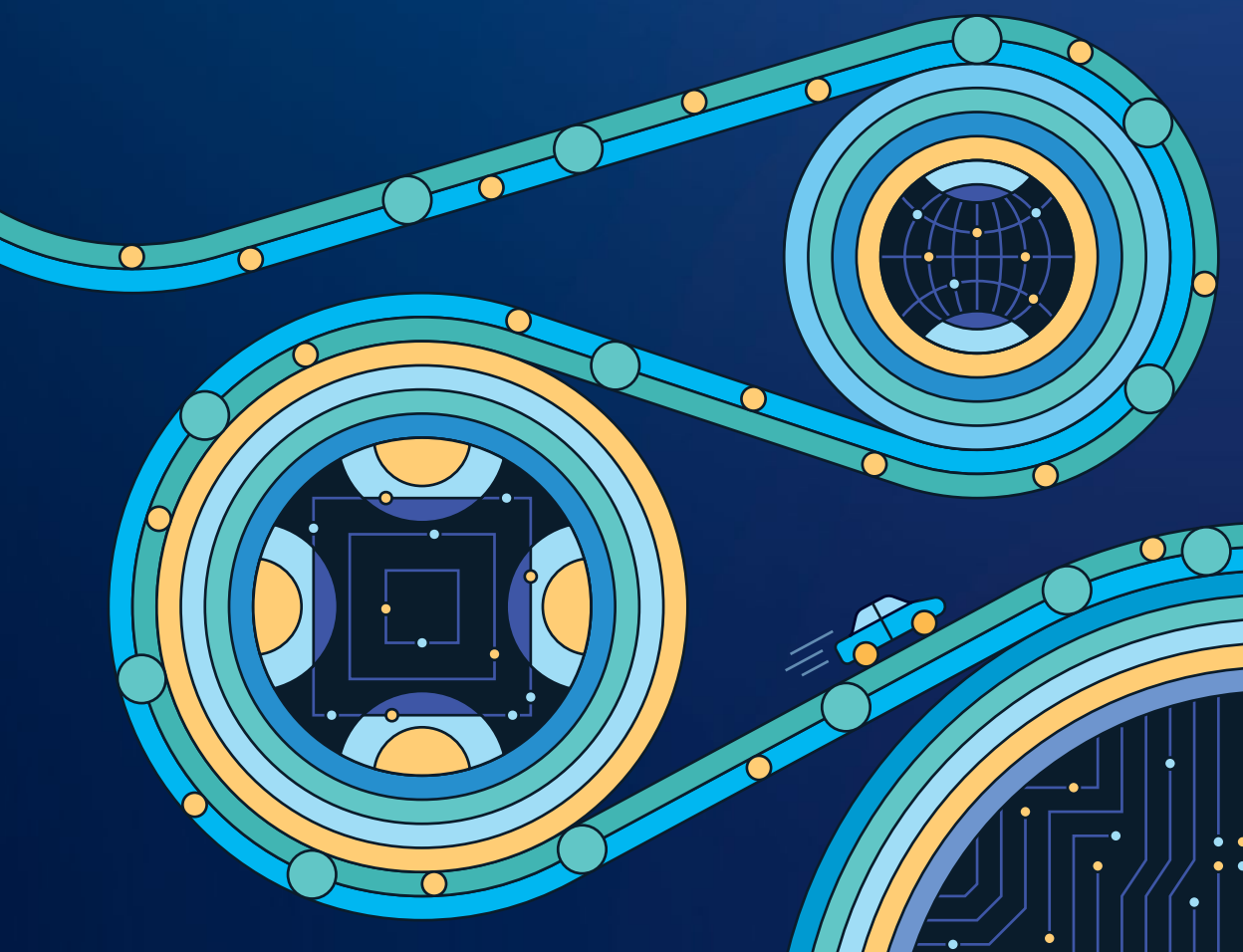
Rick Tetzeli
Editorial director,
McKinsey Quarterly

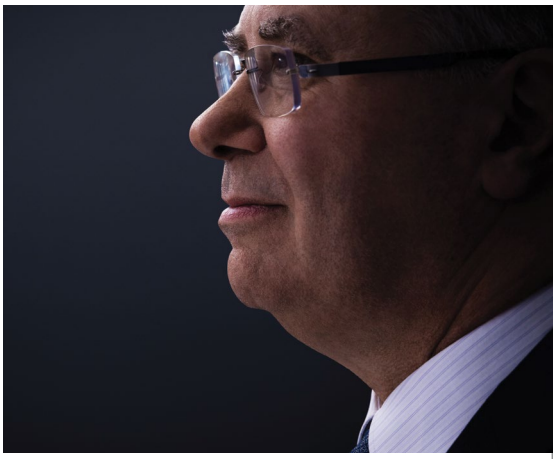
THE FUTURE OF GROWTH
cover package

The future of growth **in charts**

MINDSETS





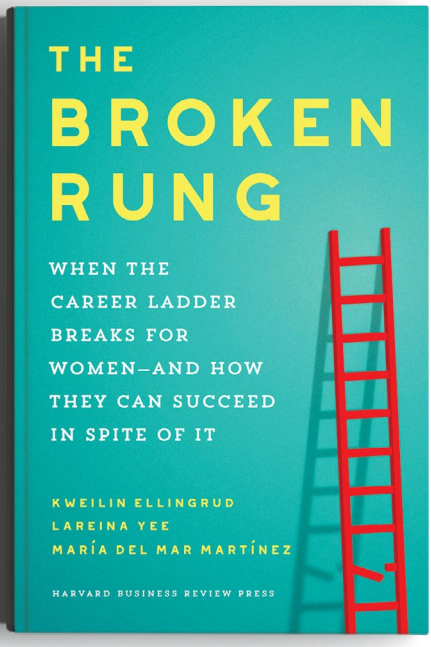


159

Dive in

Notable content on McKinsey.com to deepen your learning

BOOK ALERT



The broken rung is a phenomenon even more pervasive than the glass ceiling in holding women back from career success. This book explains it and gives women strategies for how to overcome it and fulfill their potential.

Women around the world graduate at higher rates than men do and have higher average GPAs. But then a strange thing happens: Upon entering the workforce, they immediately lose their advantage. When the first promotions come around, the slide continues—for every 100 men who are promoted to manager, only 81 women get promoted.

As McKinsey Senior Partners Kweilin Ellingrud, Lareina Yee, and María del Mar Martínez reveal, the effects of this broken rung are compounded throughout women's careers, causing them to fall behind at the start and keeping them from catching up. The authors discuss the problem's underlying cause: While about half of a person's lifetime earnings come from education and half from experience, men get more value from their experience than women do. The book offers answers to the critical question: How can women build their experience capital to level the playing field and maximize their earning potential?

The Broken Rung is based on over a decade of research, conversations with more than 50 remarkable leaders, and the authors' own experiences as senior partners and as the first three chief diversity and inclusion officers for McKinsey.

McKinsey Quarterly

***McKinsey Quarterly* staff**
Rick Tetzeli, *editorial director*
Katy McLaughlin, *deputy editor*
Janet Michaud, *head, publishing design*
Maya Kaplun, *art director*
Matt Perry, *data visualization director*
Dana Sand, *manager, editorial production*

Contributing editors
Barbara Tierney, Christine Chen, Chuck Burke, Daniel Eisenberg, Eileen Hannigan, Joanna Pachner, Jonathon Rivait, Juan Velasco, Max Berley, Richard Johnson, Rochelle Toplensky, Seth Stevenson, Stephanie Strom

McKinsey Global Publishing board of editors
Lucia Rahilly, *global editorial director and deputy publisher*
Mark Staples, *editorial director*
Monica Toriello, *editorial director*
Rick Tetzeli, *editorial director*
Roberta Fusaro, *editorial director*

Raju Narisetti, *publisher*

Acknowledgments
Diane Rice, Drew Holzfeind, Heather Byer, Michael Goesele, Pamela Norton

The future of GROWTH

Photography by Andrew B. Myers

FROM THE
MCKINSEY QUARTERLY
ARCHIVES

There is profit-and-growth magic in the principle of pooling. Our large, decentralized organization . . . represents a great pool of ability, experience, and creativeness. While each of us is called upon to make a comparatively small contribution to the pool, we can all draw on the whole pool.

"Motivating a business toward profits and growth,"
McKinsey Quarterly, 1966, Volume 2

Outlook

The future of growth in charts

Outlook illustrations by Sam Chivers

Global working-age populations are shrinking

Working-age populations in many countries are declining from their peaks in waves.

As well-being and prosperity increase around the world, two forces—fewer children and longer lives—are reshaping global populations. Over the past several decades, families have shrunk in size virtually everywhere. Two-thirds of humanity lives in countries where the total fertility rate is below the replacement rate of 2.1, which is the number of children needed to replace their parents. Even in India, the world's most populous nation today, the fertility rate is 1.9.

In earlier stages of fertility decline, the share of a society's working-age population—those aged 15 to 64—increases, as more children mature into adulthood than the number of babies being born. But in later stages, the share decreases, as the ranks of people aged 65 and older continue to rise relative to the number of younger people due to extended longevity.

Today, demographic change is rolling across the planet in three waves. The first wave has already engulfed advanced economies and China, where the share of the working-age population, which peaked in 2009, is now falling. A second wave is beginning to wash onto the shores of economies in emerging Asia, India, Latin America and the Caribbean, and the Middle East and North Africa, where working-age populations will peak in the 2030s. Only in sub-Saharan Africa will the fertility rate remain above the replacement level beyond 2050; its working-age population will peak as a share of the total population after 2080.

Meanwhile, global life expectancy has increased seven years on average since 1997, reaching 73 years in 2023; by 2050, it is expected to hit 77 years. Centenarians, or those aged 100 and older, are the fastest-growing age group in percentage terms, according to the United Nations. However, in advanced economies currently experiencing the first

wave of demographic shift, greater longevity explains just 20 percent of the change in the age profiles of populations since 1960; falling fertility rates explain the rest.

One consequence of these dynamics is that worldwide, the number of workers available to support each senior will fall. Today, the global support ratio is 6.5, but by 2050, it is expected to fall to fewer than four people for each senior.

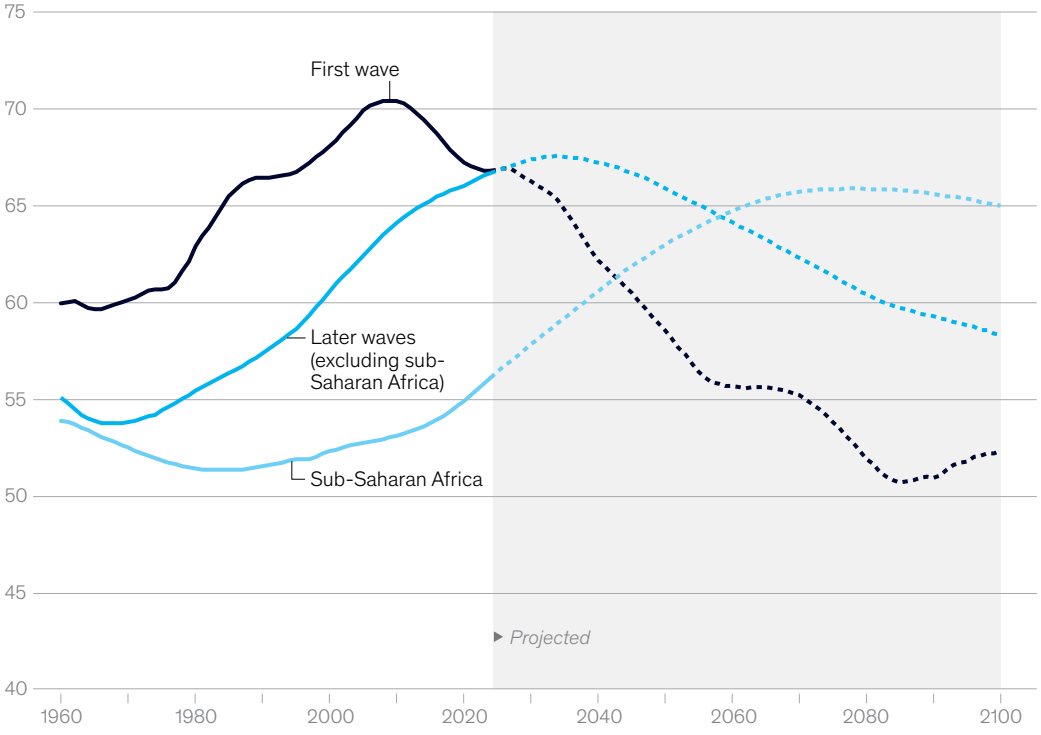
A second consequence of these forces is that the human population is shifting regionally. By 2100, first-wave regions could be home to less than 20 percent of the global population, down from 35 percent today, and China's population could fall from 18 to 6 percent. Over the same period, sub-Saharan Africa could become home to 34 percent of the global population compared with 16 percent today, according to UN projections. This change in the location of the population could dramatically alter the pattern of hours worked and dollars spent.

The third and most dire consequence is that persistently low fertility rates in many countries could lead to a population collapse by 2100. Populations in 26 first-wave countries are on track to decline by a third or more by then, while in China, Poland, and South Korea, they could shrink by half or more.

All pages of this Outlook are derived from the McKinsey Global Institute's "Dependency and depopulation? Confronting the consequences of a new demographic reality" on McKinsey.com.

Working-age populations peak in three waves.

Population aged 15–64, % of total population



Source: *World population prospects 2024*, United Nations; McKinsey Global Institute analysis

A challenge for economic growth

GDP per capita growth can no longer count on rising populations for fuel.

People tend to work less as they age—and well before official retirement begins. Labor intensity, or the weekly hours worked per capita, peaks at about 50 years of age and declines thereafter. The primary reason is falling labor force participation rates—fewer older people continue to work—but on average, older workers who are employed also work fewer hours.

A future with fewer young and middle-aged people and more older people will mean fewer hours of work per person, all else being equal. Declining labor intensity can become a drag on the growth of GDP per capita if left unaddressed.

From 1997 to 2023, the 65-and-older age group was the fastest growing in every first-wave region. But the number of working-age people also increased in many first-wave countries, even as the number of children younger than 15 years fell. This helped partially balance the age mix, diminishing the impact of increasingly aged populations for a time. Additionally, women aged 25 and older—particularly older women—worked more. This was true in every region except Greater China, where women's labor intensity didn't change.

Yet despite increased labor intensity among older workers and women, overall labor intensity fell in most regions around the world due to fewer people aged 29 and younger working, which was, at least in part, the result of increased education globally. Western Europe was the only place among first-wave regions where labor intensity not only increased but also offset the impact of the changing age mix.

Over the next quarter century, the number of older people living in first-wave regions will continue to grow while every other age group shrinks. This shift in the age mix will generate a drag on the growth in hours worked per capita—by 2.2 hours per person a week on

average—and absent any action, GDP per capita growth across these regions will also decline.

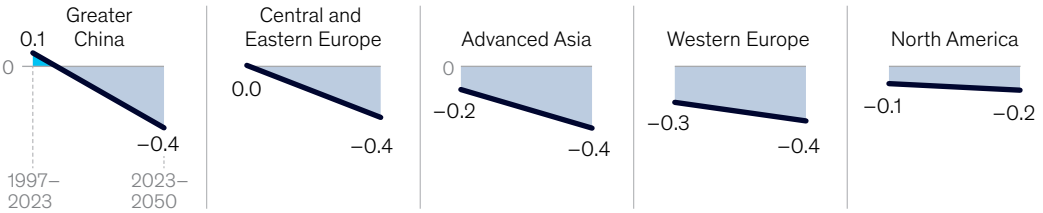
The effect on GDP per capita growth would be a drag of 0.4 percent annually in every first-wave region except North America, where it will slow by 0.2 percent. A 0.4 percent drag on GDP per capita growth per year may seem trifling, but it isn't. The impact of the shifting age mix could decrease GDP per capita by an average of $10,000 in Western Europe and $6,000 in Greater China by 2050, for example.

Naturally, regional averages hide country variation. Spain offers a particularly extreme example of the age mix effect. While age mix was neutral from 1997 to 2023, changes in it could deduct 2.8 hours of work per capita per week, bringing GDP per capita growth down by 0.8 percent annually to 2050. The effect of the demographic shift would be more muted in Australia, for example, where a changing age mix has decreased weekly hours and GDP per capita growth by an average 0.2 percent per year over the past quarter century—a decrease forecasted to continue at the same pace to 2050.

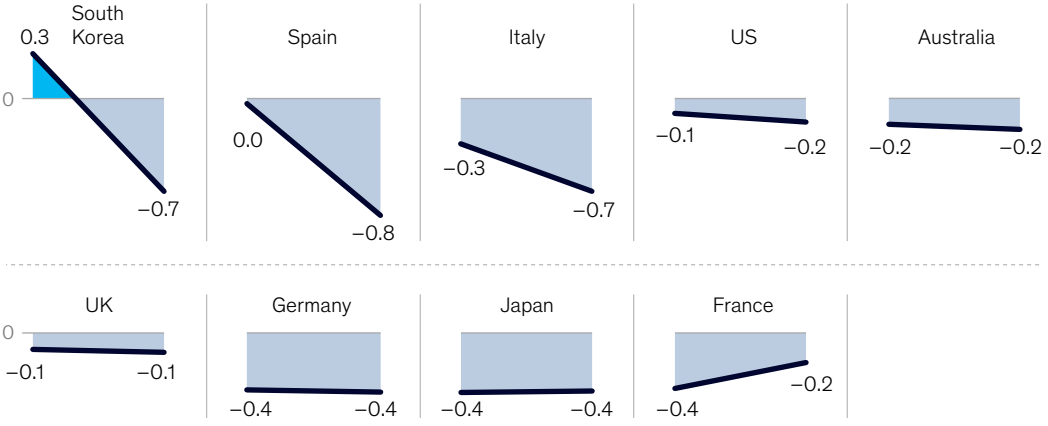
Demographic shifts will slow GDP growth across first-wave economies.

Contribution of age mix shift to hours per capita growth, 1997–2023 vs 2023–50, %

By region



By country



Source: International Labour Organization Department of Statistics; The Conference Board; *World population prospects 2024*, United Nations; McKinsey Global Institute analysis

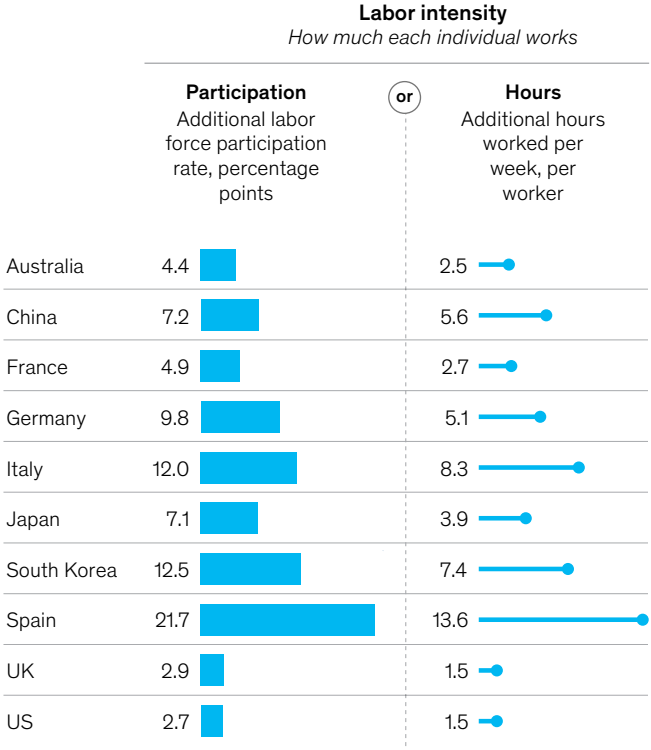
A three-legged stool

Three components can support economic growth, even as populations decline.

Three components—labor intensity, productivity, and age mix—can sustain economic growth. But since none of these factors would be sufficient on their own in most countries, some combination of all three will be needed. Each country can opt for a different

Changing the age mix, labor intensity, or productivity alone cannot sustain growth—a combination of all three is needed.

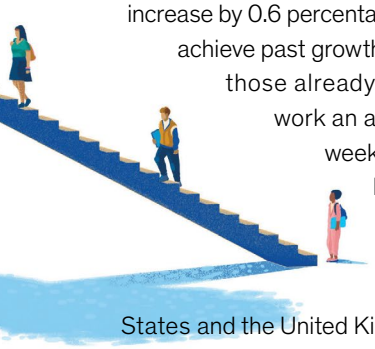
Change in age mix, labor intensity, or productivity growth needed to sustain GDP per capita growth, 2023–50



Note: For details, see Exhibit 16, "Dependency and depopulation? Confronting the consequences of a new demographic reality," McKinsey Global Institute, Jan 15, 2025.
[1]Historically, emigration has exceeded immigration in China, so needed migration cannot be expressed as a multiple of past migration.
Source: International Labour Organization Department of Statistics; The Conference Board; *World population prospects 2024*, United Nations; McKinsey Global Institute analysis

"menu" of combinations, depending on its characteristics, opportunities, and challenges.

Increasing labor intensity is key to maintaining growth. Consider Germany: If productivity continued to grow at 0.9 percentage points a year as in the past, labor intensity would need to increase by 0.6 percentage points per year to achieve past growth. That would require those already in the labor force to work an additional 5.1 hours a week. The challenge is even larger for countries like Spain and South Korea, while a bit less for the United States and the United Kingdom, which have slightly higher fertility rates and more immigrants than most other advanced economies.



Productivity in most first-wave countries would also need to grow between 1 and 2 percent a year to maintain past GDP per capita growth. This is a tall ask. In Germany, to continue the example, that would mean achieving double its average productivity growth rate of 0.7 percent over the past decade.

The third component, changing the age mix, would require increased birth rates and effective migration. So far, no country has found a way to entice people to have more children, and even if a magic solution is found, babies born today will barely have entered the labor market by 2050. Migration can more immediately boost the working-age population, but the size of the increase needed to just *maintain* GDP per capita growth is significant.

The bottom line is that each individual lever is important, but each would require very large increases. Across countries, a combination of the three will be needed to maintain or boost GDP per capita growth.

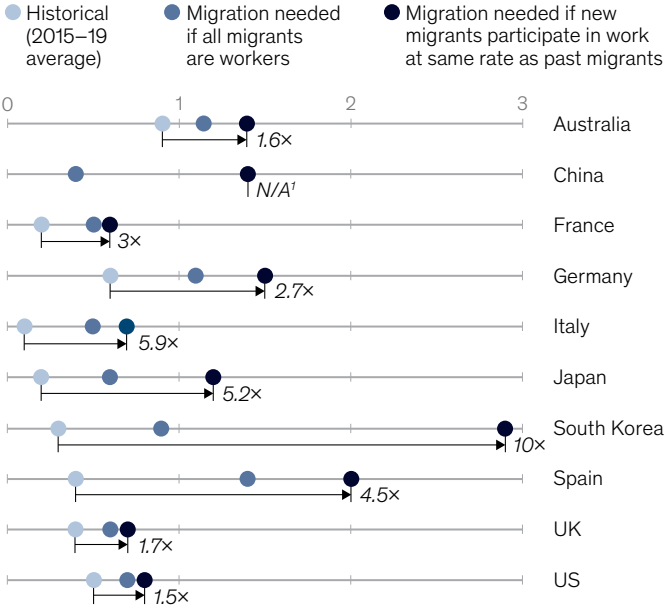
Productivity
How productive each hour of work is

Productivity growth
Growth in GDP per hour worked, %

	1997–2023	2012–23	Needed to sustain past GDP per capita growth
Australia	1.5	1.3	1.7
China	7.8	6.6	5.5
France	0.8	0.3	1.0
Germany	0.9	0.7	1.4
Italy	0.3	0.3	0.9
Japan	1.1	0.9	2.0
South Korea	3.7	2.3	3.3
Spain	0.6	0.3	1.4
UK	1.0	0.5	1.1
US	1.5	0.8	1.8

Age mix
Relative number of people per age group

Migration
Annual flow as a percentage of 2023 population, %



A surprising pace of change

Emerging markets are close behind the first wave.

The demographic clock is also ticking for emerging economies. Fertility rates in one-third of the 138 countries in later-wave regions—emerging Asia, India, Latin America and the Caribbean, the Middle East and North Africa, and sub-Saharan Africa—are already below the replacement level. Fertility rates in Latin America and the Caribbean stand at 1.8 on average, and each of the region's six biggest economies—Argentina, Brazil, Chile, Colombia, Mexico, and Peru—has a fertility rate below 2.0. Only sub-Saharan Africa will have an average fertility rate in 2050 (2.9) that exceeds the replacement rate of 2.1.

These later-wave regions face a challenge most first-wave regions do not, which is the need to "get rich" before their populations "get old." Over the next quarter century, many later-wave economies will reach population structures that mirror those in the first wave today but with significantly lower GDP per capita. Their challenge is to increase wealth *before* their populations age.

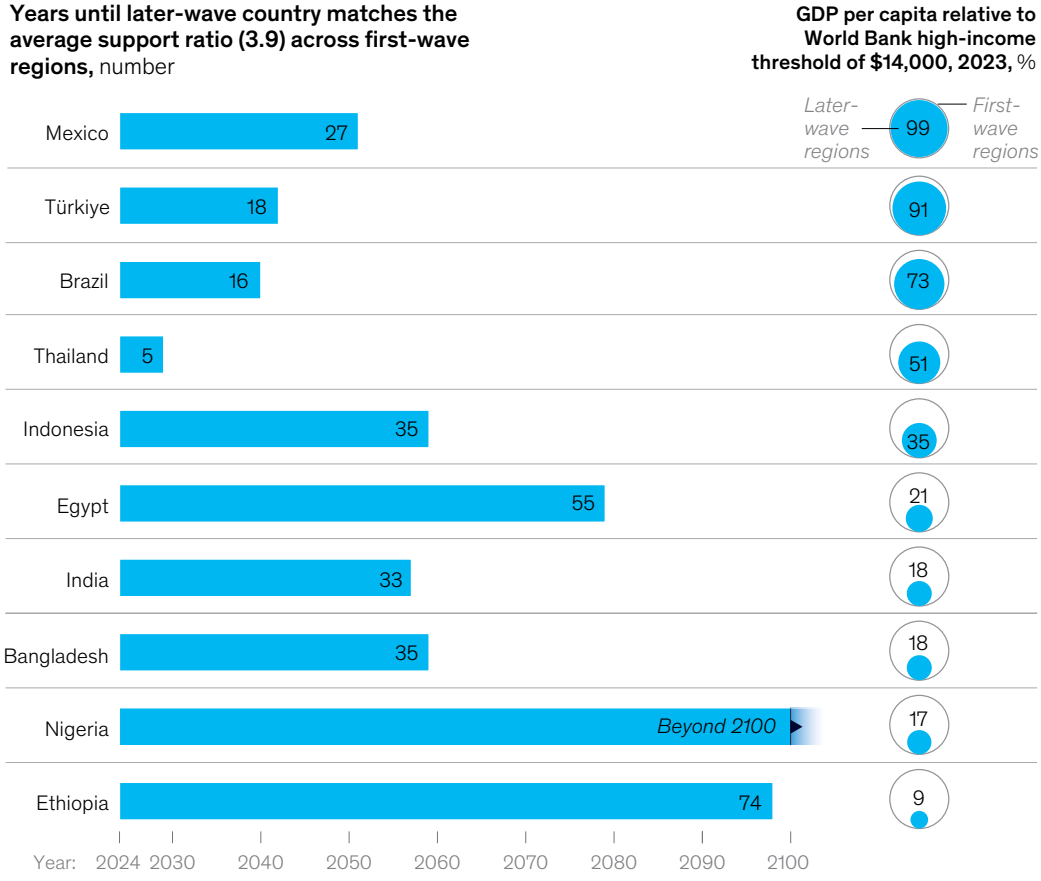
Existing projections suggest that more than two-thirds of later-wave countries will not reach the high-income threshold as defined by the World Bank before their support ratios fall to the current level in first-wave regions. If all countries in later-wave regions underperformed those projections by just 1 percent a year, 80 percent of them would fail to achieve the high-income threshold before their populations reached the same age as the populations in the first-wave regions. If they fell short by 2 percent, 87 percent would not reach the high-income level by that time.

This presents an opportunity as well as a challenge. An economy's per capita GDP is determined by the size of its workforce relative

to population and the productivity of each worker. Many emerging economies have low labor force participation rates, particularly among women. The median prime-age female labor force participation rate in these economies is 61 percent, compared with 80 percent in advanced economies. Increasing those rates, as advanced economies have done, is a large opportunity for these regions.

Additionally, the productivity gap is currently large in later-wave regions—as low as $3 per hour for a country in the bottom decile to a median of $13 per hour, compared with $60 an hour in high-income countries. Emerging economies have an opportunity to raise productivity by investing in infrastructure, technology, and skills. Low investment—and thus low productivity growth—means that workers in emerging economies may struggle to find gainful work opportunities and improve their living standards. Conversely, low productivity can make it difficult to attract investment—both are needed to create a virtuous cycle.

Countries in later-wave regions, with lower GDP per capita, are one to two generations behind the demographic changes in first-wave regions.



Source: *World population prospects 2024*, United Nations; McKinsey Global Institute analysis

Winning by working with and catering to older people

Companies can thrive by meeting the needs of older workers and consumers.

Businesses have opportunities in the demographic shifts sweeping the globe, starting with their own workforces. Increasing labor intensity will be key to offsetting the negative impact of smaller, older populations, and finding ways to retain older workers can help.

At today's participation rates, people aged 65 and older will contribute 6 percent of the total hours worked in first-wave economies by 2050, up from 4 percent today. Among people aged 50 and older, the trend is starker: Their share will climb to 37 percent on average by 2050, up from 32 percent today and 17 percent in 1997. If older adults participate more or work more hours, as in Japan, their share of the workforce will grow even more.

Additionally, the geographic distribution of labor will shift. Holding current hours worked per capita constant in each country and age group and simply applying demographic changes, later-wave regions would account for 71 percent of all hours worked globally by 2050, up from 60 percent today and 51 percent in 1997.

In the United States, retail pharmacy chain CVS has worked to retain and recruit older workers

with brighter lighting, larger font sizes on shelving signage, and a variety of flexible-hour programs. Other companies have begun offering career planning to help workers envision longer working lives, opened apprenticeship programs to older adults seeking new skills, and made other adjustments to help retain and develop older workers.

Seniors are also spenders, and contrary to what some may think, consumption doesn't decline in old age. Of course, healthcare accounts for much of seniors' higher spending, but even excluding those expenditures, per capita consumption doesn't decline and, in some countries, even increases as people age. Given demographic trends, seniors' share of total consumption is growing rapidly.

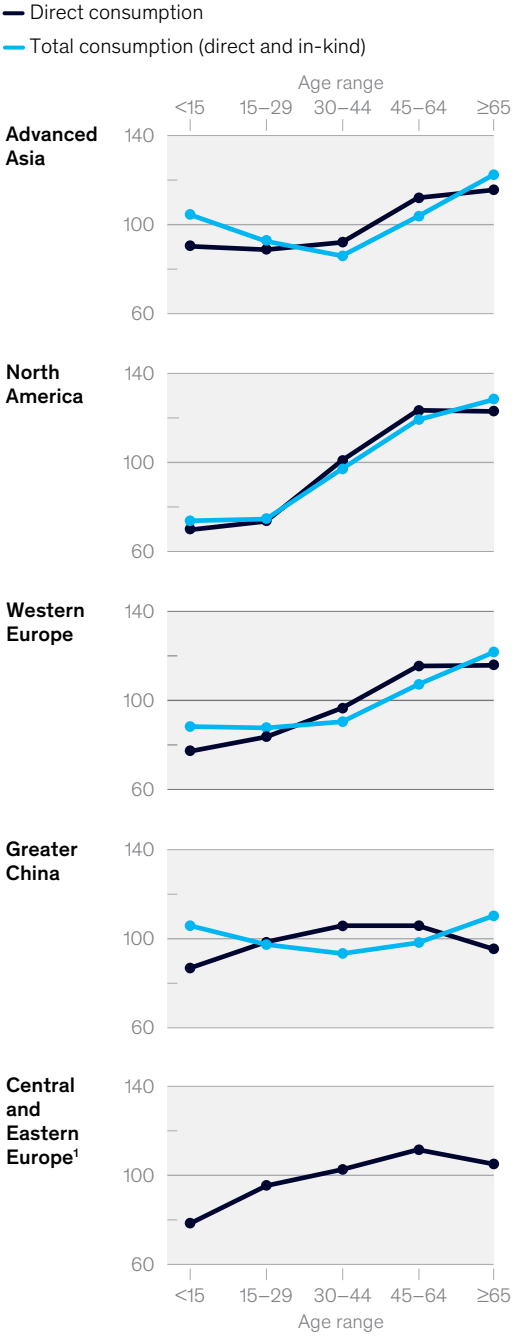
Today, residents of first-wave economies who are aged 65 and older account for $21 of every $100 spent, compared with $15 a quarter century ago. As countries become increasingly "youth scarce," this share will increase to $31 of every $100 spent by 2050, all else being equal.

Consumption, too, will shift geographically. Countries in later-wave regions will account for more than half of global consumption. World Data Lab projects that India and emerging Asia will account for 30 percent of global consumption at purchasing-power parity by 2050, up from 19 percent today. By comparison, advanced Asia, North America, and Western Europe could account for just 30 percent of the world's consumption by that time, down from 40 percent today.

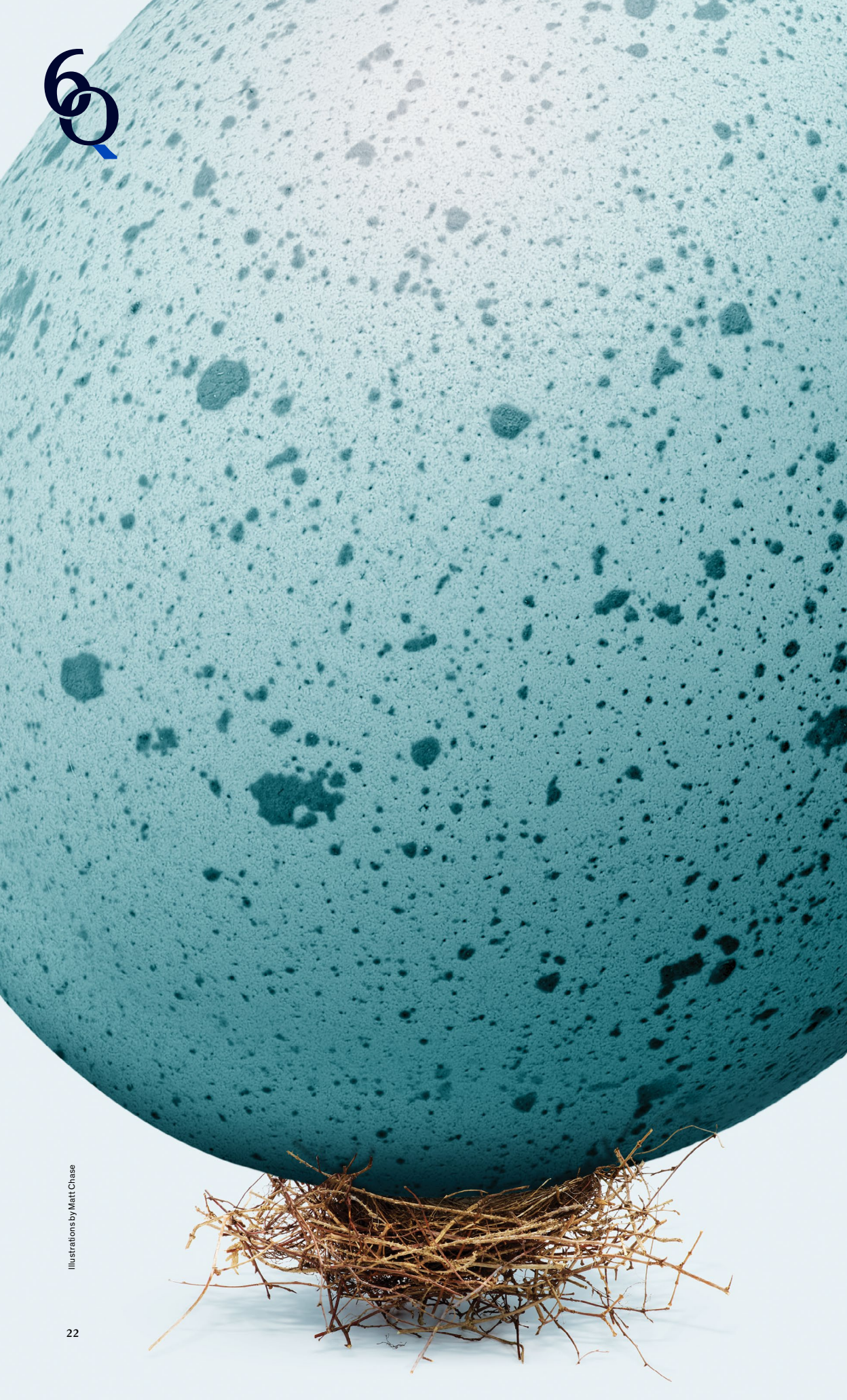
The growing senior population presents opportunities for companies to offer new products and services to address seniors' specific needs, as well as to incorporate seniors into the workforce. Companies can capitalize on the skills and education of the older workforce and help seniors use those assets in innovative, new ways. They can also deploy new technologies to drive the productivity of a workforce with a markedly different age mix.

Older people consume marginally more than younger cohorts.

Average consumption per person, 2023, indexed (100 = average consumption per capita in 2023)



Note: For details, see Exhibit 21, "Dependency and depopulation? Confronting the consequences of a new demographic reality," McKinsey Global Institute, Jan 15, 2025.
[1]No data on in-kind consumption is available.
Source: OECD; World Data Lab; *World population prospects 2024*, United Nations; McKinsey Global Institute analysis



Illustrations by Matt Chase

Achieving growth

Putting leadership **mindsets and behaviors** into action

by Andy West, Greg Kelly, Jill Zucker, Kate Siegel, Louisa Greco, Michael Birshan, Rebecca Doherty, and Sascha Lehmann

Growth requires the right mix of outlook, strategy, and capabilities. Top leaders achieve their goals by turning five mindsets into action.

Picture a venerable industrial conglomerate steeped in history, where tradition has calcified into stagnation, causing the company's stock price to languish for decades.

Enter a dynamic leader with the vision to shake things up—not just to dream of growth but to ignite it. This new CEO doesn't just bring fresh ideas. She brings a new mindset, refusing to accept silos and inefficiencies or to defer to the status quo. She leverages technology and analytics to uncover missed opportunities and new business adjacencies, acting swiftly to drive both growth and cost reduction. The result? An explosion of new energy across the company and a stock price nearly doubling in two years.

For CEOs and top executives everywhere, growing profitably is the ultimate fitness goal. It's a long-term athletic pursuit that drives significant value, with high-growth companies experiencing 50 percent higher TSR than their peers. Profitable growers reap even greater rewards.

That said, achieving and sustaining growth is tough work. Previous McKinsey research found that only one in ten companies maintained above-GDP growth and remained in the S&P 500 over 30 years. Growth demands courage, dedication, and discipline.

Our new survey research has found that while many leaders *believe* they've adopted and implemented productive mindsets for growth, these attitudes and ambitions don't always translate into the behaviors and actions necessary to drive growth, as shown in Exhibit 1 (see sidebar "About the research").

Leaders of outperforming companies unlock sustained growth by aligning their behaviors with five critical mindsets: prioritizing growth, acting boldly, maintaining a customer-centric approach, attracting and nurturing talent, and executing with rigor. Growth outperformers—companies exceeding their subsector peers on revenue growth and profitability—do things differently. They set themselves apart by closing the gap between knowing and doing, turning their growth aspirations into reality.

The journey to growth is a marathon, not a sprint: It often requires more than 18 months to see results. To get there, leaders need more than just ambition and business savvy; they need a holistic approach with courage and resilience at the core. Getting fit for growth means converting mindsets into actions to drive toward targets. Leaders should be intentional in making decisions that reflect five critical growth mindsets.

1. Invest in growth, even in turbulent times

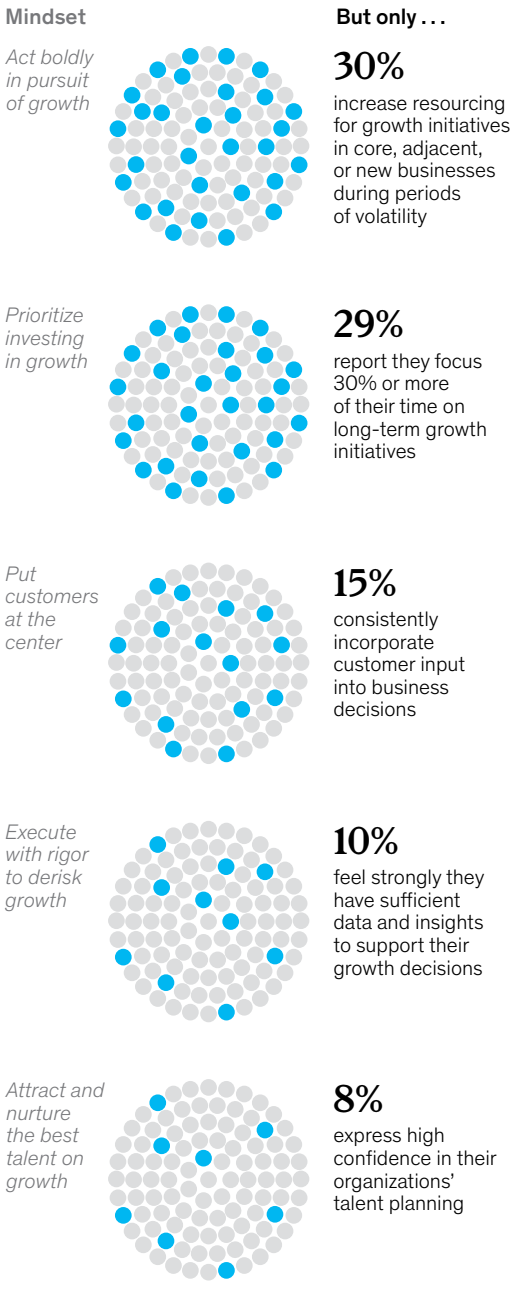
Investing in growth starts with thinking about, then acting upon, an organization's long-term growth goals. Most leaders believe they make growth a top priority, with 72 percent of our survey respondents setting above-market targets compared with their peers in the same industry. They think they unite their businesses around ambitious targets, confidently adjusting and reallocating resources and talent as needed across both short- and long-term initiatives.

However, our survey results reveal gaps between executives' growth ambitions and their ability to translate them into practices and results. Through-cycle outperformers—leaders who outperform through the ups and downs of an economic cycle by prioritizing long-term growth over short-term initiatives—

Exhibit 1

There are five key mindsets for growth, but few leaders take the necessary steps to turn their aspirations into action.

Growth mindsets and corresponding actions taken by leaders, % of respondents



Source: McKinsey Growth Leaders Mindset Survey, June 7–July 18, 2024 (n = 500)

tend to produce higher revenue growth than their peers. Yet, on average, respondents say that only 22 percent of their time is spent on long-term growth initiatives, with the remainder of their time dedicated to short- and medium-term projects.

How can leaders tactically invest in and prioritize growth? To become outperformers, leaders should align their behaviors to reflect a long-term vision and commitment to growth (see sidebar "From glassware to gen AI: Corning's new growth trajectory"). Leaders' focus areas should include the following:

- *Spending more time on long-term growth initiatives.* Leaders often underestimate the time and focus required for growth initiatives. To truly drive sustainable success, they should prioritize long-term growth and resist the temptation to get sidetracked by shorter-term tasks.

- *Allocating resources to long-term growth initiatives.* Businesses should continually survey the landscape for growth opportunities and take calculated risks in shifting resources to promising new areas, even when budgets are tight. Our survey results show that outperformers are 10 percent more likely than others to engage in monthly or quarterly debates with their teams about whether to accelerate, modify, or halt growth initiatives and to track progress against goals.

- *Communicating externally and internally that growth is a 'north star.'* Leaders should explicitly state ambitious growth goals to the board and executive team to generate buy-in and accountability. Outperformers are 80 percent more likely than others to communicate their achievements through town halls, investor updates, and performance reviews to help their teams hit ambitious long-term targets, according to our survey.

The journey to growth is a marathon, not a sprint: It often requires more than 18 months to see results. To get there, leaders need more than just ambition and business savvy.

From glassware to gen AI: Corning's new growth trajectory

Over the past few years, the stock price of 173-year-old specialty glassmaker Corning has undergone several swings. The COVID-19 pandemic initially spurred demand for fiber-optic cables and electronic devices needed to help a global population work remotely, as well as medical glassware critical for disease testing and vaccine delivery. Corning saw double-digit growth, with its stock price nearly tripling in just 12 months. However, as the pandemic waned, customers reduced their inventory while consumers shifted spending from lockdown necessities to experiences and services in a reopened economy. By October 2023, Corning's stock price hit a three-year low, with sales declining 11 percent from the previous year.

Facing this pivotal moment, CEO Wendell Weeks redefined the company's growth trajectory. He recognized that the pandemic had temporarily depressed demand but was confident that a smart long-term strategy could lead to a rebound. "If you understand innovation deeply, you understand that getting the timing right is almost impossible," Weeks said to *Fortune* magazine in 2024. "You've got to be able to instead go to work on stuff that matters early." And that's exactly what Corning has been doing for the last few years—quietly driving innovations to fuel explosive growth in areas like generative AI (gen AI) while remaining ready to support a rebound in longer-term areas like broadband expansion. Where some CEOs shy away from specific commitments and frequent accountability, Weeks has rallied internal stakeholders and announced his aspirations externally. He publicly outlined a concrete plan in 2024 to drive growth across business units, ambitiously aiming to deliver more than $3 billion in annualized sales over the next three years through existing and emerging product areas. He also promised to report quarterly about how the company was faring against its goals, a rarity among CEOs today.

Since announcing this growth plan, Corning accelerated product development in its optical business to support anticipated demand from the gen AI boom, all while managing costs and invested capital to maintain strong margins. Weeks's ambitious mindset has already begun to pay off. In Corning's 2024 third-quarter earnings call, it reported an 8 percent increase in revenue year over year, delivering growth above guidance. Adoption of its new connectivity products for gen AI drove 55 percent of the year-over-year growth in the enterprise portion of Corning's optical-communications segment. Weeks continues to provide public updates on key milestones, demonstrating his commitment to growth, account ability, and momentum.

Some CEOs shy away from specific commitments and frequent accountability, but Corning's CEO promised to report quarterly on how the company was faring against its goals.

2. Be audacious on growth

Acting audaciously means thinking creatively, taking risks, and mobilizing resources quickly across a portfolio of growth bets and pathways. This includes a willingness to explore unconventional avenues with potential for growth (see sidebar "From Brazil to Saudi Arabia: Expanding cancer care across continents"). Eighty-three percent of outperformers in our survey indicate that they encourage their teams to test new ideas, fail quickly and affordably, and learn from the results. Furthermore, 79 percent of all survey respondents say they prioritize speed over perfection when it comes to their growth-related practices (Exhibit 2).

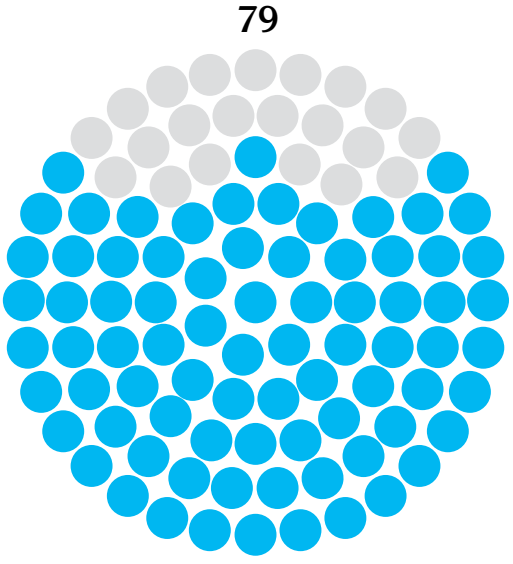
However, when it comes to committing resources to bold actions, the reality looks different. During periods of volatility, 30 percent of respondents say they choose to increase resourcing for growth initiatives—whether in core, adjacent, or new markets—indicating a reluctance to commit to courageous growth strategies when it matters most. Moreover, 47 percent of respondents tend to focus on tactics, such as pricing and automation, rather than making bold moves, such as investing in innovation or focusing on a new, unfamiliar market with high potential.

Exhibit 2

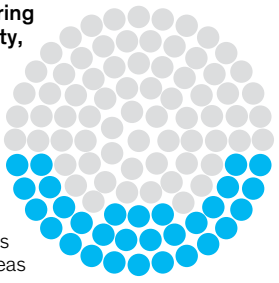
Leaders say they prioritize making bold moves quickly but fail to commit the resources needed to take action.

Growth actions taken by leaders

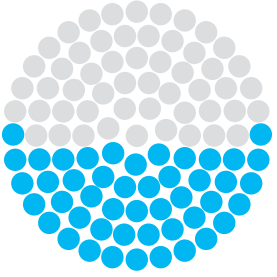
Share of respondents agreeing or strongly agreeing that they prioritize speed over perfection, % (n = 480)



Actions taken during periods of volatility, % of respondents (n = 500)



30
Increase resources for growth initiatives in core business areas



47
Prioritize revenue/ cost optimization

Source: McKinsey Growth Leaders Mindset Survey, June 7–July 18, 2024 (n = 500)

From Brazil to Saudi Arabia: Expanding cancer care across continents

Dr. Bruno Ferrari is no stranger to bold moves. The CEO of Oncoclínicas, which operates leading-class outpatient cancer care centers in Brazil, founded the company in 2010 with a single clinic in Belo Horizonte, Brazil, and expanded to more than 140 clinics in less than a decade. In a country where most healthcare is centralized, Ferrari built the Oncoclínicas network by building smaller clinics outside of the major hospital systems to meet patients where they were and where they most needed care.

Keen to expand the impact of Oncoclínicas, Ferrari went far afield. After learning that there was no specialized oncology provider to serve the 37 million people in Saudi Arabia, he sensed an opportunity. "We saw that there were key similarities between Brazil and Saudia Arabia in the challenges that people have in getting cancer care," he told us. "We decided to make a move and expand to the Middle East. Now we can help the people there by providing more accessible treatment with reduced wait times."

In August 2024, Oncoclínicas announced a partnership with a local multisector conglomerate, Al Faisaliah, to open its first cancer care clinic in Riyadh, with an eye toward future expansion across Saudi Arabia. The ability to have broad impact in an area with limited cancer care facilities, coupled with strong government support for the healthcare sector, made this unconventional strategy appealing to Ferrari. The joint venture is expected to open five new clinics, expand to other countries in the region, and generate $550 million in annual revenue (50 percent of Oncoclínicas' current revenue) within five years.

Brazil's Oncoclínicas chose to expand far afield to Saudi Arabia rather than to a neighboring country.

Leaders of outperforming companies set themselves apart in the following ways:

- *Experimenting with bold risks to support innovative ideas.* Amazon founder and executive Jeff Bezos has said that experimental failure can be beneficial. (He differentiates this from operational failure, where execution is poor.) Leaders who are willing to try new ideas, even when they may not pan out, can learn, innovate, and grow from the experience. According to a 2023 McKinsey digital strategy survey, top performers were 63 percent more likely than peers who were not outperformers to allocate resources to innovate in the development of a new product or to enter a new market, and 44 percent more likely to do so in breakout opportunities outside of their current industry or ecosystems.

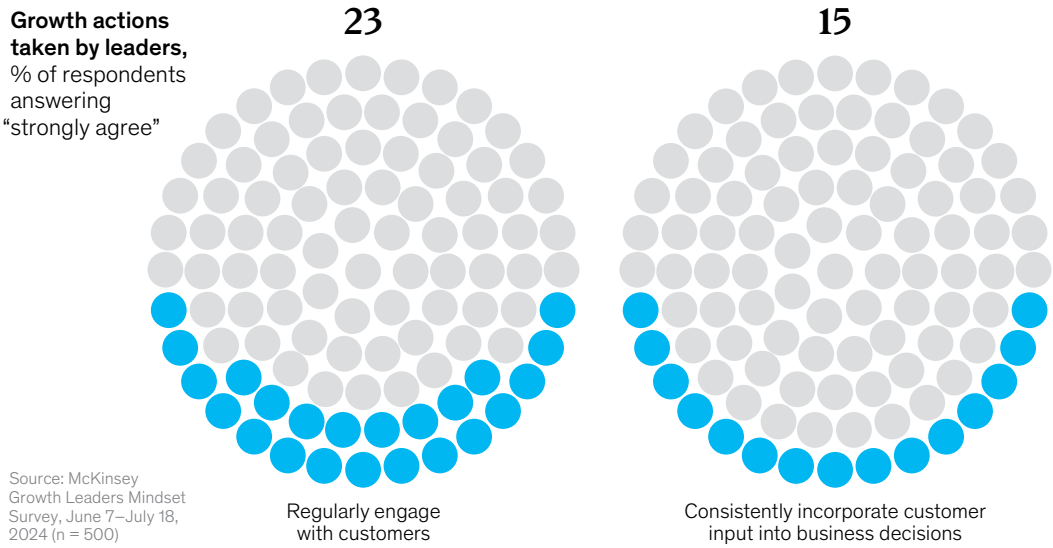
- *Favoring speedy action over perfection.* Outperformers create a clear path to action that allows teams to execute on initiatives proactively or react rapidly to unpredictable shifts in the market. Sixty-four percent of outperformers act with speed when faced with market shocks or internal changes, allowing them to capture a first-mover advantage.

3. Listen to your customers—for real

Improving customer experience creates stacked wins for higher returns, faster growth, and lower costs. As previously described in McKinsey's work on experience-led growth, companies that put customer experience at the center achieve twice the revenue growth of those that fall behind in this area. Sixty-three percent of survey respondents cite customer feedback as a top source for generating growth ideas (second only to internal R&D, at 64 percent). Yet despite significant evidence showing that customer-centricity is important, only 15 percent of respondents say that they consistently incorporate customer input into their decisions, and just 23 percent say they regularly engage with customers to ensure their offerings deliver real value (Exhibit 3).

Exhibit 3

Few leaders take the necessary actions to put customers at the center.



Source: McKinsey Growth Leaders Mindset Survey, June 7–July 18, 2024 (n = 500)

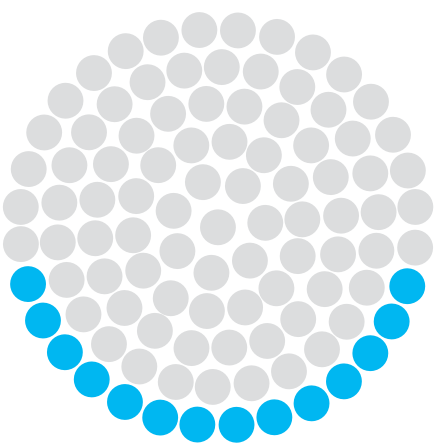
This reveals a disconnect between the intent to prioritize customer needs and the reality of executing on that commitment.

Leaders of outperforming companies put the customer at the center by achieving the following:

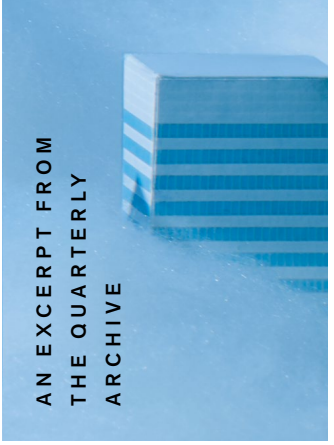
- *Figuring out what customers want next.* Growth outperformers use predictive analytics to not only learn but actually *predict* needs. They look at the edges of their own industry and beyond to identify broader shifts. This allows them to truly understand their customers' core desires, then create products and adjust services accordingly. To do this, leaders leverage AI and use technology beyond survey-based systems to identify customer experience issues and opportunities in real time. Forty-five percent of outperformers in our survey indicate that they use technology to better understand customer needs.

- *Deploying gen AI to respond to customers.* To deliver on brand promise and expectations, outperformers personalize responses to inquiries and quickly respond to customers in their moments of need. For example, autonomous gen AI agents

14



Use technology to predict customer needs



1986

McKinsey Quarterly
Number 4

Hustle as strategy

The competitive scriptures almost systematically ignore the importance of hustle and energy. While they preach strategic planning, competitive strategy, and competitive advantage, they overlook the record of a surprisingly large number of very successful companies that vigorously practice a different religion. . . . Hustle is their style and their strategy.

Leaders
spend more time
on short-term growth initiatives
than on long-term
ones.

78%

Short to medium term
(≤5 years)

22%

Long term
(>5 years)

The beauty aficionados at the center of Sephora's success

Despite intense competition from both established players and emerging brands, global beauty retailer Sephora has continued to experience significant organic growth across business units (LVMH's selective retail business that houses the brand grew 25 percent in 2023). According to global president and CEO Guillaume Motte, the main ingredient to Sephora's fast-growth success has been a relentless focus on customers. Sephora's key initiatives in 2024 included enhancing the in-store experience with interactive displays and personalized consultations, convening more "SEPHORiA" experiences (a Fashion Week–like customer event), and building a skin analysis service based on feedback from customers.

Additionally, Sephora has cultivated a thriving community of over 40 million "Beauty Insiders." This loyalty program rewards members with special events such as the Rouge Celebration, which leverages Sephora's relationship with brands to provide special giveaways, discounts, and demonstrations to top customers. Sephora's focus on customer engagement has paid off: Beauty Insider members account for a majority of Sephora's annual transactions.

augment human–customer interactions to improve service levels, customize interactions, and automate complex tasks.

- *Ensuring customer insights are consistently translated into new growth initiatives.* Outperformers ensure that once customer feedback is systemically captured and analyzed at scale, it is turned into innovations in products, services, or strategies that reflect that feedback and provide a superior customer experience (see sidebar "The beauty aficionados at the center of Sephora's success").

4. Rally a dream team for growth

Talent is essential for growth. Engaged employees fuel innovation, productivity, success of functional capabilities, and customer loyalty. By focusing on talent, companies can achieve a competitive advantage and cultivate an organization with a growth mindset.

Despite the important role talent plays in an organization's ability to grow, 69 percent of respondents believe there is a significant human capital or capability gap within their organizations (Exhibit 4). Moreover, fewer than 8 percent of respondents express high confidence in their end-to-end talent strategy (that is, recruiting, integrating, and upskilling) to deliver the workforce needed to drive future growth, casting doubt on their companies' ability to fill talent gaps organically. These shortcomings highlight a critical disconnect between recognizing the importance of talent and taking credible steps to secure it.

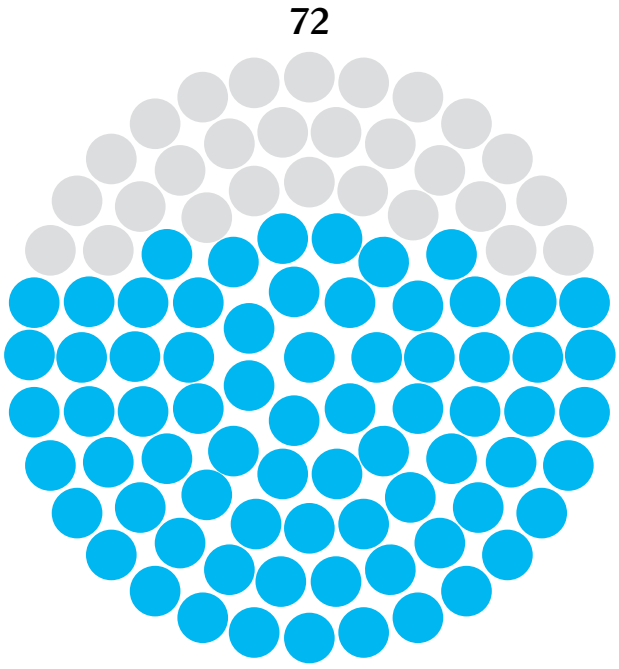
Leaders of growth outperformers take a different approach to talent planning (see sidebar "Banking on tech talent for growth"). They center their organizations' development on growth and nurture team relationships

Exhibit 4

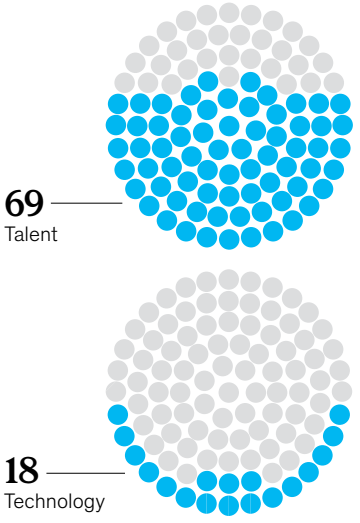
Leaders recognize the importance of talent, and most of them prioritize filling the talent gap in-house.

Sentiments about gaps hindering growth

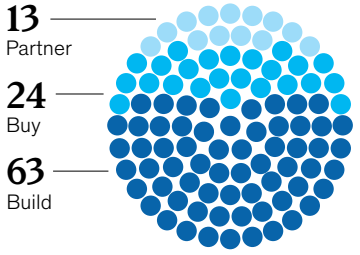
Share of respondents acknowledging a critical gap hindering growth at their organizations, % (n = 500)



Source of gap hindering growth,[1] % of respondents (n = 355)



Prioritized approach to filling talent gap, % of respondents (n = 285)



[1]Respondents could select more than one response.
Source: McKinsey Growth Leaders Mindset Survey, June 7–July 18, 2024 (n = 500)

to foster cultural health, which in turn unlocks growth. These leaders focus on talent to fuel growth by making the following moves:

- *Elevating and redeploying top performers.* Many companies reward people based on the size of the business unit they oversee or how many people they manage. That means top performers often end up running more mature parts of an organization, rather than growth areas. Outperformers, however, invest in and offer incentives to high-performing talent by putting outstanding employees in more visible roles to further their development and continue to spark growth. Thirty-six percent of outperformers say they have an agile organizational talent model that allows easy movement of the best people through their companies.

- *Rewarding failure when done fast and cheaply.* Outperformers encourage taking calculated risks by creating a culture of psychological safety that supports iterative development and knowledge sharing, with the appropriate guardrails to derisk

Banking on tech talent for growth

DBS Bank (DBS), one of Southeast Asia's largest banks, is focusing on nurturing top talent. The DBS executive team committed to hiring new talent and upskilling and reskilling tens of thousands of staff members, with a focus on fostering tech skills. Sameer Gupta, DBS's chief analytics officer, recently shared with McKinsey the bank's strategic approach, which focuses on building an enterprise-level data science talent pipeline through a targeted curriculum for data scientists and data analysts. Under his leadership, DBS has created a comprehensive training curriculum on AI and data for its employees across skill levels and fostered an environment that encourages learning for its employees across operations.

By investing in technology talent (the bank has roughly twice as many technologists as bankers), DBS has successfully captured value from its early adoption of AI and machine learning. DBS employees have used gen AI to generate hundreds of ideas, including hyperpersonalized financial guidance for customers, deeper insights to enhance customer engagement, and customized career pathways to foster long-term employee growth. In 2023 alone, the bank's AI and machine learning use cases generated approximately $270 million of incremental economic value, either through revenue growth or expenses saved.

initiatives. Leaders who act on this mindset lead with optimism, not just pragmatism, to communicate a positive outlook clearly and encourage bold thinking.

- *Pursuing unconventional sources for talent.* High-growth leaders explore hiring from adjacent or different industries to bring a fresh level of thinking that pushes growth and spurs new and sometimes even uncomfortable conversations. They ensure that teams have the right combination of both big-picture visionaries and detail-oriented thinkers. Outperformers are 50 percent more likely than peers to proactively close talent gaps through external hiring. They do so not only in the C-suite but at each level of the organization.

5. Derisk growth by executing with excellence

Executives need a robust operating rhythm—one that clearly manages growth activities, communicates growth strategies, and ensures accountability—to succeed against their growth goals (see sidebar "Sparking growth through accountability").

Derisking growth also requires executives to harness the right technology from the early planning stages all the way through to execution. The potential of AI and gen AI is, by now, widely viewed by executives as an important growth enabler. However, only 10 percent of executives in our survey believe they have sufficient data and insights to back their growth initiatives (Exhibit 5). Most leaders regularly check in on the performance of their initiatives but face significant challenges in effectively utilizing new technologies to drive growth.

As our recent research shows, successful growth transformers take the following actions:

- *They recognize risks and challenges and course-correct with agility.* Outperformers establish processes such as using evaluation tools or

conducting regular check-ins to identify, assess, and debate risks. They also ensure KPIs are as rigorously measured and monitored on growth initiatives as they would be on cost initiatives. More than 40 percent of respondents course-correct their growth initiatives based on measured progress against growth goals. They move first but minimize risk by closely monitoring growth initiatives and changing course if moves are proving unsuccessful.

- *They remove roadblocks.* Outperforming leaders don't just check in with their teams. They also clear obstacles to unleash teams' full potential to drive growth, ensuring that everyone can focus on what they do best without getting bogged down by unnecessary hurdles.

- *They enable decision-making and assign real accountability.* These leading companies assign real influence and accountability at the initiative-owner level. Charging a broad slate of owners with specific remits and incentives to collaborate encourages an atmosphere of empowerment and trust.

Growth dreams alone don't get you in shape. Doing real work, day in and day out, does. High-performing leaders don't just hope for progress; they work up a sweat to make it happen. They translate aspirations into concrete plans and drive them forward with decisive leadership.

To do this, executives can start by asking and answering these fundamental questions:

- *What funding have I recently reallocated toward growth?* In any resource-constrained environment, there will always be ideas and initiatives that gain traction and those that wither away. Executives who can prioritize growth initiatives—even if it means making painful or conflict-ridden decisions—outperform their peers.

Sparking growth through accountability

When a new executive was tasked with growing a business unit at an iconic North American services company, she started by instituting weekly check-ins. But these were no ordinary check-ins with a readout and a few questions. Instead, she started the week with early Monday morning stand-up meetings, which included head-to-head matchups between teams, a growth leaderboard, and frequent uncomfortable challenges to those lagging behind on their targets.

The somewhat oppositional Monday morning check-ins worked. The initial discomfort across the team gave way to increased accountability and an entrepreneurial spark, which led to a nearly 25 percent increase in the division's book of business year over year from 2023 to 2024 as the team hungrily chased growth against the odds.

- *Am I acting boldly, or just operating in my comfort zone?* If growth decisions don't lead to at least a little discomfort, they may not be bold enough. If your team is not able to call shots quickly (and change direction with agility, if needed), then there hasn't been sufficient effort to derisk a bold growth move.

- *What have I done lately to better integrate customer needs?* Most companies generate customer insights of some kind. Gen AI agents and other tools create an opportunity to gather much more accurate customer insights rapidly. The executives who find success with growth are using the latest technology to better understand their customers and then act on those insights.

- *Have I reconstituted my team to focus on growth?* Fostering the best talent requires not only a strategy but also a willingness to make difficult decisions to put the right team in place. A group of people with the right experience isn't enough. Leaders of outperforming

About the research

Our McKinsey Growth Leaders Mindset Survey, conducted from June 7 to July 18, 2024, queried 500 leaders, including CEOs, presidents, other C-suite executives, senior vice presidents, and executive vice presidents. Respondents included leaders from all regions of the world from publicly listed companies generating $1 billion or more in annual revenue and representing a wide range of industries, including consumer goods, energy and materials, financial services, healthcare, industrial, technology and media, and travel and leisure. Thirty-six percent of our respondents are executives of companies we consider to be growth outperformers. To determine which companies were outperformers, we looked at more than 4,000 of the largest companies globally from 2017 to 2022 and identified those companies exceeding their subsector peers on revenue growth *and* profitability.

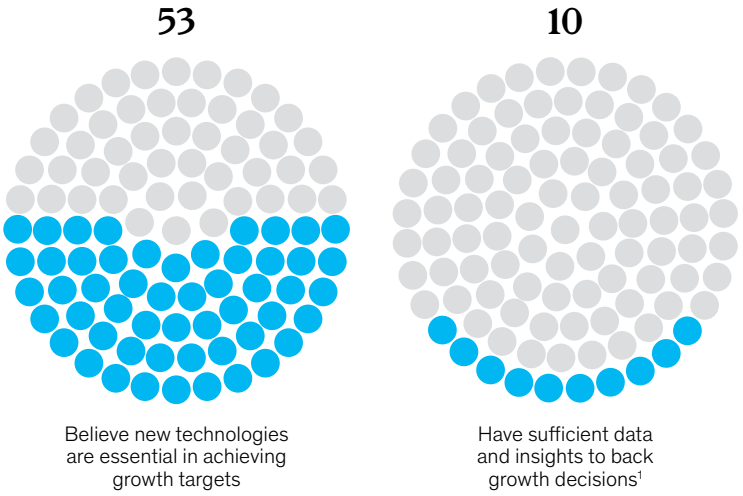
We asked each executive 50 questions about behaviors, mindsets, and practices related to growth strategies and initiatives. These questions covered how executive teams set and track growth goals, allocate resources, monitor progress, and communicate growth to key stakeholders. The survey also explored the leaders' underlying growth mindsets and practices. Many of the mindsets remain consistent with previous McKinsey research, but we examine them in greater depth here.

Our findings reveal a disconnect between growth ambitions and actual actions. High-performing leaders, however, demonstrate mastery of certain mindsets that correlate with strong financial performance. This research builds on previous McKinsey articles, "Choosing to grow: The leader's blueprint" and "Courageous growth: Six strategies for continuous growth outperformance."

Exhibit 5

Many leaders face challenges in effectively utilizing technology for growth.

Growth actions taken by leaders, % of respondents



[1]Share of respondents answering "strongly agree."
Source: McKinsey Growth Leaders Mindset Survey, June 7–July 18, 2024 (n = 500)

companies also make it a point to have teams with the right balance of personalities to ensure high-quality discussions and collaboration.

- *What targeted interventions have I made recently?* Growth requires more than a strategy. It requires rigorous execution and mechanisms to track and support it. Executives should determine the best operating rhythms for themselves and their teams and implement necessary changes to ensure a consistent focus on growth.

It's time to shift from wanting to achieving. Growth happens when leaders roll up their sleeves and get to work, mixing pragmatism with optimism to propel forward in sometimes-uncharted waters. Only then can leaders ensure their organizations are fit and ready for the growth journey ahead. Q

Andy West is a senior partner in McKinsey's Boston office, **Greg Kelly** is a senior partner in the Atlanta office, **Jill Zucker** is a senior partner in the New York office, **Kate Siegel** is a partner in the Detroit office, **Louisa Greco** is a partner in the Toronto office, **Michael Birshan** is a senior partner in the London office, **Rebecca Doherty** is a partner in the Bay Area office, and **Sascha Lehmann** is a partner in the Hamburg office.

The authors wish to thank Andre Gaeta, Doris Lynk, Hemani Patel, Karin Löffler, Laura LaBerge, Matt Banholzer, Michelle Wycoff, Nicolas Maechler, Pari Ranjan, Parth Jhaveri, Sandra Sancier-Sultan, Tim Koller, and Victoria Alvarez Vitale for their contributions to this article.

How to identify the growth industries of tomorrow

by Chris Bradley

Arenas are industries that produce outsize growth and reshape the business landscape. Eighteen arenas could reshape the global economy over the next two decades.

Chris Bradley is a director of the McKinsey Global Institute and a senior partner in McKinsey's Sydney office.

In 2005, the top ten global companies averaged about $250 billion in market cap. They belonged to a very traditional, very old set of industries, such as oil and gas, pharmaceuticals, retailing, and banking. There was just one software company on the list: Microsoft. Today, nine of these companies are no longer on the top ten list, and the companies that replaced them are from a very different set of industries. By 2023, these firms were eight times bigger than those they replaced. Looking back, it seems that something almost magical was happening.

Research by the McKinsey Global Institute shows that these new top industries sprang from a remarkably small number of crucibles, which we call "arenas of competition." Arenas are where the action is in the business world. Two main characteristics define them: They account for an outsize share of economic growth, and market shares of companies within them change to an outsize degree—a metric we call "dynamism."

Using these two main criteria, we first identified 12 arenas of today, which arose between 2005 and 2020. They include industries such as consumer internet, software, semiconductors, and video and audio entertainment. These industries became epicenters of growth, largely driven by digital and silicon innovations that spurred enormous new technology races.

In that 15-year period, arenas grew their revenues at a CAGR of 10 percent, two and a half times faster than nonarenas, which grew

at just 4 percent. In addition, the market caps of today's arenas grew at a 16 percent CAGR, almost three times faster than nonarenas. Arenas also tripled their global GDP share to 9 percent, from 3 percent, in that period. They generated just 9 percent of our sample's economic profit in 2005, but by 2019, they accounted for 49 percent.

So the differences between arenas and nonarenas are dramatic. To borrow an analogy from *Harry Potter*, arenas are like wizards, while normal industries are like muggles. Arenas, like wizards, operate with slightly different rules than muggles and make their own magic.

Arenas improve their capabilities by escalating investment in R&D. So if I check the six Big Tech companies today, they are spending over $400 billion a year on capital expenditures and R&D. To put that in context, the Apollo space program, in today's dollars, was about $190 billion.

In arenas, greater spending on R&D also drives industry shakeouts and hyperscaled global structures. Arenas also earn far greater profits than other industries do, spawn a disproportionate number of global giants, and offer unusually strong opportunities for new entrants to become powerhouses.

This is where the wizardry comes in. Technology breakthroughs make possible what we call an "arena-creation potion," which enables the escalatory mode of competition that characterizes arenas. The potion has three ingredients: a reset of the technology platform, a huge incentive to escalate investments that improve quality and often have increasing returns to scale, and the presence of a large, addressable market. The magic happens when you get these three ingredients right, leading to escalatory competition among companies that make large investments to gain both market share and higher product quality.

We used the three elements of the potion to try to peer into the future and spot arenas that could plausibly emerge between now and 2040. We identified 18, which could account for one-third of all economic growth going forward. They include AI, space, obesity drugs, and nuclear fission, to name a few.

Together, they could yield $29 trillion to $48 trillion in revenues and $2 trillion to $6 trillion in profits by 2040. Furthermore, in terms of impact on the economy, we estimate that they could grow from about 4 percent of GDP in 2022 to 10 to 16 percent by 2040. This translates to an 18 to 34 percent share of total GDP growth.

A key takeaway for business leaders and investors is that you're either competing with an arena, attacked by an arena, or in an arena. Even though arenas are a small part of the economy, they drive so much of its growth and dynamism that their reach is felt everywhere. Amazon, for example, touches cloud, AI, and video—but also advertising and logistics.

It's also important to bear in mind what we call the "shuffle rate," or the churn of market share within an arena. Back in 2005, one-third of the market cap we have today consisted of tiny competitors or companies that didn't yet exist. So arenas are places where new competitors will emerge and new players will step in. It's like winning a gold medal. In these arenas, winning a gold medal really, really, really matters—but it's not a gold medal for life. The Olympics come around every four years, and companies have to keep earning that gold medal. It's that incessant competition that drives the rate of innovation. Q

For more on these arenas, turn the page.

The next big arenas of competition

by Chris Bradley and Kevin Russell

These 18 industries could reshape the global economy and generate $29 trillion to $48 trillion in revenues by 2040.

Looking at today's industrial landscape, a striking feature is the rise of a small set of industries that capture a disproportionate share of value and growth and display a remarkable level of dynamism. These arenas of competition, as we call them, currently account for eight of the ten most valuable companies in the world—as well as the vast bulk of economic profit, though they represent only about 10 percent of revenues. Examples of arenas of today, which showed this characteristic growth and dynamism between 2005 and 2020, include biopharmaceuticals, consumer electronics, semiconductors, and software.

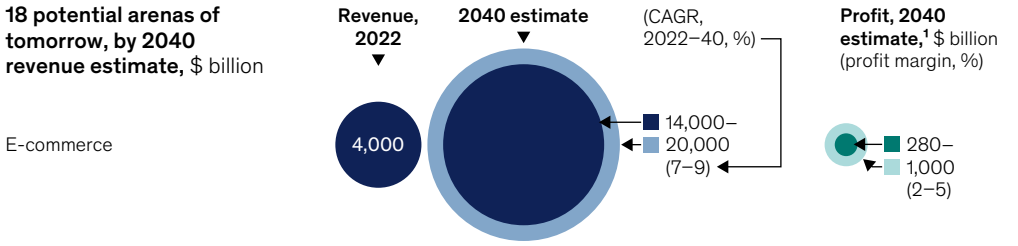
Now we turn our attention to the arenas of tomorrow. Which ones will emerge over the next ten to 15 years and again redefine the world's industrial landscape? The McKinsey Global Institute (MGI) undertook significant research to identify 18 of the best candidates. Collectively, they could represent $29 trillion to $48 trillion of revenue in 2040 and one-third of the economic growth until 2040, starting from only 4 percent of world GDP today and rising to 10 to 16 percent by 2040 (exhibit). For those who want to know where the future of business will be decided, these will be some of the best places to look.

Arenas of tomorrow

Many of the 18 industries that MGI has identified as potential arenas of tomorrow demonstrate continued improvements in broadly applicable technologies, such as AI software and services, batteries, cloud, and semiconductors. Some represent new possibilities for how these technologies combine to massively improve physical products, such as in the case of future air mobility, shared autonomous vehicles (SAVs), space, and the next generation of electric vehicles (EVs). Others, such as cybersecurity, digital ads, and e-commerce, expand and secure the digital economy.

Exhibit

The 18 potential arenas of tomorrow could generate $29 trillion to $48 trillion in revenues and $2 trillion to $6 trillion in profits.



18 potential arenas of tomorrow, by 2040 revenue estimate, $ billion	Revenue, 2022	2040 estimate (CAGR, 2022–40, %)	Profit, 2040 estimate,[1] $ billion (profit margin, %)
AI software and services	85	1,500–4,600 (17–25)	230–920 (15–20)
Cloud services	220	1,600–3,400 (12–17)	160–510 (10–15)
Electric vehicles	450	2,500–3,200 (10–12)	100–320 (4–10)
Digital advertisements	520	2,100–2,900 (8–10)	320–580 (15–20)
Semiconductors	630	1,700–2,400 (6–8)	340–600 (20–25)
Shared autonomous vehicles	N/A	610–2,300	20–460 (4–20)
Space	300	960–1,600 (7–10)	50–160 (5–10)
Cybersecurity	160	590–1,200 (8–12)	90–240 (15–20)
Batteries	98	810–1,100 (12–14)	40–110 (5–10)
Modular construction	180	540–1,100 (6–10)	20–220 (4–20)
Streaming video	160	510–1,000 (6–11)	50–150 (10–15)
Video games	230	550–910 (5–8)	80–180 (15–20)
Robotics	21	190–910 (13–23)	20–180 (10–20)
Industrial and consumer biotech	140	340–900 (5–11)	10–270 (4–30)
Future air mobility	N/A	75–340	10–70 (10–20)
Drugs for obesity and related conditions	24	120–280 (9–15)	30–100 (25–35)
Nuclear fission power plants	18	65–150 (7–13)	5–50 (5–30)
Total	**7,250+**	**29,000–48,000 (8–11)**	**1,900–6,100**

[1]Defined as net operating profit less adjusted taxes (NOPLAT). NOPLAT share based on most closely mappable industries from our database of 3,000 companies analyzed.
Source: Company annual reports; McKinsey Value Intelligence; McKinsey Global Institute analysis

Still others offer ways to transform such essential needs as energy (nuclear fission), food and household goods (consumer and industrial biotech), health (drugs for obesity and related conditions), and housing (modular construction).

While arenas are defined by their outsize growth and for the changes in market shares among players at the top—a dynamic we call the "shuffle rate"—they are remarkable in other ways, too. The arenas of today increased their share of economic profits fivefold between 2005 and 2020, were twice as R&D intensive, and saw twice as many new entrants into the top 3,000 companies.

Understanding potential arenas is relevant for entrepreneurs and incumbent companies that want to compete directly in arenas, other companies whose businesses would be affected by the emergence of arenas, investors looking to allocate capital to these industries, people seeking jobs in the winning industries of the coming decades, and policymakers looking to play a role in how and where these industries develop and serve the public.

Our compendium of the 18 industries that could become the arenas of tomorrow includes descriptions of the growth factors and competitive dynamics that could shape each potential arena over the coming decades. Looking into the future is always speculative, and we recognize the possibility—indeed, the likelihood—that we may be getting some things wrong. That is also why we estimate a range based on arena-specific factors and three cross-cutting swing factors: geopolitics, the pace of AI adoption, and the execution of the green transition. These swing factors could bring additional industries, such as hydrogen, renewable-energy equipment, sustainable fuels, or even nuclear fusion, above arena thresholds for growth. We describe part of our process in this excerpt (see sidebar, "Characteristics of arenas—present and future"), but a more complete description of our methodology is available in the original MGI report, "The next big arenas of competition," on McKinsey.com. This granular look at our methodology will enable readers to calibrate their own views of which industries could end up becoming arenas.

The 18 next big arenas of competition

The potential future arenas can be divided into three groups: arenas of today that are likely to continue developing into arenas of tomorrow, subsegments of current arenas that may grow sufficiently large and fast to become spin-off arenas, and emergent arenas that are not as closely linked as the potential spin-offs to any of today's arenas. While at different stages of their evolution, each displays early signs of the three "arena-creation potion" elements. The following list is ordered by the upper end of 2040 revenue estimates, from smallest to largest within each group.

Continuing arenas

Four of our 12 current arenas—e-commerce, EVs, cloud services, and semiconductors—are likely to become arenas of tomorrow. All four are in the middle phase of rapid growth in their S-curve of market adoption. Demand pools still have large headroom, and they continue to see the ever larger investments that continually improve product quality, contributing to growth and dynamism.

E-commerce. This arena is continuing on the rapid phase of its S-curve of growth and is still anchored in the original business model step change, which was the online availability of retail sales. Nevertheless, other relevant business model resets could also spur growth

in e-commerce; these include retail media networks, which are adjacent to the reset in another future arena, digital ads. From mid-2020 to mid-2022, more than a dozen retailers debuted this new advertising revenue stream. Social commerce, which allows consumers to make purchases on social media apps, is another business model reset on the rise. In addition, e-commerce is expected to undergo more business model step changes by expanding further into large product categories such as healthcare and food. Because e-commerce is a continuing arena, the escalatory investments in merchant and customer acquisition are likely to continue. Capital expenditures for last-mile delivery capabilities and investments in social media and payments integration are also likely to continue to rise. A larger share of sales in developing markets and expansion into new product categories in developed markets are likely to sustain demand and propel the majority of e-commerce growth, effectively stretching this arena's S-curve.

Electric vehicles. EVs are likely to continue to be an arena for two reasons: continued growth as EVs capture an increasing share of the large and stable demand for passenger and commercial vehicles, and the new rising competition in the industry. The breakthrough of battery cell technology and its current scalability and commercialization is the technology step change in this continuing arena. R&D investments could continue to mount as players, especially traditional automotive incumbents, increase their share of EV sales. These sales could eventually take the lion's share of overall passenger vehicle sales—by our estimates, from 18 percent in 2023 to between 82 and 96 percent by 2040.

1983

McKinsey Quarterly
Number 4

Changing values in a post-industrial society

We are beginning to see the emergence of a multisectoral structure for the industrialized economy. New production technologies, including information technologies and the microprocessor, are likely to lead to more highly automated, more capital-intensive mass production processes. They could also lead to more decentralized living and working. They will probably do both.

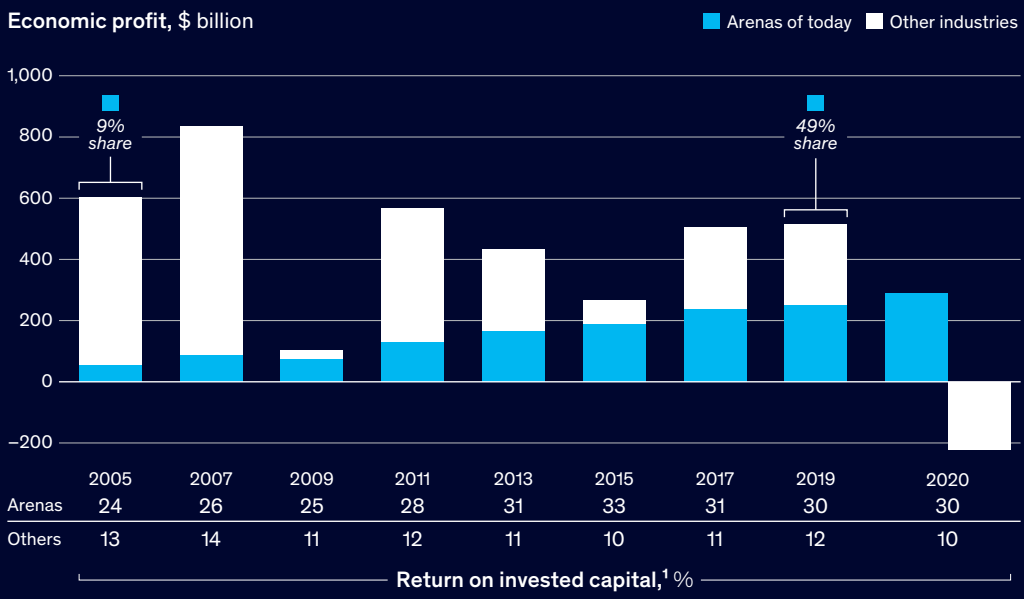
Characteristics of arenas—present and future

To identify the future arenas, McKinsey Global Institute researchers started by identifying 12 arenas that showed outsize growth and dynamism from 2005 to 2020. In order of their market capitalization in 2020, from largest to smallest, they are software, semiconductors, consumer internet, e-commerce, mobile and other consumer electronics, biopharmaceuticals, industrial electronics, payments, video and audio entertainment, cloud services, electric vehicles, and information-enabled business services. These arenas of today (four of which are likely to also be arenas of tomorrow) had a revenue CAGR of 10 percent and a market capitalization CAGR of 16 percent. They tripled their global GDP share to 9 percent, from 3 percent, in the 15-year period and increased their share of economic profit to 49 percent in 2019, from 9 percent in 2005 (exhibit). By contrast, nonarenas had only a 4 percent revenue CAGR and a 6 percent market cap CAGR over the same period.

To help us identify future potential arenas, we examined how today's arenas originated. Three telltale elements of a forming arena are business model or technological step changes, escalatory investments, and a large or growing addressable market. The presence of these elements can lead to escalatory competition among players, which make large investments to gain not only market share but also a product quality edge, compounding the benefits of investment and further setting them apart from other companies in a race to the top.

Exhibit

Arenas' share of economic profit grew from 9 percent in 2005 to 49 percent in 2019.

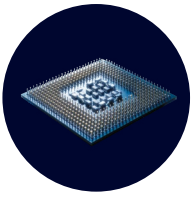


[1]Computed as net operating profit after tax/invested capital for a given year.
Source: McKinsey Value Intelligence; McKinsey Global Institute analysis

Four of our 12 current arenas—cloud services, e-commerce, electric vehicles, and semiconductors—are likely to become arenas of tomorrow.

Cloud services. The ongoing adoption of cloud services could generate $3 trillion in EBITDA increases for *Forbes* Global 2000 companies by 2030. The AI cloud represents a technological step change in this arena because new AI models require significant amounts of computational power, which could be supported by cloud infrastructure. Furthermore, the types of infrastructure and platform services, including AI-enabled capabilities, that cloud providers offer will likely continue to evolve. New data sovereignty regulations, such as requirements about where data centers must be located, are also generating a step change in business models, fostering the emergence of regional competitors.

The escalation of capital expenditures is likely to continue as in past decades, and R&D expenditures could also increase as players try to develop more efficient cloud infrastructure. We estimate that the share of global IT spending on cloud services could rise from 8 percent in 2022 to between 19 and 41 percent by 2040 as companies continue to migrate their computing and storage processes to the cloud.

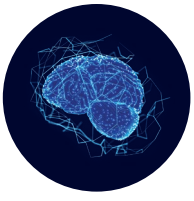


Semiconductors. This arena undergoes frequent technology step changes as manufacturers keep reducing the distance between chips' transistors and shrinking the size of components, including the transistors themselves. Companies are likely to continue to increase R&D and capital expenditures for machinery in pursuit of node resets but also to meet rising demand for computational power. For example, the need for high-performance chips could keep growing as cloud services companies double down on investments in graphics processing units and AI accelerators for computationally intensive tasks. Demand from four segments—automotive, computing and data storage, industrial electronics, and wireless communications—could fuel the majority of the growth in semiconductors. Driving-assistance features, EVs, and infotainment system components could propel automotive demand, while the requirements of AI and cloud services are likely to boost computing and data storage demand. Industries such as medtech, automation, and electricity

generation are likely to fuel industrial-electronics demand, and the growing need for connected devices could increase wireless-communications demand.

Spin-off arenas

Three arenas of today—software, consumer internet, and video and audio entertainment—have subsegments that may grow large enough and fast enough to become new arenas. From an S-curve perspective, a specific technological or business model step change helped separate these subsegments, now potential arenas of tomorrow, into their own new S-curves.

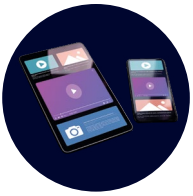


AI software and services. Although some types of AI, such as machine learning, have been around for decades, the technology rose to public prominence in late 2022 with the release of OpenAI's ChatGPT, a gen AI interface capable of producing remarkably humanlike responses to users' prompts. The recent emergence of gen AI is the technological step change in this market that supports our definition of AI software and services as its own arena, making it a spin-off of software as an arena of today. Cloud services, a continuing arena, is also critical for AI software and services because it enables most of the computational processing required by today's AI models. There are signs of momentum for adoption that indicate the beginnings of a new S-curve: In an April 2023 McKinsey survey, nearly a third of respondents said their organizations were using gen AI in at least one business function, and 40 percent said their organizations would add to AI investments. In a March 2024 McKinsey survey, two-thirds of respondents reported that their organizations were using gen AI, doubling the level of adoption in less than one year.

Companies are increasing R&D investments in this arena as they attempt to differentiate their services through advanced capabilities. AI systems such as OpenAI's GPT-4 and Google's Gemini, which compete in the "frontier" foundation models segment—that is, the biggest, most advanced models—escalate investments in proprietary data and infrastructure to create industry-leading models. Companies that compete in the fragmented specialized-AI software segment (such as AI start-ups that have specific use cases) escalate investments by creating bespoke AI-enabled systems tailored to their use cases. This arena's potential economic impact and the associated revenue could be significant as a result of a large market for both consumer as well as corporate use cases,

> **Three arenas of today have subsegments that may grow large enough and fast enough to become new arenas.**

such as consumer research and segmentation, operations, and software engineering.



Digital advertising. More people online, a rising middle class (ten countries alone could add 900 million people to the middle class by 2030), and more time spent on digital media (in the United States, from 40 percent in 2016 to 66 percent in 2026, according to forecasts) are continuing to increase the demand pool for digital advertising, which funds much of the internet through its use in searches, social media, and digital media. Companies are continually experimenting with business models to attract users. For example, media companies are trying out different ad-supported tiers, as well as different formats of advertisements, such as in-line ads in social media posts or ads displayed as part of a gen AI search query result. Technology in the industry also is moving quickly: Some companies are introducing new experiences such as short-form social videos, building capabilities to hypertarget customers and track the cost-effectiveness of advertisements, and increasing the use of gen AI for hyperpersonalization and to lower the cost of content creation.

Investments mount as companies attempt to sustain a leading edge in an environment with strong network effects. Companies are locked in a battle for attention across platforms and must continually invest to create the most engaging experiences, biggest social networks, or best media content to keep people—and the advertisers that want to reach them—on their platforms. Participants must also invest to capture new pockets of growth, especially in developing economies, where regional competitors can emerge to challenge global leaders. We expect digital ads to capture a growing share of global ad spending, from 65 percent in 2022 to between 80 and 90 percent by 2040.

Streaming video. The video and audio entertainment arena could be transformed because the streaming technology developed in the past 15 years is being adopted more rapidly, resulting in a new spin-off arena: streaming video. The uptake of streaming video is still in the steep part of its S-curve. In the past, investments in customer acquisition and content production surged as competition intensified between players. However, companies now face pressure to improve profitability. As a consequence, investments will be made in partnerships and other collaborative models, such as content bundling. The two-way network effect in this arena will likely persist: More content attracts more viewers, and more viewers give platforms more leverage to license content or revenues to produce their own. The market for streaming video may also be buoyed by demand from the increasing access to high-speed internet in developing economies as more households around the world gain the ability to stream video online. This larger customer base would also increase the potential revenues earned from advertising on these platforms.

Emergent arenas

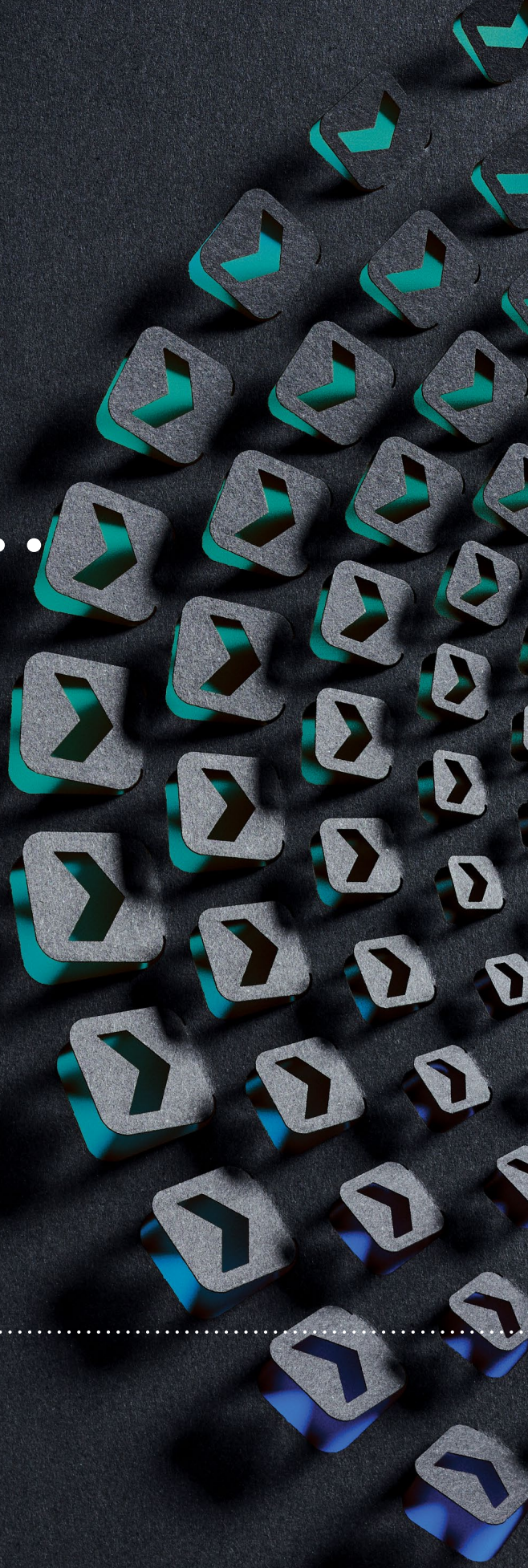
The remaining 11 potential arenas of tomorrow, the emergent arenas, are generally novel relative to existing industries. These potential arenas vary in degree of maturity, a natural consequence of using 2022 as the starting point of our analysis. All have high growth and high dynamism potential because these arenas are in the early to middle phases of their S-curves. For this reason, they are also smaller in scale in our 2040 estimates (all 11 falling among the lower 12 out of our 18 arenas) and have higher ranges of uncertainty.

The arenas of today . . .

increased their share of economic profits fivefold between 2005 and 2020

were twice as R&D intensive

and saw twice as many new entrants into the

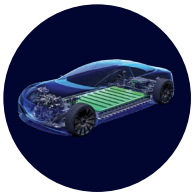


Shared autonomous vehicles. The development of technology for vehicle autonomy (for example, the integration of computer vision, real-time machine learning, and large-scale data engineering, such as high-resolution mapping) is the step change in this arena, where R&D investments increase primarily to overcome technological obstacles that affect the cars' safety and reliability. Despite the growing prevalence of vehicles for hire that don't require a human driver, a recent decline in SAV investment suggests that commercialization may go more slowly than forecast. The large market for SAVs could depend on regulation, technological progress, financial feasibility, and consumer adoption of the vehicles. We estimate that SAVs could capture 25 to 51 percent of revenues in the shared-mobility industry by 2040.

Space. The commercial sector of the space arena has shown robust growth and accelerating market activity in the past decade, with companies such as Blue Origin, SpaceX, and Virgin Galactic recently entering the fray. Government interest has also evolved: The number of government space agencies around the world has grown from 40 in 2000 to more than 75 today. This arena experiences frequent technological step changes, especially in the form of commercially viable spacecraft and new satellite systems, such as SpaceX's Starlink system. Innovations in launch mechanisms, such as reusable boosters, are also underway. Escalation in R&D has occurred in both the public and private sectors. Major players continue to double down on investments for new product launches. Private sector spending in space is reaching all-time highs, with more than $70 billion invested in 2021 and 2022 combined.

Growth in the space arena may be driven by state-sponsored investments in civil and defense segments; consumer needs for space capabilities, such as communications and navigation; and commercial infrastructure and support operations required to meet these state-sponsored and consumer demands.

Cybersecurity. In 2020, the global direct financial damage from cybercrime was estimated at about $950 billion, almost twice the $520 billion recorded in 2018. When considering direct, indirect, and upstream-systemic costs, the overall economic impact of cybercrime in 2020 was estimated to reach approximately $4 trillion to $6 trillion, or more than 4 percent of global GDP and more than four times the direct costs. As adversarial parties keep improving their capabilities, selling ransomware as a service, and creating marketplaces for hacking tools and data, players in this arena need to continually improve their offerings to protect computer systems from unauthorized access by adversaries. The cybersecurity technological step change is the data protection and network security that complements other fast-growing technologies with new vulnerabilities. As a result, R&D investments rise for the development of more effective products and services. This often includes investing in proprietary data sets and processing power, which are frequently needed for AI use cases. Innovation in the industry has been expanding, too, with the number of patents growing at rates of 10 to 25 percent from 2017 to 2021. As attacks proliferate and the digital landscape grows and changes, cybersecurity spending is expected to represent a larger share of global IT spending, from 6 percent in 2022 to between 7 and 14 percent by 2040.



Batteries. The global energy transition is fueling demand for batteries, mainly due to the continued growth of EVs, battery energy storage systems, and consumer electronics. Manufacturers of batteries have made technological step changes related to energy density, charging speed, longer life cycles, and manufacturing sustainability. R&D is likely to grow as manufacturers innovate on battery technologies, such as enriching the anode with silicon compounds. Manufacturers also are innovating in new designs, including solid-state and new chemistries such as lithium sulfur and vanadium redox, which could become direct substitutes for lithium-ion and sodium-ion batteries in specific applications. Capital expenditures could escalate as players try to capture the benefits of manufacturing at scale, as seen in the rise of gigafactories. As a result, barriers to entry could rise for new entrants, improving the margins of large incumbents.

Video games. The rise of mobile and cloud gaming, which allow games to be delivered faster through new platforms, served as a technology step change in this arena. This coincides with a business model step change, with free-to-play games such as *Fortnite* aiming for wider distribution and to generate revenue through in-game purchases. R&D investments, especially in game development, have increased in this arena. For example, several high-profile AAA games are released each year. These games have budgets of at least $200 million, more than the average production budget of the 150 most expensive movies from 2016 to 2023, $180 million. The surge in mobile gaming and the success of the free-to-play in-game-purchase business model on various platforms drive this large and expanding market. Growing consumer spending on games, as well as higher advertising revenue and console sales, are expected to increase revenues despite recent setbacks in certain markets, such as below-expectations revenue growth and consumer spending that returned to prepandemic levels.

Robotics. Advancements in the autonomous-robot segment represent a major technological reset by helping to improve the mobility and dexterity of the machines and expand the range of tasks they can easily perform. One way to understand this arena is through robot types, from single-purpose robots typically used in industrial or manufacturing environments to general-purpose robots, which are more recent and can execute a variety of tasks with limited

> **The remaining 11 potential arenas of tomorrow are generally novel relative to existing industries.**

human intervention. Boston Dynamics, Figure, Google, Sanctuary Cognitive Systems, and Tesla are among the companies trying to develop general-purpose robots that would take on tasks currently performed by humans. R&D investments may escalate, especially in the subsectors of general-purpose robots and specialized robots for specific use cases, such as cooking or packing boxes. Players are intensifying an already heavy R&D focus on deep technology as they vie for share. Acquisitions and investments in robotics companies are also escalating. The robotics arena received a surge in capital, with venture capital investment increasing from about $4.6 billion in 2018 to about $13 billion in 2022.

Industrial and consumer biotechnology. The technology step change in this arena is attributable to breakthrough biological innovations, such as the decline in the cost of reading genetic codes and the improvement in the capability to edit genes using CRISPR technology. As a result, application of this technology may accelerate in four areas: agricultural biotechnology (such as bioengineered crops), alternative proteins (such as cell-based meats), biomaterials and biochemicals (such as bioplastics), and consumer products and services (such as personalized wellness products). R&D and capital expenditures account for the majority of the escalatory investments for product development, commercialization, and manufacturing needs. The large and growing market in the industrial and commercial biotechnology arena may be driven by several factors, including advancements in technology facilitating R&D, increasing consumer demand, the commercialization of new products and services, and regulatory and consumer commitments to sustainability.

Modular construction. In this process, builders in the housing market produce standardized, prefabricated modules that are made at an offsite factory and then assembled into buildings. This method can improve construction productivity amid lagging labor productivity growth in the gigantic $13 trillion global construction industry. Improving construction productivity is urgent to address an ongoing global housing shortage and affordability crisis, as well as a critical skilled labor gap in the construction industry. The modular, prefabricated process that enables the parallelization of construction phases is the business model reset in this arena and could greatly improve construction productivity. While some modular construction is widespread in a few high-labor-cost countries, such as Japan, the "Nordic countries," and Singapore, global penetration is still relatively low. However, there are signs that broader adoption—the rising part of the S-curve—could be near. There is increasing investment and research into processes and digital tools that can help players solve the complex value chain coordination challenges of modular construction. Growth in this sector has the potential for a flywheel effect: As more buildings are built using modular techniques, the supply of modular buildings grows, which in turn makes it more likely that other developers could choose modular construction as well.

Nuclear fission power plants. Today, nuclear fission reactors are the second-largest source of electricity, after hydropower, generated with low emissions of greenhouse gases. In this arena, we look at players that build

nuclear-power-generation facilities. The next generation of small modular reactors (SMRs) is an example of a technological step change because the reactors are designed to be both safer than traditional large-scale reactors and cheaper to build by using prefabricated components and standardized designs. As more countries build nuclear power plants and the global market grows, learning curve efficiencies could push down this capital expenditure for both large-scale reactors and SMRs. R&D investments could escalate in the race to reduce building costs and develop new reactor technologies, construction methods, and coolant types. Global venture investment funders seem optimistic about this arena, despite the high capital costs and the long time horizon before returns are realized. Funding rose from about $60 million in 2018 to about $390 million in 2022. To reach emissions-reduction targets, countries would likely need to rely on nuclear power to complement intermittent renewable-energy sources, such as wind and solar. China, Russia, South Korea, and other countries plan to significantly scale up nuclear power production. At the COP28 climate conference in 2023, 25 countries pledged to triple their nuclear energy capacity by 2050 to reduce emissions.

Future air mobility. Innovations in materials, propulsion, batteries, and autonomous technology for passenger electric vertical takeoff and landing vehicles and delivery drones are the technological step changes in this arena. R&D investments in these components could continue to increase as air mobility technologies begin to reach commercialization. The need for "vertiport" boarding and landing facilities, as well as delivery distribution centers, means capital expenditures may also increase. While many of these nascent technologies are yet to be commercially available, there are early signs of future growth: Disclosed annual funding for this arena grew from less than $600 million in 2017 to $5 billion in 2023 as companies progressed on their regulatory and certification journeys and aimed to tap the large addressable markets for new modes of transportation.

Drugs for obesity and related conditions. A report by the World Obesity Federation estimates that obesity prevalence could rise from 14 percent in 2020 to 24 percent by 2035, based on current trajectories, with an attributable economic impact of $2.0 trillion in 2020 and $4.3 trillion in 2035. The technology step change in this arena was the introduction of GLP-1 agonists, a revolutionary class of drugs initially approved to treat diabetes that has been approved more recently to treat obesity as well. An escalatory dynamic is evident in the R&D race, as major players develop their own GLP-1 weight-loss therapies. With generics on the horizon, players are motivated to further invest in R&D for more efficacious drugs with fewer adverse effects or more convenient drug administration, such as an oral solid pill, rather than the current injectables. Q

Chris Bradley is a director of the McKinsey Global Institute (MGI) and a senior partner in McKinsey's Sydney office, and **Kevin Russell** is an MGI senior fellow and is based in the Carolinas office.

Illustrations by Sam Green

10 rules of growth

Empirical research reveals what it takes to generate value-creating growth today.

by Chris Bradley and Rebecca Doherty, with Nicholas Northcote and Tido Röder

One of the surest signs of a thriving enterprise is robust and consistent revenue growth. That has not been easy to accomplish over the past 15 years. Corporate growth slowed dramatically after the global financial crisis, with the world's largest companies growing at half the rate they did before 2008. Furthermore, increases in capital investments outstripped revenue expansion, compressing returns. Now, with a slowing global economy, rising inflation, and geopolitical uncertainty, growth that delivers profits and shareholder value may become more elusive still.

To buck these trends, business leaders need to follow a holistic growth blueprint consisting of three core elements: a bold aspiration and accompanying mindset, the right enablers embedded in the organization, and clear pathways in the form of a coherent set of growth initiatives. To help our clients identify these pathways, we conducted an in-depth study of the growth patterns and performance of the world's 5,000 largest public companies over the past 15 years.

The research reaffirmed that revenue growth is a critical driver of corporate performance. An extra five percentage points of revenue per year correlates with an additional three to four percentage points of total shareholder returns (TSR)—the equivalent of increasing market capitalization by 33 to 45 percent over a decade. Firms that managed to grow faster and more profitably than their peers during our study period did even better, generating shareholder returns six percentage points above their industry averages.

This article is an edited excerpt of the version that first published on McKinsey.com, in August 2022.

However, relatively few companies could boast such results. A typical company grew at a mere 2.8 percent per year during the ten years preceding COVID-19, and only one in eight recorded growth rates of more than 10 percent per year.

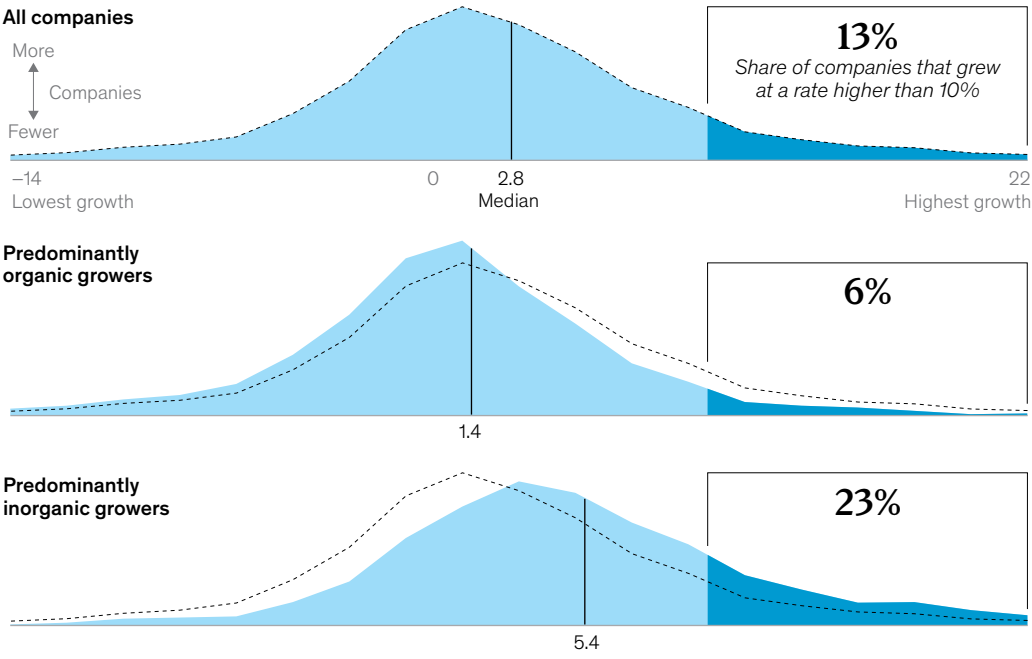
Healthy growth has also been hard to sustain. When we compared our sample's performance in the first half of the last decade with the second half, only one in three companies that were in the top quartile of growth between 2009 and 2014 managed to maintain that rate in the subsequent five-year period. Among companies that grew predominantly organically, the rate was even lower, at one in four. This suggests a strong tendency for growth to revert to the mean.

To understand how organizations can try to overcome these obstacles, we studied the growth patterns of the sample companies through various lenses. Our findings suggest ten imperatives that should guide organizations seeking to outgrow and outearn their peers.

We have quantified what it takes to master each rule, as well as the extent to which excelling at each improves corporate performance. The resulting "growth code" allows you to benchmark your growth performance and set the bar for your next strategy. The more rules you master, the greater your reward. But the bar is high—fewer than half of the companies in our sample excelled at more than three of the ten rules, and only 8 percent mastered more than five.

Growth is hard for companies to achieve.

Companies, by revenue growth and growth approach, 2009–19, CAGR, %



Note: For details, see Exhibit 1, "The ten rules of growth," McKinsey, Aug 12, 2022.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey; Strategy Analytics by McKinsey

1

Put competitive advantage first

A high return on invested capital (ROIC) indicates a business model powered by a competitive advantage. Companies that generate stronger returns attract and deploy more capital, a virtuous cycle that enables them to grow faster and generate still higher returns. While some firms forgo profits for a time in pursuit of growth (with Amazon being perhaps the best known), the far more typical, and practical, approach is to establish a distinctive business model and then scale it.

For example, a department store chain had a business model—brand-name bargains in stores with low inventories and costs—that in 2007 delivered 5 percent higher ROIC than its cost of capital. The management team used this advantage to expand the store network from approximately 900 locations that year to more than 1,500 in 2019. As a result, revenue grew by 9 percent per year and the company generated an impressive 29 percent in annual shareholder returns.

Companies that maintain or increase exposure to fast-growing, profitable segments generate one to two percentage points more TSR.

2

Make the trend your friend

This age-old axiom holds especially true today as the acceleration of pre-COVID-19 trends widens the gap between corporate winners and laggards. Over the past 15 years, companies that expanded in ways that maintained or increased their exposure to fast-growing, profitable segments generated one to two percentage points of additional TSR annually. This suggests that organizations already in attractive markets should keep investing to stay ahead of the pack. Firms facing market headwinds, on the other hand, may need to aggressively reallocate their resources toward tailwinds, potentially staging large-scale pivots.

The selection of markets needs to be precise, however. In the best-selling book *The Granularity of Growth: How to Identify the Sources of Growth and Drive Enduring Company* (Wiley 2008), our colleagues observe that many growth sectors have sluggish subindustries, while relatively mature sectors include rapidly growing segments. Take the telecommunications services industry, which grew at 1.6 percent per year over the period of our analysis. The fastest-growing company in the sector increased its revenues by 21 percent annually, while the slowest contracted by 9 percent per year. This dichotomy reflects the influence of acquisitions and divestitures, as well as portfolio choices—that is, varying degrees of exposure to segments with different rates of growth. The cloud services category is growing faster than voice services, for example, and the growth rates of each category vary widely by country.

3

Don't be a laggard

Outgrowing your industry implies a strong business model—an advantage rewarded by capital markets whether you're in a fast- or slow-growing industry. Furthermore, companies that manage to win market share away from competitors are likely to beat the growth expectations reflected in their share price, unlocking even stronger returns.

Consider this tale of two retail companies, both of which grew at 4 percent a year between 2007 and 2017 but in different segments. A home improvement retailer achieved its growth in a category that grew at 3 percent annually, and the company generated annual TSR of 17 percent. A sports apparel company, in contrast, was outpaced in growth by its segment peers by one percentage point annually, and its shareholder returns were more lackluster at 1 percent per annum. While many factors could have affected these two companies' stock prices aside from their growth rates, our analysis suggests that outgrowing your industry is worth, on average, an additional five percentage points of shareholder returns per year. Among companies that managed to achieve this while being more profitable than their peers, this figure was one percentage point higher still.

4

Supercharge your core

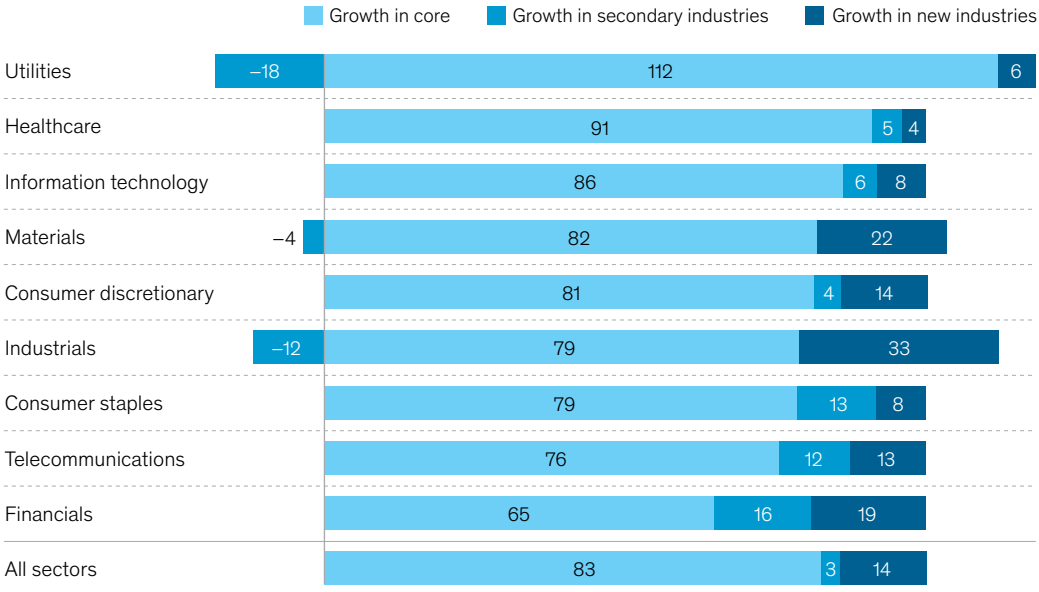
When developing a growth strategy, often the first question on a CEO's mind is, "Where should that growth come from?" To help find the answer, we categorized revenue increases among our sample companies into growth within the core industry (their largest industry segments at the start of the study period), in secondary industries (smaller but still significant revenue contributors in the first year of our time frame), and in new industries (segments where the companies did not initially have a presence).

This decomposition reinforced the importance of a healthy core business. Put simply, it is improbable that you can achieve strong growth if the core isn't flourishing. Only one in six of the companies in our data set with core-segment growth rates below its industry median managed to achieve overall corporate growth rates above those of its peers. Therefore, finding a way to unlock growth in the core needs to be a top priority. For some organizations, this may require a wholesale revamp of the operating model. Others may need to identify granular pockets with growth potential in their existing markets or new ones and reallocate resources to them from more stagnant segments.

83% of revenue growth at the average sample company comes from growth within its core industry.

Only 20 percent of most organizations' total growth comes from beyond the core.

Share of revenue growth, by growth type, 2005–09 to 2015–19, %



Note: For details, see Exhibit 4, "The ten rules of growth," McKinsey, Aug 12, 2022. Figures may not sum to 100%, because of rounding.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey

5

Look beyond the core

Our study found that, on average, 80 percent of growth comes from a company's core industry and the remaining 20 percent from secondary industries or expansion into new ones. However, these figures varied among sectors during our study period. For example, industrial companies generated a full third of their growth from new industries, while utilities consolidated toward their core business areas more than other sectors.

Companies that grew into adjacent industries generated, on average, an extra 1.5 percentage points per year of shareholder returns above their industry peers. One such company was a global automotive tire supplier that diversified into brake and safety system technology, powertrains, and vehicle connectivity and information systems. Together, these segments now account for approximately 75 percent of the company's total revenue, and its growth exceeded that of its peers by 2.4 percentage points per year. But examples of this strategy abound. The current transition to net-zero carbon emissions, for instance, presents many promising opportunities for companies in chemicals, construction, and other industries to expand into fast-growing adjacencies, such as recycled plastics, sustainable construction materials, or meat substitutes, as demand for their legacy products declines.

For companies with fast-growing core businesses, expanding into new areas can help position their portfolios ahead of future trends. Those with slow-growing cores, on the other hand, can use adjacent businesses to offset slow growth elsewhere.

6

Grow where you know

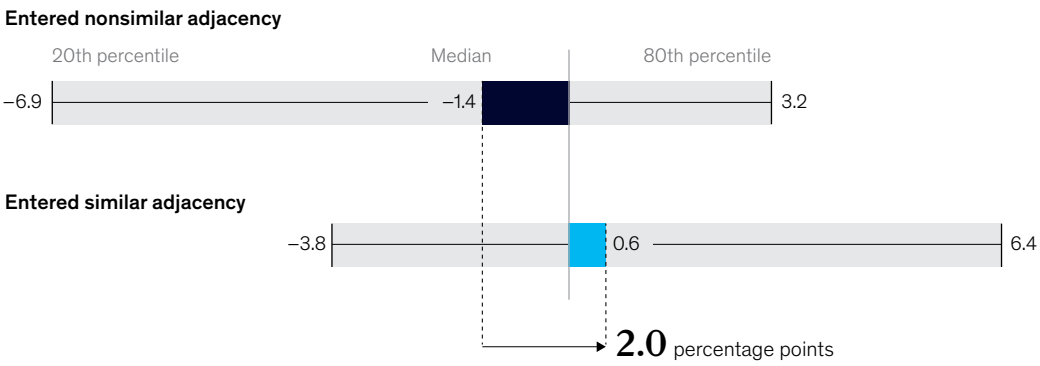
As we saw, diversifying into adjacent segments can be a valuable growth strategy, but how similar should these segments be, both to the core and to each other? We used a simple measure: Industries are similar if they often appear together in corporate portfolios (for example, cable and satellite together with broadcasting, or aerospace and defense with industrial machinery).

Our analysis showed that companies growing in a way that increases the similarity of their portfolios earn, on average, an additional one percentage point of TSR per annum. Those that expand into new industries can expect an additional two percentage points if the new industry is similar to their core.

Why does similarity matter so much? We believe it is a proximate measure of whether a company is a natural (or best) owner of an asset and thus able to generate optimal value from owning or operating the business. This value could derive from synergies with other businesses the company owns, distinctive technical or managerial capabilities, proprietary insights, or privileged access to capital or talent. Take the example of General Mills' purchase of Pillsbury from Diageo. There was little overlap between Diageo's core business and Pillsbury's, while Pillsbury's and General Mills' businesses share many of the same competencies and assets. This enabled General Mills to reduce costs in purchasing, manufacturing, and distribution, and thereby to raise operating profit by roughly 70 percent.

Companies that grew into similar adjacencies outperformed their peers.

Excess total shareholder returns, by similarity of new growth areas, 2005–09 to 2015–19, %



Note: For details, see Exhibit 5, "The ten rules of growth," McKinsey, Aug 12, 2022.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey

Companies that entered similar adjacencies gained two percentage points more TSR compared with peers entering nonsimilar adjacencies.

7

Be a local hero

Industry (along with moves up and down the value chain) is only one aspect of the where-to-grow issue. The other is geography. Just as it is hard to achieve overall growth if your core business isn't thriving, it is unlikely that you can raise your growth trajectory without winning in your local market. In fact, fewer than one in five of the companies in our sample that had below-median growth rates in their local regions managed to outgrow their peers. Many members of this minority are companies in slow-growing regions, such as Japan, that offset lethargic local growth with aggressive international expansion. An air-conditioning and refrigeration manufacturer, for example, managed to offset slow growth in Japan by successfully expanding to North America and China.

<20%

of companies with below-rate local margins outgrow peers.

8

Go global if you can beat local

Approximately half of the total growth by companies in our sample came from geographies outside their home regions—an aggregate number fueled by Japanese and European companies that relied on international markets to compensate for slow growth at home. In faster-growing areas, such as China and North America, international regions accounted for closer to 30 percent of total growth.

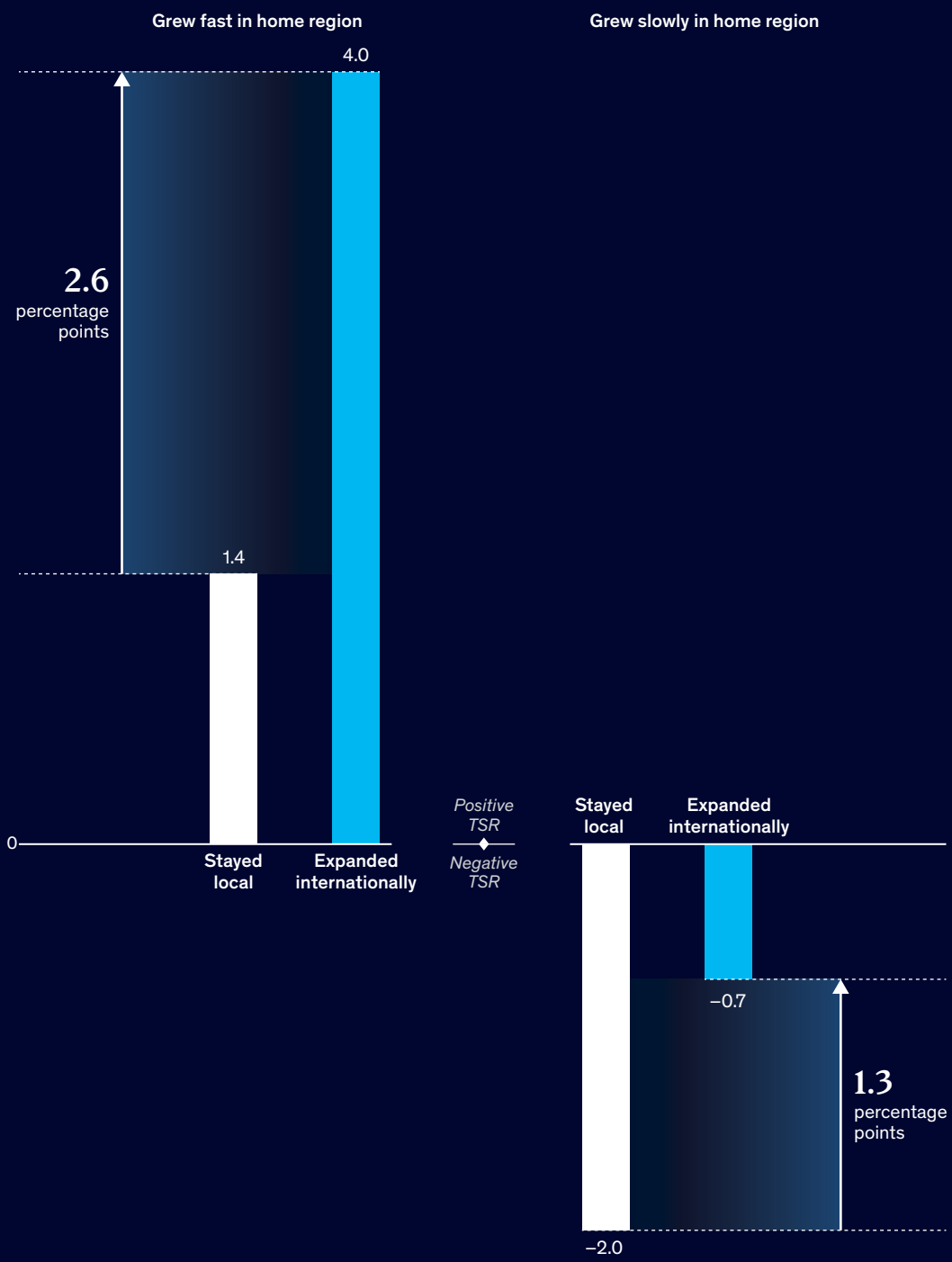
Companies that expanded internationally generated 1.9 percentage points more annual TSR than their industry peers, but those with healthy growth in their home markets benefited more than those merely treading water at home. The former category generated an additional 2.6 percentage points of annual shareholder returns through geographic expansion, while those that struggled locally gained only 1.3 percentage points—not enough to offset the performance drag from the weak home market.

To succeed at international expansion, it's critical to have a clear source of competitive advantage that is transferable across regions. Without it, foreign companies will probably struggle to compete with incumbents that better understand the local context. This reality may explain why companies that grow strongly at home benefit so much more from global expansion—they are more likely to have winning business models, aspects of which can be transferred to new regions.

The case of a high-performing European manufacturer of agricultural and municipal vehicles illustrates the benefit of venturing abroad from a strong home base. The company leveraged its equipment's stellar reputation to expand into the United States, where it continued to generate market-beating returns. On the other hand, when a European grocer that struggled in its home market expanded aggressively into Latin America, its TSR trailed that of its peers by seven percentage points per annum over the subsequent decade.

Organizations with fast growth in the home region can benefit most from international expansion.

Excess total shareholder returns (TSR), by speed of growth and expansion location, 2005–09 to 2015–19,[2] %



Note: For details, see Exhibit 6, "The ten rules of growth," McKinsey, Aug 12, 2022.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey

9

Acquire programmatically

Mergers and acquisitions account for approximately one-third of the revenue growth among companies in our data set. McKinsey's longstanding research into M&A strategies has repeatedly reaffirmed that it is not the total value of transactions but the deal pattern that drives shareholder returns. After segmenting companies into four categories, our colleagues found that programmatic acquirers—those that did at least two small or medium-size deals a year along the same theme—outperformed peers using other M&A approaches.

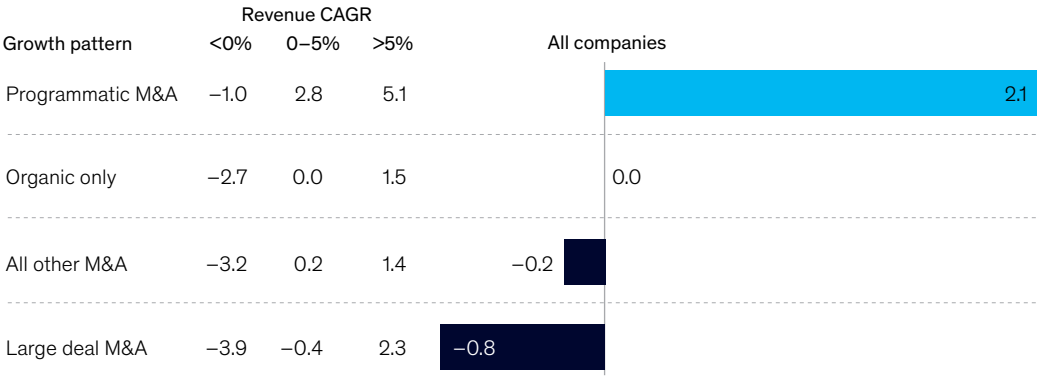
We wondered whether programmatic acquirers outperform organic growers simply because they grow faster, so we extended the analysis to control for growth rates—in other words, comparing the performance of companies with different M&A strategies but similar growth rates. We found that programmatic acquirers still outperformed their organic peers. This suggests that even when companies that grow purely organically match the growth rates of their acquisitive peers, they are less likely to generate peer-beating shareholder returns.

Today, many companies with legacy business models are using programmatic M&A to both digitize and enlarge their businesses. Take the example of a European publishing group that made more than 60 acquisitions over the past decade to expand its portfolio into digital media offerings: Digital assets now account for more than 70 percent of its revenue.

Why is programmatic M&A so powerful? First, practice makes perfect: Programmatic acquirers build organizational capabilities and establish best practices across all stages of the M&A process, from strategy and sourcing to due diligence and integration planning. Second, those that pursue large deals often need to overpay to secure the asset and then must successfully integrate two businesses of similar size—something that's notoriously difficult to get right. Finally, doing many small deals enables companies to gain access to new markets or consolidate fragmented ones without the risk of "betting the house."

Programmatic acquirers outperform, even when the analysis controls for growth.

Excess total shareholder returns, by deal pattern, 2009–19, %



Note: For details, see Exhibit 7, "The ten rules of growth," McKinsey, Aug 12, 2022.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey

10

It's OK to 'shrink to grow'

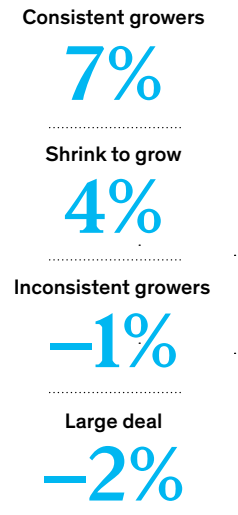
Many management teams feel pressure to deliver consistent growth, which is understandable: The 10 percent of companies in our sample that grew for seven of the ten years between 2010 and the end of 2019 strongly outperformed their peers. But suppose you don't have this consistent growth engine? Statistically, the worst thing you can do is try to buy growth with a "big bang" acquisition. Your best option is to periodically prune back by divesting slow-growing parts of your portfolio and reinvesting the proceeds into new areas.

Companies in our sample that used such shrink-to-grow strategies divested assets in one or two years but grew consistently during the other years. They managed to generate five percentage points more annual excess TSR than inconsistent growers and large-deal acquirers. The key is not to confuse increasing scale with value-creating growth. For example, one Australian conglomerate has consistently divested less attractive parts of its portfolio, such as insurance, and put the proceeds into growth opportunities. Its shareholders have been handsomely rewarded, with a TSR of more than 10 percent per year from 2009 to 2019.

All business leaders have cost benchmarks. Now you have a growth benchmark, too. However, mastering the ten rules of value-creating growth is only one part of a holistic growth recipe. Start by developing a clear growth ambition: a quantum of growth that is more than just the momentum of your current businesses. Then develop a coherent set of growth pathways that encompass as many of the rules as possible. Finally, instill the capabilities and operating model to execute with excellence. Q

For companies that aren't consistent growers, periodic pruning is the best alternative.

Excess TSR, by growth profile, 2009–19, %



Note: For details, see Exhibit 8, "The ten rules of growth," McKinsey, Aug 12, 2022.
Source: Regulatory filings; S&P Global; Corporate Performance Analytics by McKinsey

Chris Bradley is a director of the McKinsey Global Institute and a senior partner in McKinsey's Sydney office, **Rebecca Doherty** is a partner in the Bay Area office, **Nicholas Northcote** is an alumnus of the Brussels office, and **Tido Röder** is an alumnus of the Munich office.


How top
perfor
innovation
to grow
and

mers use within beyond the core

by Marc de Jong, Matt Banholzer, and Rebecca Doherty, with Laura LaBerge

Illustrations by DAQ

While innovation is critical to all companies' growth, the most successful organizations use it to both expand their lead within their industries and disrupt new ones, even in uncertain times.

Innovation and growth are inherently linked. Companies that build new businesses and develop new offerings, processes, or business models are better able to capture growth opportunities and hedge against disruption in a highly uncertain business environment.

This conclusion was strongly reinforced in our recent survey of 1,039 companies around the world. The largest share of respondents identified the ability to innovate as the most important strategic factor for generating growth over the coming 12 months (Exhibit 1).

While we found some variation by industry, innovation capabilities were consistently among the top three growth levers. In sectors undergoing significant disruption—energy, for example, where supply disruptions and large investments in sustainability require companies to evolve their businesses—innovation is particularly important. But even in industries where the evolution of business models is a less urgent need, such as retail, nearly a third of the respondents identified innovation as a top three source of competitive advantage.

What distinguishes top economic performers from the broader group, however, is their comprehensive approach to innovation and growth—both within and outside their current industries or geographies (Exhibit 2). In our survey, top performers cited innovating new offerings as their number-one investment priority for accelerating growth over the next 12 months. They were also more than 63 percent more likely to innovate at scale by building or acquiring new businesses outside their current industries and 50 percent more likely to expand geographically compared with their lower-performing peers.

Innovation spurs growth within and beyond the core

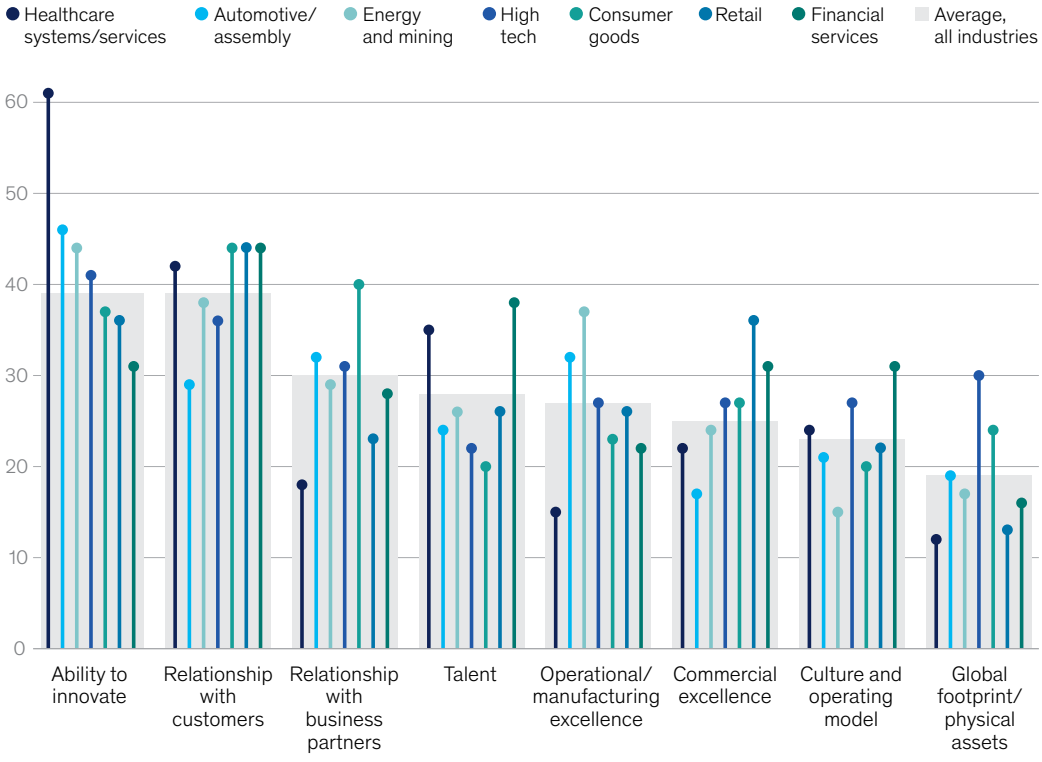
On average, 80 percent of corporate growth comes from within a company's core industry, and innovation is critical to that growth. While overall industry momentum and commercial levers such as pricing and marketing are crucial, the next two largest factors, noted by 38 and 34 percent of our survey respondents, respectively, are innovation of new offerings within the core business and expanding into new regions (Exhibit 3).

Innovation not only gives companies new revenue streams within their core businesses but also potentially steepens the entire sector's growth trajectory. For example, Taiwan Semiconductor Manufacturing's disruption of the integrated semiconductor industry by supplying manufacturing services to other players, combined with its innovations that increase chip computing density, both raised its revenues by 17 percent annually between 1995 and 2023 and contributed to boosting the sector's growth. Similarly, Apple famously helped redefine the music industry by introducing the iPod and its associated apps and created entirely new platforms with the iPad and Apple Watch, all of which bolstered its ascent to the number-two spot among the world's most profitable companies.

Exhibit 1

The biggest sources of competitive advantage vary by industry, but innovation is consistently identified as a top three growth factor.

Share of respondents citing factor as source of organization's competitive edge,[1] %



[1]Respondents were able to select more than one option.
Source: McKinsey 2024 Strategic Growth and Innovation Survey, Feb 2024 (n = 1,039)

Top-performing companies put as much effort as other firms do into growing the core. What differentiates them from their peers is their use of innovation to venture beyond their industries. As technology continues to break down traditional industry barriers, the need to innovate outside the core deepens. For example, in our research, top performers were 78 percent more likely than their peers to build new businesses in different industries and 68 percent more likely to acquire one in another sector.

This pattern holds true when we narrow the lens to the top 20 global companies by average five-year economic profit (Exhibit 4). Fourteen of them accelerated growth through significant innovation investments within their core businesses or by creating entirely new markets outside their core—sometimes both—underscoring the importance of innovation-led growth. These moves often occurred over numerous years, even entire economic cycles.

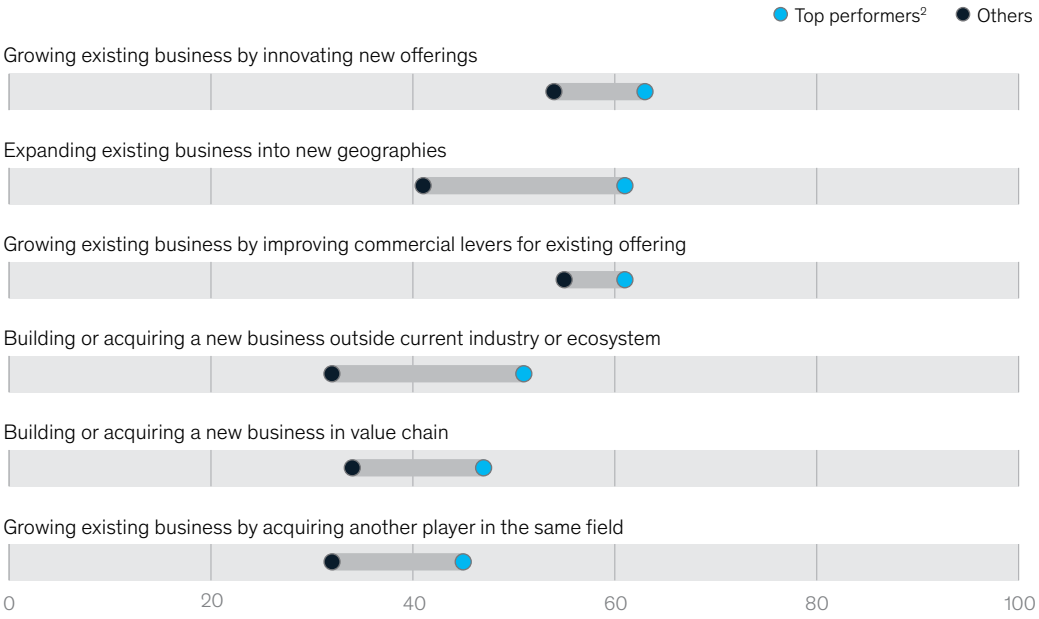
How top performers accelerate growth through innovation

Each of the top 20 companies followed a clear path of strategic advantage in choosing their innovation investments, to both maximize the upside potential and limit risk. They based their strategies on evergreen principles of innovation:

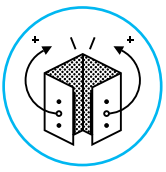
Exhibit 2

Top economic performers are pulling all growth levers harder than their peers.

Intended resource allocation to drive growth over the next 12 months, by performance,[1] % of respondents



[1]Respondents were able to select more than one option.
[2]Companies whose executives report increases of at least 15 percent revenue and EBIT over the previous three years.
Source: McKinsey 2024 Strategic Growth and Innovation Survey, Feb 2024 (n = 1,039)



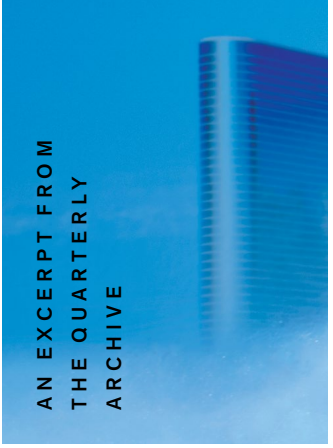
- *Commit to an innovation aspiration.* Companies that pursue growth even during downturns consistently outperform their peers, our research shows. Their leaders foster an aspirational mindset by building an innovation culture and ensuring employee ownership of growth initiatives.

- *Discover new ways to extend your strengths.* Top performers master ways to take their unique strengths and deploy them profitably outside their immediate ecosystems. Where are your manufacturing capabilities, intellectual property, customer relationships, and other strengths truly distinctive? AI tools can facilitate these searches, revealing more granular growth pockets faster than traditional methods. Following your competitive advantage essentially extends your core business to adjacent or even breakout opportunities but with less risk.

- *Accelerate into tailwinds.* If you operate in an industry with high growth momentum—thanks to rapid innovation, as in semiconductor or biotechnology sectors, or significant headroom for growth, as is the case with emerging technologies—focusing on gaining more market share in that sector by innovating new offerings or acquiring new capabilities is a less risky (and likely more profitable) growth path than moving into an unfamiliar sector. Companies in mature or highly competitive markets, on the other hand, can bolster their growth by exploring high-growth markets elsewhere.

- *Evolve and disrupt your own business, even the entire ecosystem.* Many of today's top companies didn't just ride industry tailwinds—they created them. For example, defense technology unicorn Anduril Industries is challenging the industry's conventional "cost plus" acquisition model in the public sector by fostering an open ecosystem of partners to build customized, interoperable solutions.

◀ Click icon to learn about eight breakthroughs that illustrate how innovation can drive growth.



1985

McKinsey Quarterly
Number 4

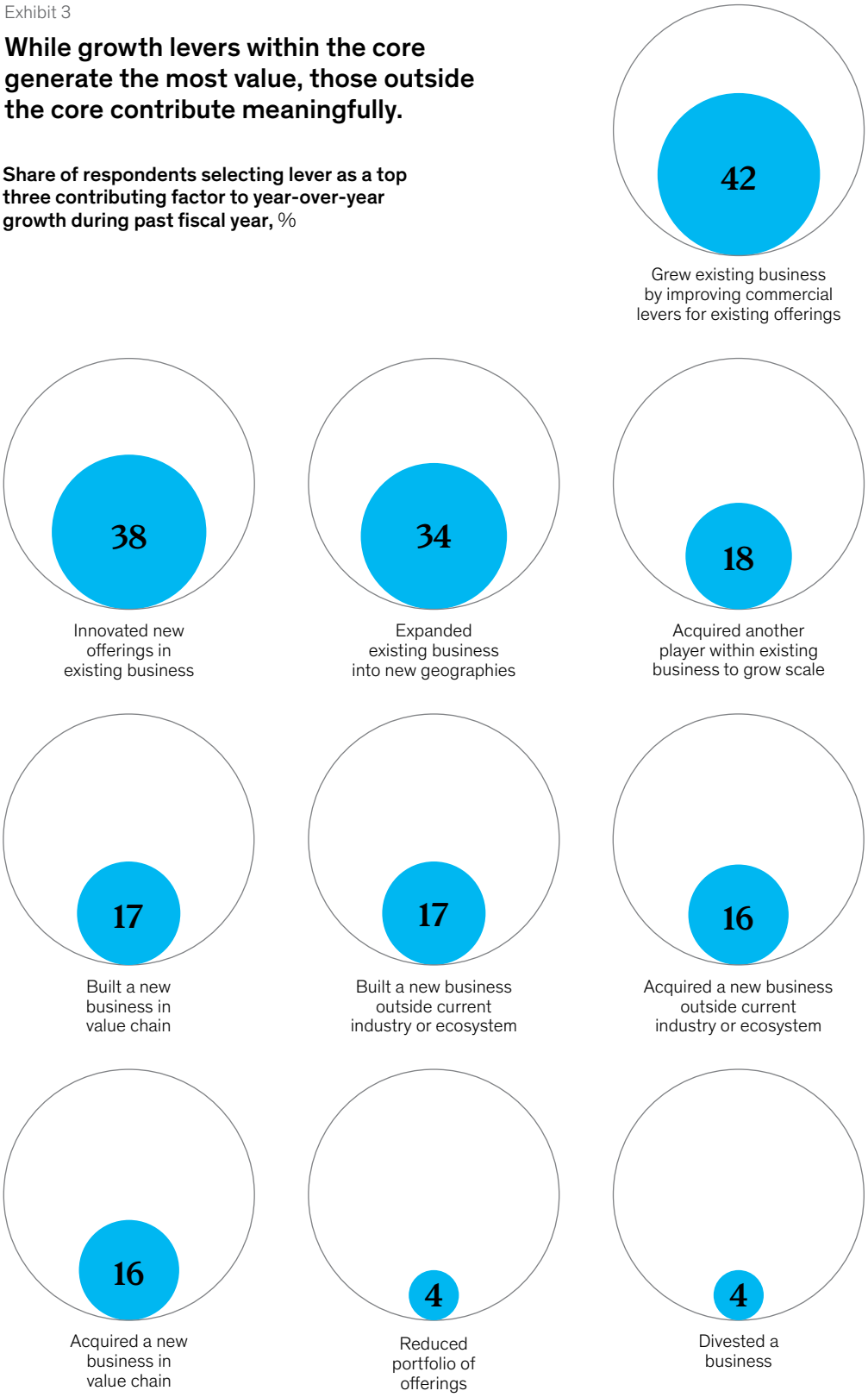
The entrepreneurial corporation

The best-performing innovators recognize that mistakes, false starts, and even embarrassment, kept within bounds, are the necessary byproducts of risk taking—an essential ingredient in the process of innovation.

Exhibit 3

While growth levers within the core generate the most value, those outside the core contribute meaningfully.

Share of respondents selecting lever as a top three contributing factor to year-over-year growth during past fiscal year, %

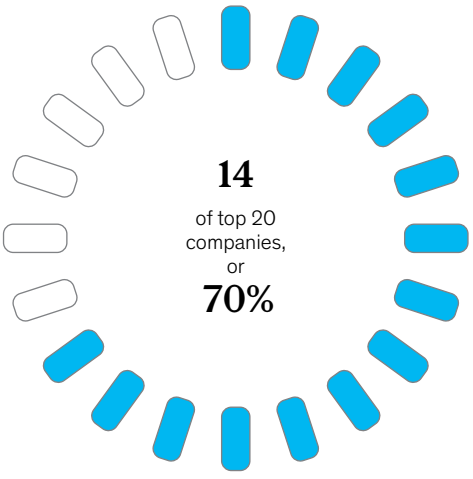


Source: McKinsey 2024 Strategic Growth and Innovation Survey, Feb 2024 (n = 1,039)

Exhibit 4

Seventy percent of the top 20 companies by economic profit globally have innovated to expand the overall size of their market or to create a new one.

Top 20 companies, by average economic profit,[1] that have innovated to expand or create a new market, number



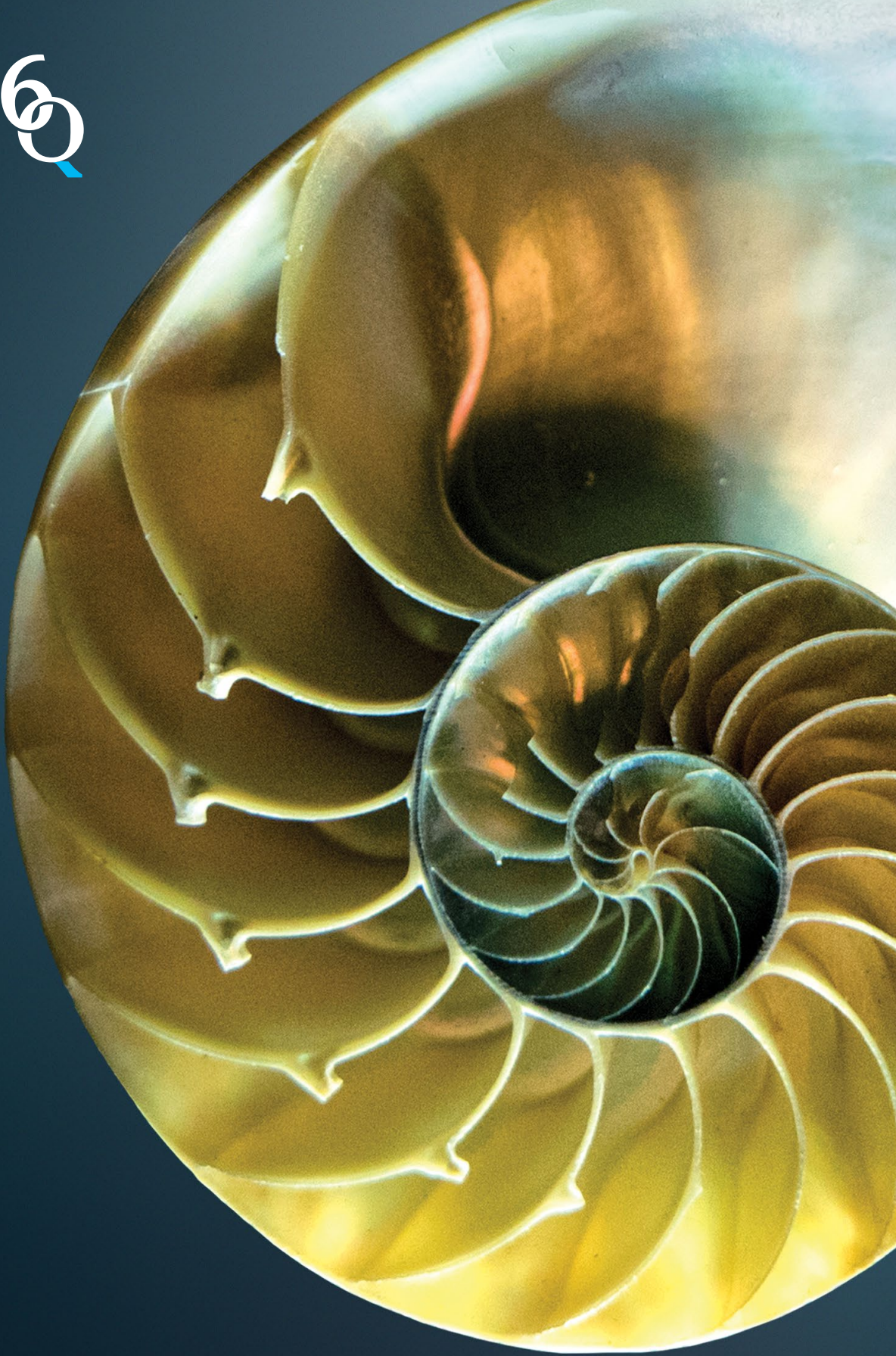
[1]Top 20 companies, by average economic profit, five-year average (2019–23). Berkshire Hathaway not applicable as a pure investment vehicle.
Source: S&P Capital IQ; McKinsey Value Intelligence

- *Scale faster by hardwiring M&A into your innovation capabilities.* Many leading organizations acquire capabilities, such as technologies or intellectual property, to accelerate their growth. They define growth opportunities they want to capture, develop lists of capabilities required to win in those spaces, and then assess which capabilities they already have, which they should build organically through innovation, and which they need to buy. Such capability maps help business leaders chart paths into areas of strategic importance and reduce the risk of falling behind competitors.

Every company that aspires to outgrow its peers in revenue and profit could benefit from these practices. However, the organization's competitive context, health, and performance will determine the right mix and intensity of each innovation lever.

Top performers understand that investments in innovation are the best way to secure growth in an uncertain economic environment. By innovating new products, processes, and business models as a means of both expanding their core businesses and breaking into new sectors, these companies not only emerge as leaders of their industries but also create entirely new businesses that grow the economic pie for all. Q

Marc de Jong is a senior partner in McKinsey's Amsterdam office, **Matt Banholzer** is a partner in the Chicago office, **Rebecca Doherty** is a partner in the Bay Area office, and **Laura LaBerge** is a client capabilities director in the Connecticut office.



by Brian Henstorf, Pieter Reynders, Sheldon Lyn, and Stefano Zerbi, with Leigh Phillips

Harnessing revenue growth management for sustainable success

In recent years, many consumer companies have delivered strong price-driven sales growth at the expense of volume. As inflation abates, they will need a more sophisticated recipe.

The economic disruptions from the COVID-19 pandemic and high inflation changed the way consumer-packaged-goods (CPG) companies achieved sales growth. Prior to 2020, pricing and volume propelled sales growth, with pricing as the leading factor. However, a sustained period of high inflation spurred a much greater shift toward price-driven growth, with volume declining or staying relatively flat for the vast majority of consumer goods categories.

Now, as inflation may be reverting to long-term norms, the pendulum is starting to swing. Adjusting prices is less of a guaranteed path to growth. In fact, retailers are beginning to increase promotions to help cover volume losses. Yet volume growth remains elusive, especially with consumers continuing to trade down and swap brands for private labels. This changing landscape is challenging for businesses looking to sustain growth by finding the right balance between price and volume.

Companies looking to navigate these uncertainties can reboot their approach to revenue growth management (RGM). Of the four levers of RGM—pricing, promotions, assortment, and trade investment—companies have largely focused on the first, taking a relatively blunt approach of increasing headline prices during inflation to drive net-price realization. But now, a more nuanced approach using all four levers could serve companies better, and increased sophistication is required.

In this article, we first describe the price elasticity that CPG companies have seen in recent years. Then we make five recommendations for business leaders: setting grounded long-term aspirations, deeply understanding consumer behavior, deciding which RGM levers to pull,

engaging retailers in new ways, and improving tech capabilities. By following these steps, businesses can position themselves for success in a rapidly evolving market and for better management of changing pricing dynamics.

Price elasticity during inflationary times

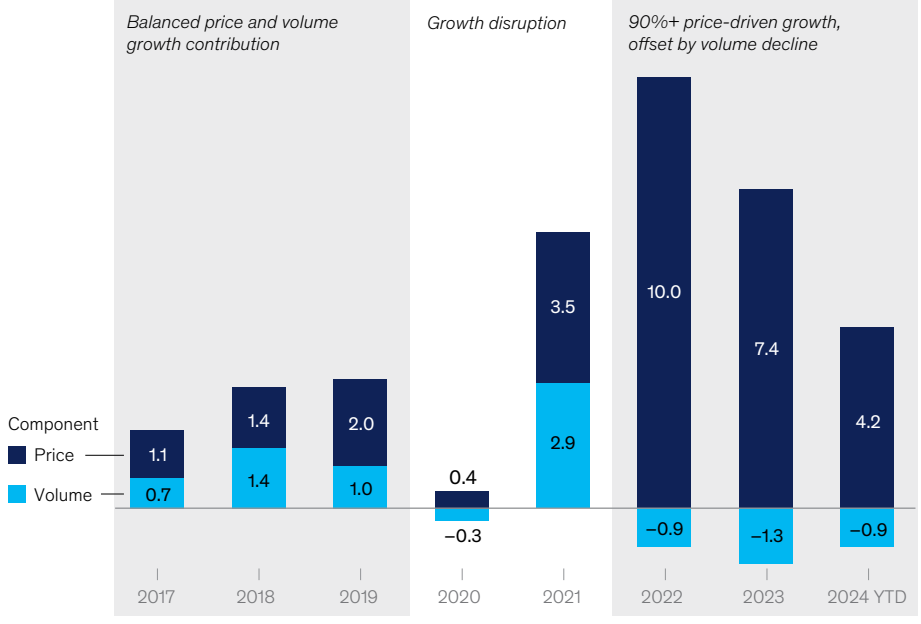
In the years leading up to 2020, most consumer goods companies reliably delivered mid-single-digit net-sales growth. According to our analysis of the top 32 publicly listed CPG companies, this growth was driven slightly more by price than by volume. In 2020, growth stagnated as a result of the pandemic. In the 2021 boom, both price and volume rose about 3 percent. In 2022, the pendulum swung heavily. Hyperinflation pushed prices up by more than 10 percent, volume decreased, and yet overall net sales remained high because of the steep price increases. In 2023, inflation reduced somewhat, decreasing net-sales growth, but volume didn't return. In 2024, we saw much lower price growth, and volume continued to decline (Exhibit 1).

Not surprisingly, this swing toward price dominance in sales growth has caught the attention of analysts and investors who are sensitive to volume losses, given category volume declines. Company executives tell us that they have sought to reassure investors of their intention to plot a path to a more balanced and sustainable mix of price and volume-driven growth.

Exhibit 1

Volume growth has eluded consumer-packaged-goods companies in recent years.

Sales growth components,[1] change vs 1 year ago, %



[1]Average of top 32 companies. Includes all companies reporting volume/value split. Represents ~70% of the total market cap of the sample set of 135 consumer-packaged-goods companies as of Apr 2024.
Source: McKinsey analysis of company filings, as of Apr 2024

Rebooting revenue growth management

With shaky total shareholder returns in recent years in the CPG sector, investors are rightly uneasy about whether companies can spur higher growth rates by balancing price and volume. Whether they raise concerns about price elasticity increasing again or retailer push-back on price increases as commodity costs turn more favorable, the broad consensus is that managing pricing in the coming months and years won't be easy. As inflation recedes, so does the potential of the pricing lever.

More sophisticated RGM capabilities beyond pricing will be critical to continue to drive net-price realization and growth. Companies can improve their odds of delivering more balanced net-sales growth by reactivating the full range of RGM levers to adjust prices, expand higher-margin items in their portfolios, *and* maintain or increase overall volume. Here are five areas of focus they can consider.

1. Set grounded aspirations for multiple cycles

Globally, central banks are indicating a potential soft landing for the economy, suggesting that inflation could return to prepandemic levels within a couple of years. The US Federal Reserve forecasts annual inflation of 2.3 percent in 2025, and 2.0 percent in 2026. The European Central Bank estimates a similar reduction in inflation over the same period: 2.2 percent in 2025, and 1.9 percent in 2026.

While no one knows exactly how things will play out, these projections provide a useful reference point for CPG companies planning price realization strategies over the next three years. If inflation does indeed hover around 2 percent, these companies should expect to return to a 2 percent price-mix realization coupled with a modest volume increase of another 1 to 2 percent, depending on the growth dynamics of the category. Top-performing companies that excel at RGM strategies and implementation will aim to beat this baseline scenario.

Companies should view incremental net-sales growth explicitly as a function of the specific advantages they enjoy in their respective categories. These advantages might include a superior brand that's less price sensitive, a distribution footprint skewed toward high-growth channels, or a presence in high-growth subsegments. Additionally, explicit actions—such as innovation with new product launches, incremental distribution with more SKUs in existing channels or existing SKUs in new channels, and greater marketing effectiveness—can help companies outperform the baseline.

2. Get to know your consumers better

Even with positive macroeconomic indicators, companies should pay close attention to trends in consumer and household sentiment and behaviors. According to consumer price index data from the Bureau of Labor Statistics, US inflation was 3.0 percent in January, compared with its peak of more than 9.0 percent in June 2022. The cost to feed a family of four is now 51.6 percent higher than prepandemic levels, heavily outpacing disposable income growth, which has risen by 30.3 percent in that same period. And although, in September, the Federal Reserve announced its first interest rate cut in more than four years, interest rates are still well above prepandemic levels, and personal monthly interest payments are up 50.1 percent. A recent McKinsey ConsumerWise Global Sentiment Survey shows that although US consumers have grown a bit more optimistic, they remain cautious about spending. They're cutting back, changing to discount retailers, shifting to private labels, or simply

delaying purchases, with 74 percent of US consumers changing their shopping behavior to trade down.

To ensure that RGM strategies are effective, companies should develop a deep understanding of how core consumers might respond to any price-related move. Aggregate views should be unpacked by category, consumer segment, and brand. For example, a given consumer segment might abandon its favorite brand and switch to private-label spices at primary grocers, or it may choose not to abandon the preferred brand and instead go to club retailers and upsize for a lower price per ounce or kilogram. Consumer behavior is differentiated; people may choose to save in some categories but increase spending in others. The more a company is able to understand what its consumers think and how they behave, the more precisely it will be able to calibrate any pricing and RGM changes.

3. Develop a chessboard of moves with RGM levers

Many companies may set ambitious net-sales-growth targets to exceed the baseline case, but fewer have a clear plan for success. That said, there are enough arrows in the RGM quiver for companies with the right know-how to improve their odds. Using the right RGM tactics—in the right proportion, for the right brand, and on the right channel—helps set companies apart (table). There's a premium to capture by getting this right. Companies that use RGM to achieve net-price increases with the most muted price elasticity effect or to outperform in volume growth will likely have a distinct competitive advantage.

At a high level, companies should start by understanding the relative net elasticity effect of a given net-price action. For example, a 10 percent increase in manufacturer's suggested retail price (MSRP) has a more tangible impact on a consumer than an equivalent increase derived from optimizing promotions, focusing on higher-end products to encourage higher margins, or resetting trade terms with retailers. All the latter actions deliver net-price gains—but with less impact on consumers.

Table

Different revenue-growth-management tactics have varied impact on elasticity.

	High perceived impact on consumers					Lower perceived impact on consumers
Tactic	**Manufacturer's suggested retail price (MSRP)**	**Pack size/ weight**	**Promotions**	**Product mix**	**Channel mix**	**Trade terms/ gross to net**
Example	10 percent increase in nonpromoted price to consumer	Hold opening price point while flattening discount slope for large pack sizes and for weight in any given pack	Eliminate lowest ROI promotions and test reducing consumer promotions funding	Drive distribution and sales of more premium-priced products	Drive sales in channels that deliver higher net prices	Reduce loss from spoilage allowances

RGM tactics are strategically tailored to how consumers perceive their value and impact. For example, direct pricing changes, such as increasing the MSRP, affect what people pay at checkout. These price adjustments are highly noticeable and can influence purchasing decisions immediately.

Other tactics such as altering pack sizes, reducing the frequency of promotions, or shifting the product mix toward premium items might also be noticed by consumers, but they generally have a slightly lower perceived impact. These changes influence consumer behavior more subtly, often by affecting perceived value rather than outright cost.

Behind-the-scenes strategies such as optimizing sales channels or reducing nonproductive trade investment have the least impact on consumer perception. These actions are designed to maintain or enhance profitability without making obvious changes that would draw consumers' attention, thereby preserving a sense of value and stability.

Whether these various tactics achieve desired outcomes depends on factors such as underlying category dynamics, strength of a given brand, and a company's execution capabilities (Exhibit 2). No plan fits all: Companies that straddle multiple categories and brands will need to tailor their own solutions, involving precise price points, promotional investment, and distribution channels.

4. Double down on tech capabilities

Effective data strategies and AI can help companies navigate the complexities of consumer behavior and market dynamics, and even develop recommendations that encourage both price realization and volume growth. However, many CPG companies struggle with implementing the right technology. Consider what it might take to develop the right MSRP recommendations to help a hypothetical brand achieve above-inflation price realization while increasing volume. This brand might feature 30 different SKUs across pack sizes, product formats, and categories. Each SKU could have unique competitive strengths, regional selling dynamics, cross-channel shopping behaviors, elasticities, switching tendencies due to price changes, and promotion responsiveness at different price points. Getting to the optimal granular solution would entail considering hundreds, if not thousands, of scenarios. This cannot be done successfully without high-accuracy predictive and automated technology, supported by robust shopper analytics.

To illustrate the power of advanced tech solutions, consider a real-life example. A food company set prices based on its own brand elasticities, using shopper analytics to estimate the outcome of pricing decisions. However, it found that actual buying behavior differed significantly from its pricing simulations, making the approach ineffective. As a result, the company decided to increase the sophistication of its methodology in two ways.

First, it added new shopper analytics that assessed switching behavior between SKUs. The company discovered that a significant part of the volume losses for a SKU was flowing back into its own portfolio through other SKUs and brands. The switching analytics enabled it to understand net portfolio elasticity from portfolio price changes, rather than just the elasticity of individual SKUs. This also changed the company's view of its competition. In many cases, the SKUs with the highest switching rates were not from expected competitors.

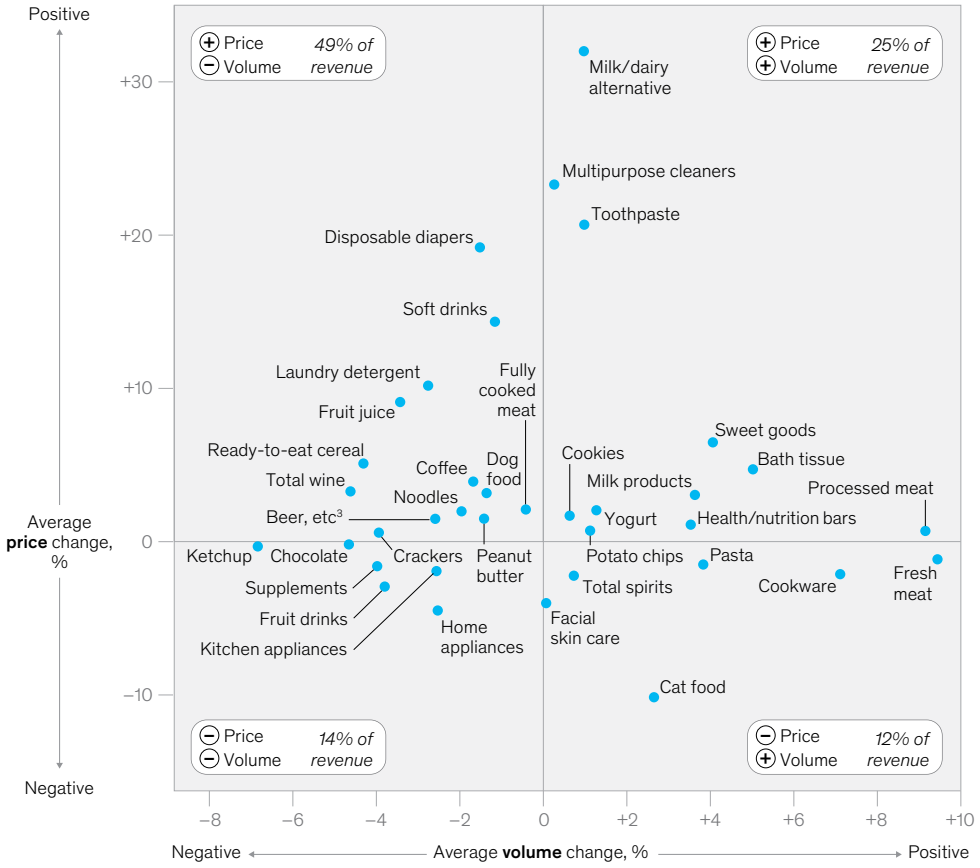
Second, the company developed a high-accuracy, AI-enabled predictive and prescriptive simulator that suggested portfolio pricing changes based on optimization under constraints—for example, to maximize profit while maintaining market share, the company's RGM analyst can ask the simulator to propose pricing changes for all SKUs in the portfolio. The company can now make thousands of tech-powered simulations in seconds, significantly improving both the impact of the price changes and the accuracy of the prediction while reducing the time spent on pricing analyses.

Advanced tech solutions are also being deployed to assess the longer-term impact of promotions on household penetration, rather than narrowly deriving short-term promotional

Exhibit 2

In the postinflationary landscape, most consumer-packaged-goods categories face significant price pressure, a volume squeeze, or both.

Impact on price and volume for select CPG[1] categories, year-over-year change, equalized sales,[2] %



[1]Consumer packaged goods.
[2]Sept 2023 to Sept 2024.
[3]Beers, flavored malt beverages, ciders, and seltzers.
Source: McKinsey Value Intelligence

ROI from incremental sales during a promotions period. By aggregating myriad data sources—such as loyalty, syndicated point-of-sale, and social sentiment—machine learning and AI can discern patterns that help companies develop recommendations that get closer to efficient promotional spend. For example, through strategic partnerships that provided access to anonymized retailer loyalty data, a leading CPG company increased its household penetration by redeploying funds from subsidies for brand loyalists to product trials for nonusers.

Generative AI (gen AI) also adds an exciting new layer of possibility, particularly in aiding the adoption of RGM technologies. Gen AI can deliver tangible short-term benefits for RGM, such as streamlining how RGM analytics are presented to the many stakeholders responsible for sanctioning and executing RGM decisions or speedily crafting more engaging, resonant sell-in stories for retailers. Companies are already beginning to explore these opportunities, enabling more effective RGM processes.

Getting the right technology in place is just part of the answer. Most CPG companies struggle to scale from an initial pilot to an enterprise capability. Implementing sustainable RGM digital and AI capabilities requires a comprehensive approach that goes beyond technology, focusing also on key enablers such as data integration, cross-functional collaboration, and change management practices.

5. Find new ways to engage retailers

The dynamic between consumer goods companies and their retail counterparts creates a healthy tension that leads to efficient outcomes for consumers. However, this tension can also prove challenging. For example, retailers are significantly increasing promotions on key value items. CPG companies often view these promotions as destructive to category value. Two ways for CPG companies to proactively move away from these clashes are retail media networks (RMNs) and data acquisition.

First, most major retailers now operate substantial RMN businesses, advertising products and brands on their e-commerce platforms. CPG companies are spending millions on these networks. However, sometimes there's little visibility between the sales team negotiating pricing and trade terms and the marketing team negotiating media spend on RMNs. To get a holistic view on commercial spend, leading companies are beginning to integrate these teams. Now is an opportune time to engage retailers on ways to connect pricing more optimally to RMN activation. For instance, combining a CPG company's RMN budget with its promotions budget to run integrated omnichannel, multimodal campaigns could harmonize online ads with in-store promotions and provide greater visibility into the incremental lifetime value of a consumer. This is a promising avenue for consumer goods players to pursue.

Second, many retailers are now de facto data vendors. Take, for example, Walmart's Scintilla venture or British grocer Tesco's Dunnhumby-powered Media and Insights Platform, both data analytics platforms that preferred vendors can use to understand how shoppers shop. Vendors can see their performance against category performance and learn whether they're gaining or losing share compared with their competitors. CPG companies should be getting ahead in finding ways to take advantage of access to this kind of granular data on SKU sales across all sales channels to build more robust models and have more strategic discussions with retail partners.

Companies that do a better of job of engaging retailers in a way that tailors to retailers' positions, leverages their specific data, and makes clear the value that proposals bring to retailers and shoppers may well propel greater price and volume growth.

The current landscape is likely to be among the more challenging in recent memory for consumer goods companies looking to increase net sales. The era of "easy pricing"—raising prices in a blunt way on the back of inflation spikes—is likely over, and unit consumption growth is a pressing concern. RGM practitioners can help their companies navigate and outperform with a clear-eyed and tailored approach that sets realistic aspirations in the context of the macroeconomic conditions. They can beat the odds with smarter use of AI and gen AI to better align stakeholders and engage retailers. Companies that excel could see as much as a 1.2 to 1.5 times net-price realization above baseline inflation while boosting consumption at category-level rates. That's a worthy goal—and more than enough of a reason to get this right. Q

Brian Henstorf is a senior partner in McKinsey's Dallas office, **Pieter Reynders** is a partner in the Brussels office, **Sheldon Lyn** is a partner in the Southern California office, **Stefano Zerbi** is a senior partner in the Paris office, and **Leigh Phillips** is an associate partner in the Washington, DC, office.

The authors wish to thank Ahmed Farah, Beatriz Ramirez, Leire Merino, Mandar Harshe, and Nicolo Canola for their contributions to this article.

1992

McKinsey Quarterly
Number 4

Managing price, gaining profit

The transaction pricing opportunity is real and achievable for most companies today. The investment and risk of capturing this opportunity are low; the keys to success are mostly executional—doing a number of small things right. What is more, advances in information technology tend to make many of these small things easier than ever to do.

How women can steer toward growing industries and companies

by Kweilin Ellingrud, Lareina Yee, and María del Mar Martínez

To build up their experience capital, women can pick the occupations, industries, and geographies that present the best opportunities to enhance their careers.

Workplaces are full of talented, educated, and hardworking women. Many are caught off guard when, several years into their careers, they see that they are falling behind their peers, and they can't put a finger on exactly how or why.

Women, after all, are doing everything they can to prepare themselves for successful careers. As early as kindergarten, girls on average outperform boys across all disciplines, including math. Women in almost all developed countries earn undergraduate and graduate degrees at higher rates on average than men, with better grade point averages.

Yet quite quickly after graduation, many women start losing ground in the workplace. Despite making up 59 percent of college graduates in the United States, women represent only 48 percent of those entering the corporate workforce. And then come the first promotions to management roles: For every 100 men, only 81 women are promoted. The blended average of 81 women overall breaks down to 99 Asian women, 89 White women, 65 Latina women, and 54 Black women. This advancement gap persists and compounds over women's careers, with lower representation of women at every step of the corporate-leadership ladder. We call this phenomenon the "broken rung."

The first broken rung of the corporate ladder opens up a gender gap that widens further at every subsequent rung, including senior-leadership positions. It is that first broken rung, however, that affects the entire talent pipeline. Despite initiatives to improve gender

parity in the corporate ranks over the past decades, gains have been modest. The largest improvement has been in the C-suite, where women have moved from being one in five top executives to just over one in four reporting to the CEO. But 29 percent in the C-suite is still far from gender parity.

This disparity is not due to a lack of ambition. McKinsey's *Women in the Workplace 2024* report, conducted with LeanIn.Org, and other global surveys show that over the past decade, women have consistently shown a similar desire as men to be promoted and hold leadership positions. Seventy percent of men and women say they are interested in being promoted to the next level; the level of ambition to be a leader, be promoted, or hold the top job is even higher among women under 30 and women of color. Yet year after year, the data shows that this level of ambition does not come to fruition. Why?

After analyzing job profiles posted online across India, Germany, the United Kingdom, and the United States and using longitudinal data to trace actual career trajectories, we made an intriguing discovery. On average, for men and women, roughly half of their lifetime earnings come from the value they bring to the table when they start their careers, including their natural talents and formal education. The other half of their earnings stem from the value of the skills and experiences gained on the job, or what we call "experience capital."

As we reviewed career trajectories of men and women in the United States, it became clear that women are not building the same levels of experience capital as men; they are not amassing the specific skills and experiences on the job that they need to be promoted at equal rates and to maximize their earning potential. In addition, women are more likely to make occupational switches—accepting jobs that are more flexible or less competitive—that decrease their income quintile. Very little of the pay gap is because of initial jobs when men and women start out.

On average, for every ten years that a man is in the workforce, a woman is working for 8.6 years, given that women have the majority of part-time roles, formally work fewer hours, and take more frequent and longer leaves (typically to give birth, take care of children, or take care of parents or in-laws).

Although skills can be built without changing jobs, they are developed and recognized the most when an individual is promoted to a new role. And so the gender gap in job moves or promotions is a long-hidden driver of the gap between women's and men's incomes over the course of their careers.

Companies can take important steps to fix the broken rung by making sure employees are getting equal opportunities for leadership and promotion. But waiting for companies to change is not a strategy. In the meantime, women can take individual action to build their own experience capital.

That is why we wrote *The Broken Rung: When the Career Ladder Breaks for Women—and How They Can Succeed in Spite of It* (Harvard Business Review Press, March 2025). We wanted to help women understand the data on the broken rung and empower them to climb over it by making decisions to steer toward the industries, companies, and strategies that can enable them to build more experience capital.

Illustrations by Helen Friel

Understand that job change is a constant

When choosing an occupation, it pays to be strategic and pick an area that is growing—where the wind is at your back instead of in your face, so to speak. If you are in an occupation that is shrinking, you may need to think more urgently about reskilling and upskilling to find your next job.

Occupational shifts have been going on for centuries, of course, as new tools and technologies reduce the need for some existing job categories and open space for new ones. But these changes are happening on a bigger and faster scale now, and they have been compounded by additional factors, including the impact of the COVID-19 pandemic, demographic changes, and long-term trends in automation and, more recently, gen AI.

During the first three years of the pandemic in the United States, nine million occupational shifts took place—50 percent higher than the prepandemic rate. With projections of economic growth and demographic shifts, we expect to have more jobs in the future than we do today in the United States. These will be higher-wage jobs, on average, which is great news. The catch is that they will also, on average, require higher skills. So the challenge for society is to build the skills needed for future jobs in the workforce of today.

At the same time, most of the jobs in shrinking occupations from which people will need to switch are held more often by women. That number represents 7 to 8 percent of US workers today. Across China, France, Germany, India, Japan, Spain, the United Kingdom, and the United States, an estimated 107 million additional occupational switches may need to happen by 2030, representing about 7 percent of the workforce.

Research occupations that present opportunities

Which occupations are growing, and which are shrinking? In the United States, healthcare jobs could grow by up to 30 percent by 2030, including 3.5 million more aides, technicians, and wellness workers, along with two million more healthcare professionals. Jobs in science, technology, engineering, and mathematics (STEM) could grow by 23 percent. Transportation, which includes order fulfillment roles, delivery workers, and ridesharing drivers, could grow by 9 percent. To a slightly lesser degree, occupations in business, the legal profession, and management, as well as in education and education training, are also expected to grow.

Nurses and home healthcare aides are two of the fastest-growing occupations. This should come as no surprise given the aging of the global population. People are living longer, while the retirement age has been steady globally, meaning people have more post-retirement years.

These demographic shifts will affect jobs across all industries, not just healthcare. Retired people have different priorities and spending patterns than those who are still working, which has knock-on effects in areas such as what kinds of consumer products people buy, how people invest and spend their money, pharmaceutical sales, and broader consumption habits across industries.

The job categories that are shrinking the most fall into four main categories. First are customer service and sales roles, which have been affected by the shift to e-commerce and the

automation of data collection and processing. Next are food services roles that can be automated and that are affected by a shift toward remote work (while waiters, bartenders, and cooks are still needed, ordering online or with a self-service tablet means that fewer are needed than before). The third category of shrinking occupations is production jobs, which are declining because of automation—despite an upswing in the overall US manufacturing sector. Finally, office support and administrative assistant roles are also continuing to shrink because of automation and an increase in remote work.

Together, these four categories account for almost ten million of the 12 million occupational shifts expected by 2030 in the United States. Women are disproportionately represented across three of the four categories: office support, customer service and sales, and food service roles. As a result, women are projected to be 50 percent more likely than men to have to switch occupations by 2030. Globally, 40 million to 160 million women may need to transition in this time frame.

The sting will be felt the most by workers in lower-income tiers. The jobs in the two lowest-wage quintiles (those earning less than $30,800 a year and those earning between $30,800 and $38,200) are disproportionately held by women, workers who report lower education levels, and people of color. Workers in those two lower-wage quintiles are *14 times* more likely than the highest earners to need to change occupations by 2030. That statistic is staggering.

The good news is that as low-paying roles are declining, the number of jobs in the highest-wage quintile (those earning more than $68,700) is expected to grow by up to 3.8 million by 2030 in the United States. Medium-wage jobs are set to remain relatively static. These changes represent opportunities for women and other displaced workers to shift into higher-paying roles.

Of course, these higher-paying jobs often require more advanced skills and higher levels of education. Reskilling and upskilling yourself and proactively seeking opportunities will be key to staying in the mix. Being in growing occupations is a good way of maximizing your experience capital.

1967

McKinsey Quarterly
Number 3

The coming scramble for executive talent

Few companies have yet turned to women as potential executive candidates. Yet there are many executive jobs, particularly in the staff areas, that require the imaginative intelligence and perseverance that many women possess. Furthermore, many graduate schools of business have accepted women, and the supply of female MBAs is likely to increase sharply over the next decade.

What can help women broaden their career options in the future? Understanding how to incorporate technologies into their jobs to create 'superpowers.'

Consider brand-new jobs

In addition to the growing and shrinking job categories, between now and the end of 2030, technology will help create entirely new occupations, creating additional job opportunities. Each decade in the United States, around 9 percent of jobs are entirely new. Examples from the past decade include machine learning and AI experts, ridesharing drivers, and social media influencers. Emerging high-paying jobs are likely to include gen AI prompt engineers and machine learning analysts.

Women are underrepresented in the highest-paying new and emerging job categories. Research by the economist David Autor finds that new and emerging occupations in the United States typically fall into three categories: wealth jobs, last-mile jobs, and frontier jobs.

Wealth jobs typically involve providing labor-intensive, in-person services to affluent consumers; these jobs typically pay average wages and include occupations such as baristas, beauty care specialists, exercise coaches, nannies, pet care workers, sommeliers, and yoga instructors. These roles tend to be filled mostly by women, who supply 62 percent of the hours devoted to them. Broadly, while these roles often do not demand technical skills, they are still increasing in importance as incomes rise, particularly in urban areas.

Last-mile jobs offer lower-than-average pay. Workers in these jobs carry out tasks that have largely been automated but retain a residual human component, such as order fulfillment workers, data entry clerks, and underground utility cable locators. These jobs are more evenly split between men and women.

Lastly, frontier jobs, such as AI specialists, roboticists, and machine learning engineers, are highly paid and tend to be held mostly by men. Women work only 28 percent of the total hours spent in frontier jobs. Highly paid frontier jobs therefore represent untapped opportunities. If women can

build the skills needed to get those roles, they will have access to a much broader set of growing opportunities, with a higher likelihood of continuing to increase their experience capital.

Turn yourself into a technologist

Developing technology skills is now a requirement for almost every woman hoping to develop her career. Automation, AI and gen AI, and other technologies will reshape most career tracks. As Erik Brynjolfsson, the director of the Stanford Digital Economy Lab, notes, "AI won't replace managers, but managers who use AI will replace those who don't." In fact, employers estimate that 44 percent of their workers' skills will be disrupted in the next five years. Our research estimates that between 2030 and 2060, half of today's work activities could be automated globally.

To succeed in this digital-first future, both women and men need to be technologists. The challenge is especially acute for women, who continue to be underrepresented in STEM, particularly in computer science. In 1995, women represented 37 percent of computer science workers in the United States; by 2022, that number had fallen to 22 percent. The challenge isn't an issue only for women hoping to work in the technology field. Women with careers in female-dominated fields also need to shore up their future with technology skills. For instance, nurses may find that 30 percent of their work activities could be automated, while in education, 40 percent of activities could be automated.

What can help women broaden their career options in the future? It's a matter of understanding how to incorporate technologies into their jobs to create "superpowers," or new ways to accomplish tasks. While developing skills in college is helpful, it's never too late for any woman to learn how to be a technologist.

A starting point is to set aside 10 percent of your workweek to invest in yourself. Ideally, you can find ways to invest in yourself that count twice—methods that build your experience capital and are helpful in your current role. Embracing continuous learning or online classes could be part of this. In addition, learn more about new technology or tech-adjacent roles in your organizations. The goal is clear: Prepare yourself for a future in which technology will play a critical role in just about every job and career.

Escape a shrinking industry

Entire industries shrink or even disappear over time, often leaving workers feeling stuck and unable to transition to a new job in a different industry. Yet while some occupations, such as nurses, are industry-specific, others are far more portable, and those tend to be in support functions.

Workers in human resources, accounting, and operations, for example, can choose to work across multiple industries over the course of their careers, as their skills can be broadly applicable. Workers often don't realize that it's possible to do a very similar job in a very different industry. But as sectors evolve, it's important to think about your skill set in a broader way instead of as something you use in your current job.

> Ask yourself **how many of your regular tasks could potentially be automated** and what unique skills you have that cannot be replicated by a machine.

If you are in a shrinking occupation, regardless of industry, it is likely that you will need to reskill or upskill to move into a growth area. This may be more urgent if you are in a shrinking occupation within a dying industry—a double whammy. But if you are in a stable or growing occupation in a shrinking industry, transitioning to a new role will be more about developing a flexible work mindset and thinking creatively and strategically about your next move.

It's similar to how you might think about your skills and how to market yourself when making a move to a new occupation. You will be taking relevant skills with you. So all is not lost if you find yourself in a shrinking industry. It could be just the push you need to find a bigger opportunity in your career.

Explore industries with growth potential

So which industries are growing, and which are shrinking?

In addition to healthcare, growing industries include social assistance, construction, transportation and warehousing, arts, entertainment, recreation, manufacturing, utilities, and professional, scientific, and technical services. Industries that are remaining static include agriculture, forestry, fishing and hunting, and educational services. The top shrinking sectors are accommodation and food services, real estate, wholesale trade, mining, finance and insurance, and retail.

It is also helpful to look at industries and occupations together to gain a more specific view of where things are going and areas you may want to target in your job search. While many occupations are either growing or shrinking consistently across industries, there are exceptions. In some industries more than others, specific skill sets are needed, causing occupations in those sectors to grow. For example, demand for architects in mining is expected to decrease by 16 percent by 2030, while there will likely be 18 percent more architect jobs in healthcare, such as for designing hospitals, nursing homes, and other facilities.

While working in a growing industry can drive experience capital and therefore lifetime earnings, it is important for other reasons too. After all, it is far more pleasant to go to work each day when there are ample opportunities to grow and develop the skills of the future.

When workers feel secure in their jobs and growth is plentiful, they are more likely to support one another, increasing the likelihood that these jobs will drive personal satisfaction and other career benefits. By contrast, people in shrinking industries may feel threatened and territorial, and their sharp elbows can come out (not typically a recipe for job satisfaction). In some cases, it may be worth trading salary for a growing occupation in a growth sector. Doing so can provide some level of job security and can make for a more satisfying work experience.

When it comes to your occupation, ask yourself how many of your regular tasks could potentially be automated and what unique skills you have that cannot be replicated by a machine. It's helpful to also look at what is going on within your organization. Is the number of people in your role being reduced? Or has hiring for people in your position stopped or slowed? These are clear signs that your occupation may be shrinking.

When it comes to your industry, it pays to follow the news and the markets to see where things are moving. Also pay attention to the amount of investment in your industry. Keep your antennae up so that you are more aware of what is coming.

Consider moving to where the jobs are

Finally, when you think about the trajectory of your career, it's important to consider where you will physically live and work. It's always been the case that some cities are thriving and offer plentiful job opportunities, while others have more depressed economies.

This is true even with many remote and hybrid working models, since being close to the headquarters office and going in at least some of the time is often required. Job opportunities are worth considering now more than ever when choosing where to live. Your next job and your network will likely be in that city, so picking an opportunity in a vibrant place can be helpful. If you are open to moving, look at whether jobs are growing or shrinking in that area.

Ultimately, you are in control of where your career is going in terms of occupation, industry, and where you work geographically. Understanding where you are likely to have greater opportunities to grow and learn—and build your experience capital—is vital to maximizing your career. Q

Kweilin Ellingrud is a director of the McKinsey Global Institute (MGI) and a senior partner in McKinsey's Minneapolis office, **Lareina Yee** is an MGI director and a senior partner in the Bay Area office, and **María del Mar Martínez** is a senior partner in the Madrid office. This article is adapted from their book, *The Broken Rung: When the Career Ladder Breaks for Women—and How They Can Succeed in Spite of It* (Harvard Business Review Press, March 2025).

The three pathways to profitable growth

by Jill Zucker

Leaders who want to grow profitably should not just optimize their core business but also explore adjacencies and new ventures. Success requires courage and long-term investment.

Jill Zucker is a senior partner in McKinsey's New York office.

Most executives wake up in the morning wanting to grow their companies. It's more fun. It's better for their employees. It's what investors and shareholders want. And it's more exciting than leading a company that's being run for efficiency. But growth is hard to achieve. In the last ten years, only one in eight companies achieved more than 10 percent revenue growth annually. *Profitable* growth beyond top-line revenue growth is even harder. It's an important distinction. Not many companies can achieve greater profitable growth more quickly than their peers over a sustained period of time. But with a changing landscape and new developments in technology and innovation, the opportunity for companies to grow right now is enormous.

There are three distinct pathways for growth. The first is maximizing the value of the core of a business today. That means getting the sales team tuned to the highest level of effectiveness, optimizing marketing spend, focusing on the products and services being offered, taking a customer- or client-backed view of everything, and allocating resources to the highest-growth opportunities.

The second pathway is thinking about adjacencies and how to move into areas to the left or the right of the current value chain. If I lead a food manufacturing company, is there another product in the same aisle that I should be producing? If I run a company that operates in one state in the US, should I add an adjacent state? Should I expand to a different country? There are risks associated with going into adjacent areas, but the risks can often be identified and managed.

The third area of growth is going into truly new business lines. It's innovation in a much more material sense. The upside can be massive, but the risks are largely unknown. Companies take on a bigger and bolder bet when they move into innovative areas of growth. It doesn't need to be an innovation that's new to the world, but it may be innovative for an individual company.

For CEOs, the key to growth is to make bets across these pathways. Many leaders say they want to figure out the value of their core business first, then move into new things. That's insufficient. It's important to make sure that they're doing things in parallel to become the growth outperformers they should be striving to be. We studied 4,000 companies around the world and across industries over a decade. We found that typically about 80 percent of growth comes from within a company's core—that first pathway that I described—but 20 percent of growth comes from those other pathways. Leaders who want to get ahead of the competition in growing their companies invest significant dollars for adjacencies or innovations. Five years from now, half of their revenue may come from areas that they're not in today. Companies that grow across multiple pathways are 97 percent more likely to outperform their peers.

Growth success really varies across industries. One example of a sector that has really innovated is the energy industry, which is thinking about how to deliver energy in a very different way from before. Another example is banking, which has turned to financial technology companies to reach customers through new types of digital interactions. Think about the ability to deposit a check without going to the bank. That was a real innovation for customers.

Hoping for growth is not a strategy. Leaders of successful companies make a deliberate, active choice to grow with a through-cycle mentality. They innovate, put the right teams in place, and invest for the long term. During both the financial crisis of 2008 and the depths of COVID-19, companies that invested for the future experienced exponential growth as the crises abated, relative to those companies that did not.

This is not a hobby. Leaders need to have a growth aspiration and a strategy. It's critical to translate growth mindsets into action. Carve out a portion of the budget and invest in the resources to test things. Rigorously track and monitor, and talk about it with the internal leadership team, employees, the board, and even publicly to Wall Street. Tell them what the company's weekly or monthly targets are, not just quarterly or annually. Have the courage to stick with a growth plan, and also be willing to admit when things aren't going to work.

Historically, leaders have waited for the conditions to be right to invest in growth. But disruptions to business cycles are becoming more frequent. Executives now realize they can't wait for the sun to shine. I'm optimistic that many are taking a long-term view and acting boldly. Q

Around 80 percent of growth comes from maximizing the value of the core, but 20 percent of growth comes from other pathways.

by Eli Stein and Kelsey Robinson,
with Alexis Wolfer, Gaelyn Almeida, and Willow Huang

Unlocking the next frontier of personalized marketing

As more consumers seek tailored online interactions, companies can turn to AI and generative AI to better scale their ability to personalize experiences.

Here's the challenge facing brands and retailers: Communicate clearly with a vast array of consumers who speak thousands of languages, hail from countless different cultures and socioeconomic backgrounds, and make purchasing decisions based on highly personal preferences. It's no easy feat to reach all of these consumers on a broad scale in an authentic way.

For some time now, companies have been trying to address customer needs through personalization, using data and analytics to craft more relevant consumer experiences. The goal is to present consumers with compelling offers and tailored, resonant messages at the right time. Today's customers want more of this. As previous McKinsey research revealed, 71 percent of consumers expected companies to deliver personalized interactions, and 76 percent got frustrated when it didn't happen. When companies get it right, however, they can create significant value.

Companies often deploy tactical, manual, and stand-alone solutions to engage their customers. But retailers are now entering a promising new era of personalization. To reach consumers where they are and how they want to be met, marketers can embrace two powerful innovations: AI-driven targeted promotions, and the use of gen AI to create and scale highly relevant messages with bespoke tone, imagery, copy, and experiences at high volume and speed.

These innovations lay the groundwork for growth. Using improved analytics models, brands and retailers can better provide valuable offers to microcommunities wherever they want to engage. Meanwhile, gen AI enables marketers to create tailored content that is relevant to those groups. Brands and retailers can better connect with customers by using language that speaks to them and by providing communications that resonate and give consumers a reason to engage.

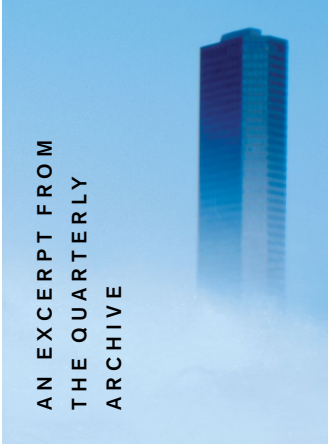
To unlock the potential of targeted promotions and content, marketers should prioritize efforts to boost their underlying marketing technology stack. A robust framework built on better data, decisioning, design, distribution, and measurement is essential. With improved analysis through technology, marketers can gain deeper insights into customer behaviors and preferences, provide improved personalized experiences, and incorporate tactics that feed into a long-term personalization strategy for growth.

The promise of targeted promotions

For both companies and customers, the old way of managing promotions—blunt offers to large groups of people—is no longer cutting it. Retailers face pressures due to economic uncertainty, changing consumer preferences, and, in some cases, declining profits. Meanwhile, previous McKinsey research suggests that 65 percent of customers see targeted promotions as a top reason to make a purchase.

Many retailers view AI and gen AI as ways to reverse the downward trends and accelerate growth. An increasing number are starting to experiment with AI to improve *mass* promotions. But companies can be more strategic by employing AI for *targeted* promotions, using data to tailor discounts based on people's shopping preferences or their affinity for different types of offers. With a more granular approach to customer segmentation, retailers can craft promotions that target specific customer life cycle stages (such as new-customer acquisition, customer retention, repeat purchase, or risk of churn) or specific business objectives (such as promoting a particular brand or category or encouraging cross-selling).

In a world saturated with promotions, companies can use targeted offers to stand out. Retailers that get this right can help ensure a better shopping experience while also enjoying better margins from saving on promotional costs and



1997

McKinsey Quarterly
Number 3

The real impact of Internet advertising

We believe that Internet advertising will account for a growth proportion of overall advertising expenditure.... Marketers will become more accountable for their results, and they will pay more attention to building a total customer relationship. Offering customers value in return for information will become vital in eliciting their preferences, which in turn will be critical to customizing advertising.

fueling more conversions. Ideally, marketers can develop a program of targeted offers at scale that accomplishes the following:

- applies business rules and algorithms to determine offerings and timings of delivery
- builds flexible, fit-for-purpose coupons (such as tiering discount rates so that those who buy more save more, limiting usage to certain categories or time periods, or designing offers that include or exclude certain premium categories or brands)
- delivers targeted promotions through all available marketing channels, such as through a company website or app, push notifications, text messages, or emails
- activates personalization with an always-on cadence where relevant
- accompanies offers with clear, highly relevant communications, such as with dynamic recommendations that update in real time for individual customers based on their purchasing or browsing history

With this variety of targeted offers, marketers can create a seamless omnichannel experience in which customers receive targeted, streamlined promotions without conflicting or overwhelming information from other places. Companies should be smart about how much margin they're giving away when and where, encourage specific objectives rather than overly broad ones, and ensure that promotions are offered at the right time to the right people (see sidebar "How one retailer unlocked growth by launching targeted offers"). From what we've observed, companies that push incremental sales through targeted promotions can see a 1 to 2 percent lift in sales and a 1 to 3 percent improvement in margins.

Relevant marketing through gen AI–enhanced personalized content

To truly enhance the impact of targeted promotions, companies can use gen AI to highly tailor copy and creative content that resonates more strongly with groups and subgroups of consumers than traditional marketing communications. Marketers have long aimed to improve the customer experience and influence consumer decisions by creating convenience or offering better prices. The next step is to make the buying experience even

Companies that push incremental sales through targeted promotions can see a 1 to 2 percent lift in sales and a 1 to 3 percent improvement in margins.

more convenient or enjoyable through greater relevance.

Traditionally, addressing small consumer groups with customized content has been cost-prohibitive and practically infeasible. Gen AI allows marketers to develop such content at scale at lower cost. While many marketers are currently piloting gen AI programs for this purpose, most are doing so manually with one-off experimental tools and use cases; they are not automating or integrating to reduce the bottlenecks of operational inefficiencies, nor are they evaluating content performance.

Smarter use of gen AI can help unlock more cohesive personalization opportunities with touchpoints and interactions more tailored to what customers want. Currently, there is no consolidated suite that does this end to end. But with thoughtfully integrated solutions that align people, processes, and platforms, marketers can deliver more rigorous content creation, smoother orchestration across teams, and seamless implementation of targeted promotions and content.

While content creation today is highly manual, gen AI can accelerate and magnify the entire process, helping channel operators, creators, and analysts become more productive. As more marketing material gets fed into a robust, foundational content data model, gen AI can learn from a feedback loop and create more copy that can be tailored for personalization. One important thing to note: As organizations increasingly use gen AI, it is critical that they build models to validate and govern gen AI–created content in order to establish guardrails against bias, toxicity, and hallucinations, and to ensure that content is in accordance with enterprise standards and design systems.

To see what's possible for better workflow in the future, it helps to look at how the ecosystem operates today—and will in the future—across the three stages of content production:

- *Product and versioning.* Today, content creators typically conduct research manually and produce multiple versions that they then tag with metadata to be discoverable in a digital-asset-management (DAM) system for future retrieval. With assistance from gen AI, content creators can brainstorm new ideas and write text at a much faster pace. Gen AI tools can also automatically select formats to suit specific audiences and tag final assets for storage in a DAM system.

- *Activation.* Right now, channel operators manually populate a content data model with creative assets from a DAM and use decisioning services to select the best text and images, feeding them into the appropriate channel platform and publishing them to relevant audiences. Gen AI tools can speed up the process by retrieving content from a DAM system and delivering creative assets with the right file sizes, resolution, and formats to fit within guidelines for specific channels.

- *Performance and measurement.* Marketing analysts develop dashboards that offer windows into customer experience, channel performance, and content performance. Meanwhile, data scientists develop propensity models that measure the likelihood that a customer will act, whether it's at the top of the marketing funnel (such as viewing or clicking on a piece of content) or closer to the bottom of the funnel (when a customer makes a purchase). With gen AI, marketers can develop a more comprehensive, standardized measurement approach, using content and campaign metadata, campaign performance data, and decisioning services to build better performance tracking of content and campaigns.

Our experience so far shows speedy results. We've seen some marketers deploy gen AI to personalize content development 50 times faster than a more manual approach (see sidebar "How a European telco used gen AI to enhance marketing materials").

Technology as a foundational differentiator

To better target promotions and gen AI–boosted content, companies can turn to a technology stack that brings everything together. In 2019, McKinsey published "A technology blueprint for personalization at scale," which described a "4D" strategy for marketing technology. The four Ds are data (single source of truth for consumer data, fully automated, to serve real-time needs of activation, analytics, and measurement), decisioning (AI and machine learning to create customer scoring and real-time triggers), design (central repository to enable dynamic offers and creative optimization), and distribution (delivery of messages and experience across channels). We add one more critical element to this: measurement (comprehensive cross-channel performance and engagement metrics). (It's not a "D," but it's just as relevant.) Marketers can establish a solid foundation for growth through personalization by ensuring these five elements use the latest technological innovations and integrate with each other seamlessly (see sidebar "A tech-enabled evolution from mass discounts to targeted offers").

Data

By improving data collection and analysis, marketers can gain deeper insights into customer behaviors and preferences. And while many enterprises have invested in data lakes (storage platforms that hold, process, and analyze structured and unstructured data) and customer data platforms (software that centralizes and unifies customer data from multiple sources to create a single view of each customer), better-targeted offers and content require expanding data architecture in five categories:

- a promotions subject area that includes the history of offers and redemptions
- a content subject area that includes the history of content delivery and engagement
- universal (and potentially gen AI–enabled) metadata and taxonomy, which can improve the flow of automation
- a robust analytics infrastructure and MLOps (machine learning operations), with dedicated feature stores to rapidly deploy and scale ML models
- new data pipelines and integrators, prompt stores, and vector databases to build or customize large language model implementations

Along with granular transaction data, these additional data assets are the backbone of AI-powered decisioning to predict customer behavior in any channel and can be a true differentiator in today's market.

By improving data collection and analysis, marketers can gain deeper insights into customer behaviors and preferences.

How one retailer **unlocked growth** by launching targeted offers

One North American retailer used a traditional calendar-based approach to promotions, offering mass discounts to all customers during holidays, and created a tiered discount program for different types of members of its loyalty program at other times.

Recently, the company embarked on a mission to pivot toward personalized and data-driven marketing. It wanted to know how to increase demand during the times of year with softer sales. The company explored how to deploy mass promotions in a personalized way—with offers to the full customer base during specific days, but with different depths of discounts to different customer segments. It also experimented with offers targeted only to specific customers who fit certain criteria.

To start, the marketing team developed analytical models to assess the likelihood that a customer would respond positively to an offer—called "promotion propensity"—based on past purchases. The retailer then engaged in A/B testing for each model, using data analytics that allowed agile, cross-functioning teams to test the value of various targeted offers (made primarily via email) over a series of two-week sprints. After learning that its customers felt overwhelmed by too many promotions, the company pared back some of its offer frequency and simplified the customer experience.

After three months of using this more targeted approach, the retailer saw a boost of about 3 percent in annualized margins during initial tests. The company now plans to expand targeted promotions at scale.

Decisioning

To develop new targeted promotions and content through more robust targeting, companies can also benefit from refreshing their decision engines with new AI models. Their tasks include the following:

- *Promo propensity* predicts the likelihood of a customer making a purchase due to a promotion, based on previous customer purchasing and engagement behavior. This can lead to better customer satisfaction and targeting with the right level of discount to improve margins.
- *Promo uplift* (or promo effectiveness) predicts promotion ROI (uplift) by analyzing customer behavior during promotion and no-promotion periods.
- *Content propensity* predicts the likelihood that a customer will respond to a piece of content. Propensity scores enable the automated delivery of the best content that will encourage a customer to respond to a call to action.
- *Content effectiveness* measures the effectiveness of content by analyzing customer response. Highly effective content can be reused or thematically replicated in future campaigns.

Model outputs are then fed to a decision engine that ranks and determines the best offer and content to show a customer at a given point in time.

Design

Innovative design ensures that content is both engaging and relevant. A sophisticated design layer that oversees two critical workflows (offer management and content production) helps manage the process, fueling both operational excellence and agility.

Targeted offers work best with an integrated offer management system to catalog, manage, deliver, and redeem them across any channel, including e-commerce and point of sale. Meanwhile, content management begins with gen AI tools for creating copy and developing creative assets, handling versioning, and autoformatting content as varied as billboards and mobile devices. Digital assets are stored in a single, centralized DAM system.

It's crucial that both the offer management and DAM systems are well integrated into all downstream channels. This enables easy search, reuse, and dynamic delivery of assets.

Distribution

Achieving true, real-time personalization requires sophisticated architecture that delivers

Promo propensity can lead to better customer satisfaction and targeting with the right level of discount to improve margins.

How a European telco used gen AI to **enhance marketing materials**

A European telecom company recently boosted its marketing strategy by integrating a personalization engine that uses both AI and gen AI. The telco previously relied on mass promotions and a calendar-based approach. To better engage its customers, it set up a next-best-action engine, using a combination of multiple machine learning models to determine the most effective actions to suggest to each customer.

The next-best-action mechanism predicted the probability of a customer accepting a specific action and the expected value if the offer was accepted. It then ranked these actions, optimizing for the highest expected value from a response. The company then tested a granular set of about 2,000 different actions by texting messages to customers.

The marketing team then deployed gen AI–enhanced messaging for a handful of different campaigns to see how a more personalized approach would work. It sent messages to customers based on factors such as age, gender, and data usage. The copy blended general company messaging with campaign-specific features, making the offers feel more personal and relevant to customers. Guardrails were put in place to limit the length, tone, and content, ensuring that messages were concise, relevant, and respectful of user privacy.

Over the course of a few months, the experiment showed that customers receiving the personalized messages from the gen AI–enhanced campaigns engaged and took action 10 percent more often than customers who did not receive personalized content. The telco is now looking at more extensive use of personalized content across multiple marketing channels.

A tech-enabled evolution from mass discounts to targeted offers

A large, established North American retailer, known for its deep discounts during sales, transformed itself to enhance pricing and promotional strategies. A few years ago, the company began to develop an incremental marketing approach to improve profit. This shift aimed to optimize the financial outcomes of marketing efforts, ensuring that each promotion was both attractive and effective.

To achieve this, the company incorporated three key levers: technology, analytics, and activation. The technology team integrated the company's legacy point-of-sale (POS) infrastructure with its marketing technology stack, creating use cases that spanned both systems. This integration allowed for seamless data sharing and a unified view of customer behavior. On the analytics side, the retailer built models that provided unique insights into the overlap between products and customers, which helped it tailor its offers more precisely and prioritize retention efforts for frequent shoppers who had stopped purchasing. To bring it all together, the company formed cross-functional teams with representation from marketing, pricing, technology, and operations to align all commercial stakeholders and launch targeted offers while scaling back on mass-market promotions.

The results were dramatic. Over a single year, the company produced $400 million in value from initial pricing improvements, and an additional $150 million from gen AI–enabled targeted offers.

seamless and consistent messaging to the right audiences at the right time as customers traverse channels.

This critical infrastructure combines core capabilities:

- instant processing of customer signals, fed to journey orchestration and decisioning platforms to optimize the right message and channel across customer touchpoints
- front-end tools that support a company's website, app, and email (such as content and campaign management systems, as well as dynamic content optimization), built with dynamic modular templates and API integrations to render personalized content in real time
- interoperability and integrations across multivendor platforms

Measurement

A comprehensive marketing technology stack requires thorough measurement to facilitate ongoing optimization and improvement. To validate the ROI of personalization efforts, rigorous incrementality testing, standardized performance metrics, and measurement playbooks are essential.

Businesses need actionable intelligence for continuous improvement. Marketers can implement closed-loop measurement by aggregating data from all channels into a centralized reporting engine that produces self-serve dashboards for distinct stakeholders—from executive leadership tracking revenue and margin impact to marketing operators optimizing campaigns in real time.

To unlock the next frontier of gen AI–enabled personalization, marketers can begin with a thorough assessment of their opportunities by making the following moves:

- mapping out the areas where targeted offers and more relevant content can drive the highest value
- identifying the lifetime value events that they want to encourage
- conducting a tech diagnostic to identify missing tools
- reconfiguring processes in areas such as talent, data, tech, analytics, and marketing operating models to optimize for targeted promotions and content development

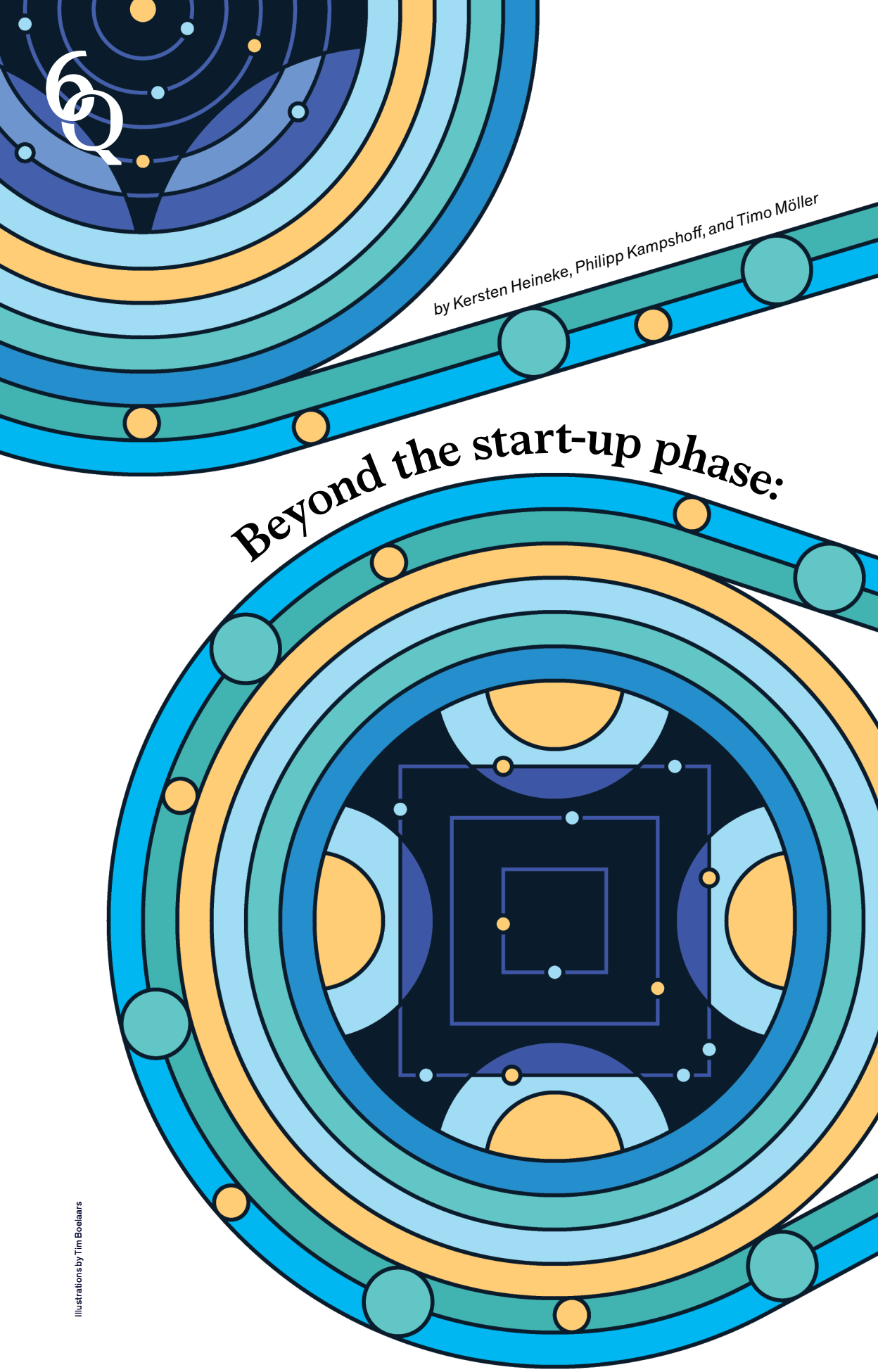
Excellence in execution sets the leaders apart from the followers. Success hinges on seamlessly integrated platforms backed by well-trained teams that can fully maximize investments. To improve performance, marketers can focus on operational efficiency, eliminate redundant systems, and establish robust governance. This can help bring together disparate tools into a unified engine for more relevant and personalized customer engagement, contributing to real growth. Q

Eli Stein is a partner in McKinsey's Bay Area office; **Kelsey Robinson** is a senior partner in the Boston office; **Alexis Wolfer** is an associate partner in the Southern California office; **Gaelyn Almeida** is an associate partner in the Washington, DC, office; and **Willow Huang** is an associate partner in the New York office.

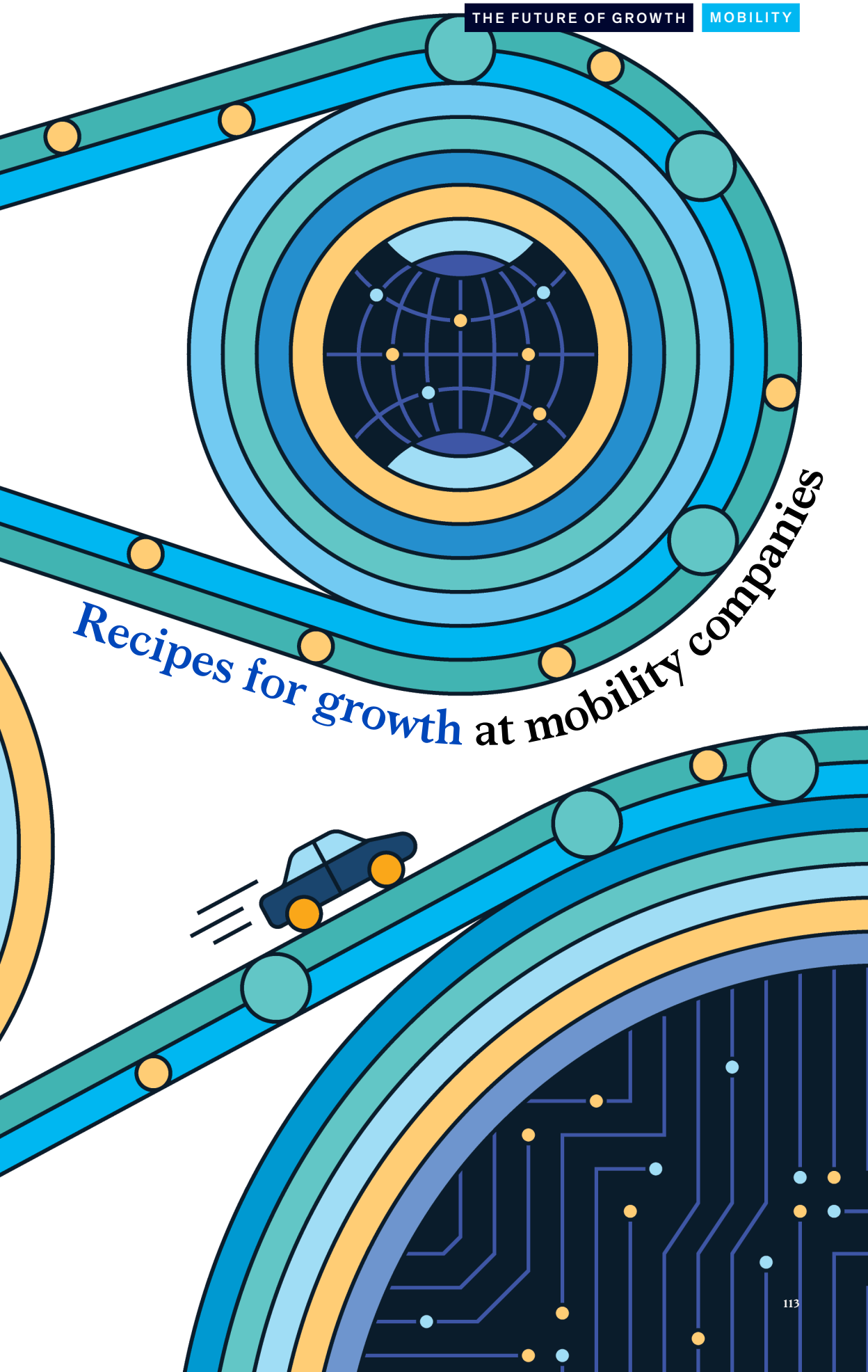
The authors wish to thank Carolyn Spalding, Jianing Cheng, and Molly McCulloch for their contributions to this article.

by Kersten Heineke, Philipp Kampshoff, and Timo Möller

Beyond the start-up phase:



Illustrations by Tim Boelaars



Recipes for growth at mobility companies

Most promising mobility start-ups fizzle out before they can scale their operations. With billions of dollars in investment at stake, they need a better path to growth.

The invention of the automobile, in the late 1800s, soon attracted entrepreneurs. Car manufacturers sprung up across the world, with the number in the United States increasing from 30 in 1899 to about 500 by 1910. The early industry's hallmark was rapid and constant innovation, which included the introduction of V-8 engines, the replacement of hand cranks with electric starters, and the addition of folding tops for weather protection.

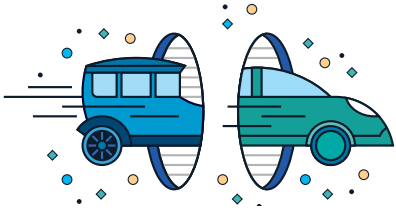
By the 1920s, innovation was still going strong, but most US automotive companies had ceased operations or failed to achieve scale, leaving three familiar names to lead the market: Chrysler, Ford, and General Motors. The winning companies distinguished themselves by developing the most distinctive, high-quality products; keeping costs in check; and always striving for operational improvement. Ford's Model T, for instance, had a transmission that made it easy to shift gears and benefited from new mass-production techniques that reduced costs and made car ownership affordable for the middle class. By the time Ford stopped Model T production, in 1927, it had sold more than 15 million units.

History is now repeating. The mobility industry has entered an age of innovation that rivals the early 1900s, as start-ups and traditional OEMs invest in digitization and the ACES (autonomous driving, connectivity, electrification, and shared mobility) trends. Thousands of entrepreneurial businesses have emerged since 2010, and the winnowing process is now underway, with some start-ups closing their doors after receiving billions of dollars in funding. Across industries, more than 90 percent of start-ups fail before they can scale their operations.

Innovation always carries the risk of failure, and some complications are unavoidable, including unexpected shifts in consumer demand, new regulatory requirements, and the emergence of

better technologies (see sidebar, “Innovation always comes with risk”). But some start-ups fail even if they have a great concept and a potentially large market because they run out of funding before they can scale their business.

How can businesses increase the odds that they will not only survive but grow? Although no single strategy is right for every company, a greater focus on excellence in execution—everything that occurs between idea generation and achieving scale—could benefit all. After examining recent investment trends, this article looks at six moves that can put start-ups on a strong growth trajectory.



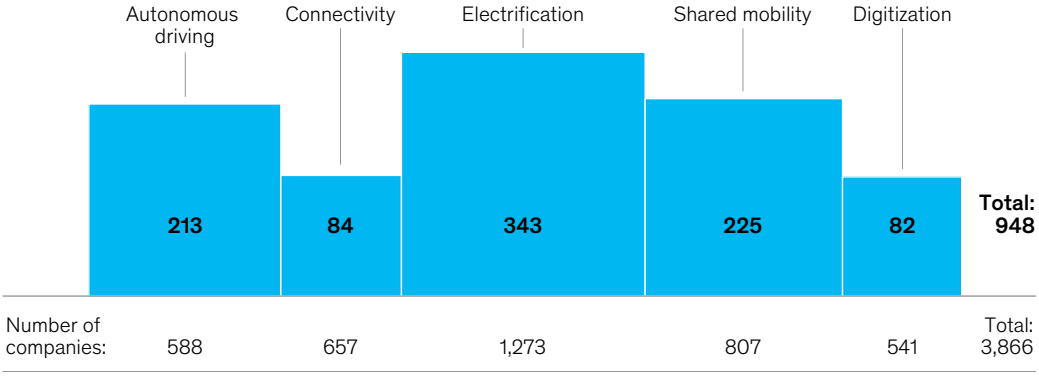
Major investment—and equally large risks

Investors have funneled almost $950 billion to about 3,800 future-mobility start-ups since 2010 (Exhibit 1). From 2022 through the second quarter of 2024, traditional automotive companies accounted for only about 7.5 percent of total inorganic investment; more than 90 percent came from companies in other sectors, such as oil and gas, or from venture capital groups, private equity firms, technology companies, and pension funds. This breakdown has been relatively stable since the 2010s. Funding from traditional OEMs and suppliers may be low because they direct billions to internal R&D ventures rather than make acquisitions or invest in future-mobility start-ups.

Exhibit 1

Electrification, shared mobility, and autonomous driving are the main investment clusters for future-mobility start-ups.

ACES[1] tech and digitization cluster breakdown, total disclosed investment since 2010, $ billion



Note: Figures may not sum to totals, because of rounding.
[1]Autonomous driving, connectivity, electrification, and shared mobility.
Source: PitchBook; McKinsey analysis

Annual funding for future mobility was highest from 2021 to 2022 (Exhibit 2). At the peak, in late 2021, the 12-month rolling average for investment was more than $15 billion. Funding levels then trended down until late 2023, when they began trending upward again.

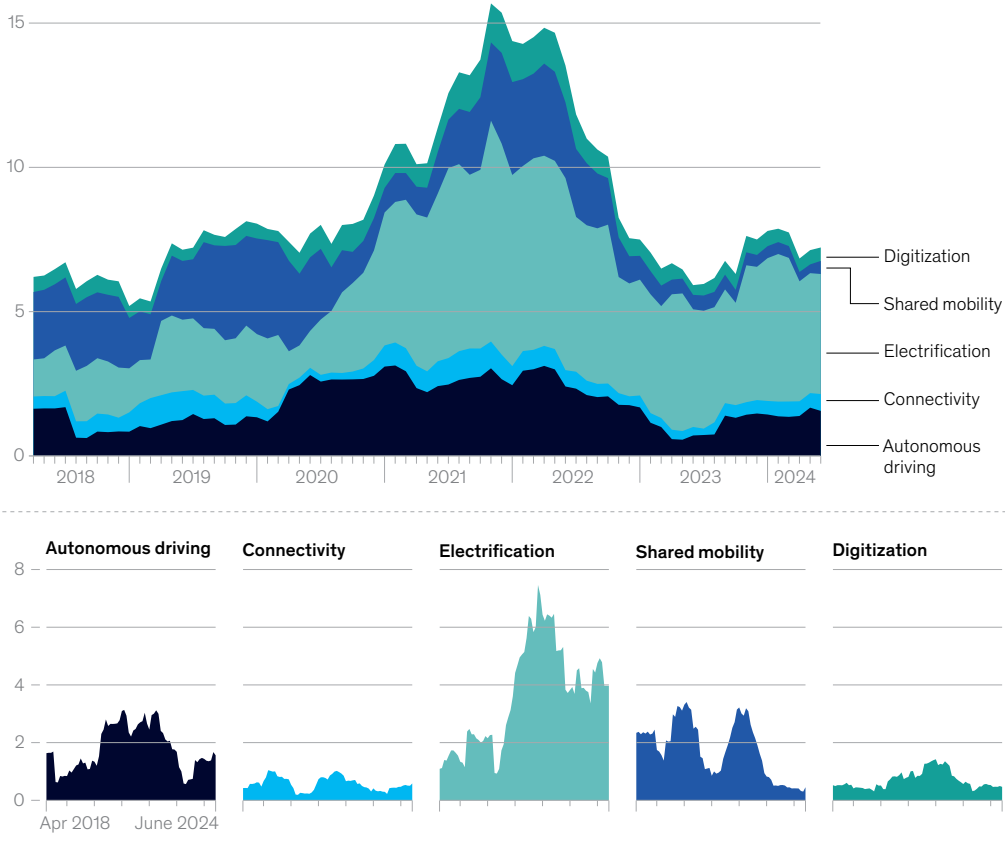
Another market shift relates to deal value. For many years, investors undertook numerous small deals but only a few that involved large, game-changing sums. Recently, however, the number of deals has declined while value has increased.

Together, these trends suggest that investors are increasing their bets but are being much more selective—and that makes it more important to understand which start-up strategies are likely to deliver growth. The moves discussed next may be among the most critical for start-ups trying to gain scale.

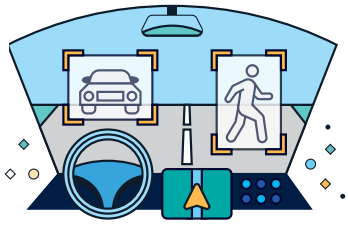
Exhibit 2

Mobility funding dropped after the peak in 2021–22 but has begun to recover.

Disclosed investments for future mobility, by ACES[1] tech and digitization cluster, 12-month rolling average, $ billion



[1]Autonomous driving, connectivity, electrification, and shared mobility.
Source: PitchBook; McKinsey analysis

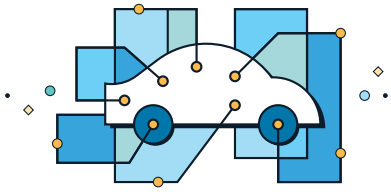


Focus on a narrow use case—but adapt as needed

Many companies have successfully developed autonomous vehicles (AVs) and moved beyond the start-up stage. As one example, consider Waymo, which emerged out of Google's Self-Driving Car Project. This company initially had one broad ambition: to create AVs capable of independently navigating roads. This mandate led the company to investigate applications in multiple areas, including robotaxi services, trucking and logistics, urban public transportation, and passenger cars. Soon, however, Waymo decided to concentrate on robotaxis to get on a "solid path of value creation." The company's ridesharing business has grown rapidly, with more than four million rides completed in 2024 and more than 150,000 trips now occurring weekly in Austin, Los Angeles, Phoenix, and San Francisco.

As the robotaxi business begins generating substantial revenues, Waymo is expected to have more capital to refine its technology and develop other business opportunities, such as those in commercial trucking, that are now secondary priorities or on hold.

One caveat: Companies that focus on a single area must be prepared to adapt. Some of the most compelling automotive start-ups originally focused on one product or service but changed direction because of internal or external dynamics.



Have a truly distinctive design, product, or technology

The first electric vehicles (EVs) emerged in the 1800s but were soon eclipsed by internal combustion engine (ICE) vehicles. Over the years, interest in EVs waxed and waned until the 1990s, when growing concerns about emissions and climate change prompted OEMs and start-ups to give them more attention.

Although several OEMs had EVs on the road in the 2000s, Tesla became the standout. The company's Roadster, which began production in 2008, was the first to use lithium-ion batteries, but the car's outstanding driving range—200 miles—was the distinction that really attracted consumers. Although the Roadster's price tag put it out of reach for most consumers, this vehicle helped many people realize that EVs could be a true alternative to ICE cars.

Tesla's reputation for distinction may have helped subsequent vehicle generations. The Tesla Model 3, which launched in 2017 at a price much lower than the Roadster's, became the world's best-selling EV a few years later and hit more than one million units in cumulative sales by 2021—the first EV to reach that milestone. The average sales time for a Tesla Model 3 is now 17-fold faster than that of other top EVs.

The 2025 Consumer Electronics Show revealed that other companies are aiming to produce EVs with innovative twists—be they distinctive features or capabilities—to distinguish themselves from the competition. Examples include Aptera Motors, which has created a prototype EV with solar panels on various parts of the vehicle. Among other benefits, the car can drive up to 40 miles per day using solar power alone, reducing the need for charging. Another innovator, Honda, is working on prototype EVs, slated for production in 2026, that will allow "eyes off" driving through software that enables some autonomous-driving features.

Be the first to market in a product category

Companies that are first to market in a product category often make a splash that increases their brand recognition and wins customers, allowing them to capture substantial market share before competitors enter the scene.

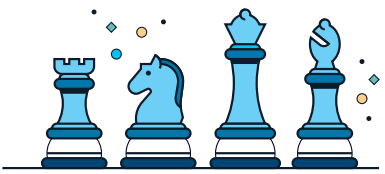
Of the many companies that have followed this strategy, Tesla can once again serve as an example. After introducing the first fully electrified car in the 2000s, the company began building a customer base long before most other EV start-ups did. These factors have contributed to Tesla's growth, and it is currently the leading EV OEM in the world.

As an early entrant, Tesla helped shape the market and established many of the EV features, processes, and technologies that are now regarded as standard or optimal, such as innovative batteries and in-house design of chips. Tesla also established new practices for service and maintenance that use the company's leading-edge technologies and digital focus. For instance, Tesla decided to provide over-the-air software updates for its vehicles, as well as remote diagnostics and technician support, to improve customer convenience and reduce shop visits. Tesla also revolutionized sales by connecting directly with consumers, often through online channels, rather than relying on dealerships. Many other EV companies have adopted Tesla's sales model because it can result in increased profits.

Early entrants often have ample time to build and upgrade their production networks before demand surges. That preparation gives them an advantage over later entrants, which must scale more quickly and thus may not have time to optimize either their processes or facilities before at-scale production begins. Tesla now has a strong network of factories in China, Europe, and the United States to produce batteries, energy storage products, electric motors, vehicle powertrains, and other components. In addition to ensuring a solid supply of EV

batteries and parts, the factories allow Tesla to accelerate both innovation and sales growth.

The first-entrant strategy can produce outsize benefits, but the risks are equally great because the public typically takes time to warm up to innovations, making at-scale adoption a distant target. Unless companies can secure significant funding, they may run out of money before the market embraces their product.



Be a well-paced follower

Rather than racing to be first to market, some businesses deliberately pursue a cautious-follower strategy by waiting for early entrants to establish their presence, stimulate demand, and refine technologies. This approach allows them to avoid many of the expenses and setbacks, such as post-launch software bugs, that early entrants experience, and it gives them time to understand the customer base before they enter the market. What innovative features did customers value in the first products? Did customer complaints relate to specific performance issues? Answering these questions may increase the odds of success.

Consider an AV company that entered the market in 2024. It would have less name recognition and a smaller customer base than early entrants, but its costs and development timelines would likely be shorter because of recent technology advances, including those facilitated by AI. The latecomer's AVs would also have the latest features from the outset, and they might avoid some of the glitches that early entrants experienced.

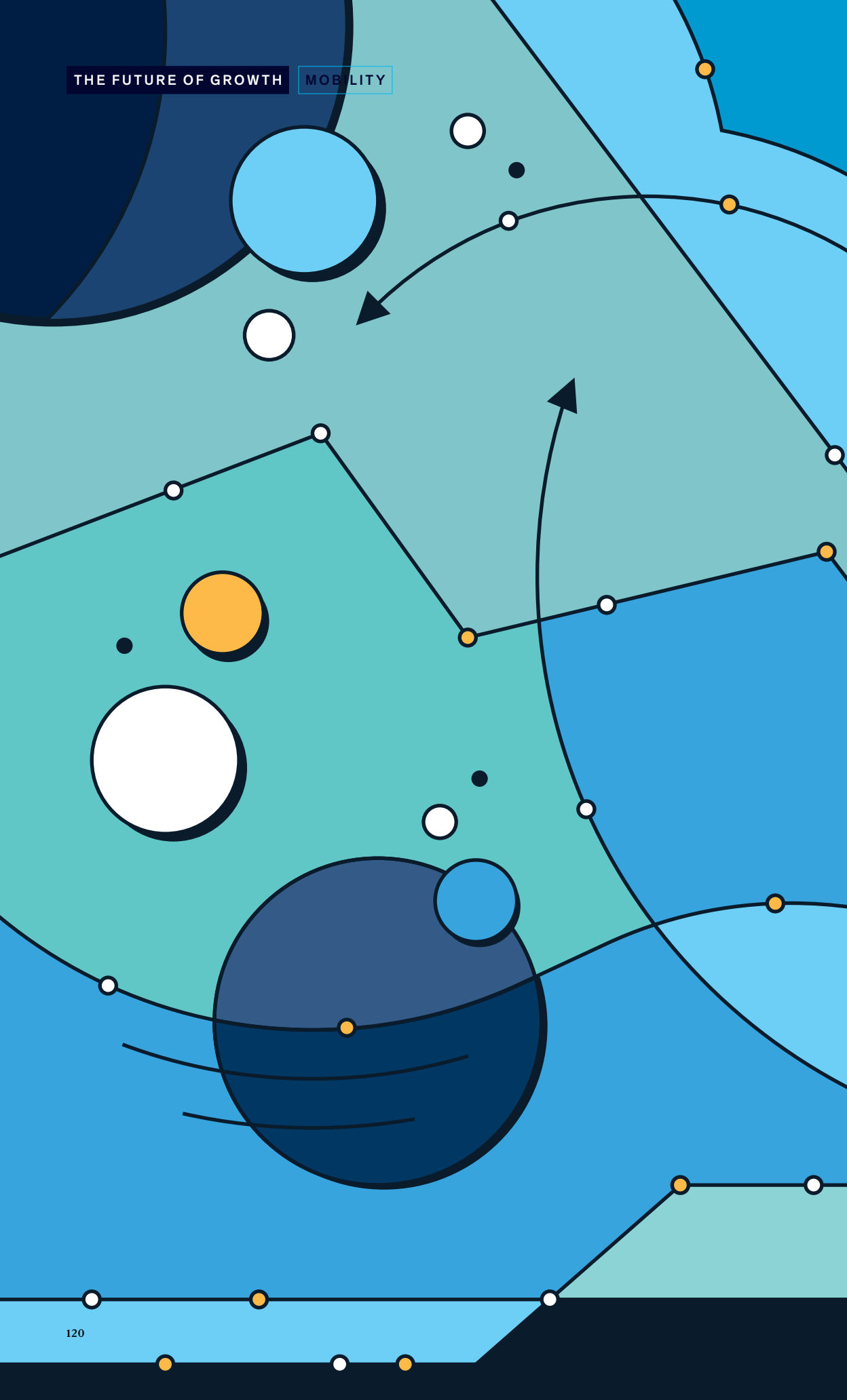
Cautious followers must be strategic about their entry point. If they wait too long, their competitors may become so well established that it would be difficult to take any market share from them.

1995

McKinsey Quarterly
Number 2

Is your growth strategy your worst enemy?

Why do plans look good on paper but go bad when they are executed? The problem lies in what might be called secondary effects—unforeseen by-products of strategy that confound its original intentions. . . . We believe that companies wishing to implement a successful and sustained growth strategy need [an approach] that takes account of the impact of these secondary effects and helps managers make more informed choices.




Today's innovations do not simply improve mobility—they transform it and could **lead to a new age of growth.**

Within the smartphone sector, the leaders have gained such an advantage that no other company has been able to gain substantial share. Companies must also be realistic about technological advances. If they spend too much time trying to improve features to best the competition, they might enter the market too late or discover that the desired product features would require an unfeasibly high bill of materials or complex, time-consuming operations. If companies examine technology and cost trade-offs early in development, they might avoid such pitfalls.

Gain market share through M&A or partnerships

For start-ups, deals typically fall into four categories:

- equity investments, in which a company buys a stake in another one—often, but not always, an incumbent purchasing an interest in a disrupter
- strategic arrangements, in which companies collaborate without equity exchange
- technological partnerships, in which companies jointly create new innovations
- commercial partnerships, in which two companies collaborate to sell products

For a small start-up, an equity investment from a major incumbent can be a ticket to growth. In one McKinsey analysis, start-ups that formed partnerships with Fortune 100 companies attracted an average of $6.7 billion in funding—90 percent more than the $3.5 billion received by disruptors without partnerships. Their alliances with larger, well-funded companies may have reassured investors that they would be able to weather the inevitable rough patches that start-ups encounter as they scale their operations.

In 2017, the autonomous-driving company Mobileye received a significant investment from the much-larger Intel. After becoming the majority owner, Intel was able to offer automakers a larger package of autonomous-driving components, making them more appealing to OEMs that wanted to simplify purchasing and supply chains. The funding infusion helped keep Mobileye on a growth path, and it is now valued at much more than it was at the time of Intel's initial investment. When Intel reaffirmed that it wanted to keep its majority stake in 2024, Mobileye's stock rose even further.

Volkswagen has also been collaborating with Mobileye for many years. Recently, it strengthened the partnership by asking Mobileye to create production-ready automated driving systems for several of its luxury brands. Later, Mobileye is expected to provide platforms for some of Volkswagen's commercial vehicles. Volkswagen benefits from the sophisticated technology, which may accelerate its autonomous-driving efforts. Meanwhile, Mobileye is ensured of new orders for its platforms, which should accelerate growth.

Other types of mergers and acquisitions can also stimulate growth, and they do not always involve a large company investing in a smaller start-up. Consider the car-sharing company

Miles Mobility, which initially took a measured approach to growth and limited its operations to a small number of cities, allowing it to understand each market thoroughly. It remained open to attractive growth options, however, and purchased Volkswagen's WeShare car-sharing business in 2022. At the time, WeShare operated 2,000 EVs in Berlin and Hamburg and already had about 200,000 customers in those locations.

The deal allowed Miles Mobility to establish a presence in some new cities quickly. It also made faster progress toward its stated goal of increasing the percentage of EVs in its fleet. Volkswagen also benefited from the deal, since Miles Mobility agreed to purchase 10,000 EVs from the company and assume all fleet-management responsibilities. While Miles Mobility had only about 9,000 vehicles premerger, it now operates about 21,000, marking it the largest car-sharing fleet in Europe.

Spend big but wisely

Bigger is not always better when it comes to funding. A large investment could generate greater growth than a small bet, but it comes with more risks because of the amount of money at stake and thus deserves more scrutiny. Companies that divide vast sums of money among too many products may also encounter problems because managers cannot give each one the resources and attention it deserves.

Lime, the world's largest company offering shared electric bikes and scooters, has made several noteworthy investments since its founding, in 2017, that have successfully contributed to its growth. Strong groundwork and research have preceded each investment, and the company also emphasizes continuous improvement.

Innovation **always** comes with risk

Every innovation sounds great when it's still at the design stage. The problems, including serious regulatory and technological risks, often fail to materialize until late in the product development stage, or when companies have just launched a new product and want to scale production. Some obstacles may be insurmountable, making product failures an unavoidable part of the innovation process.

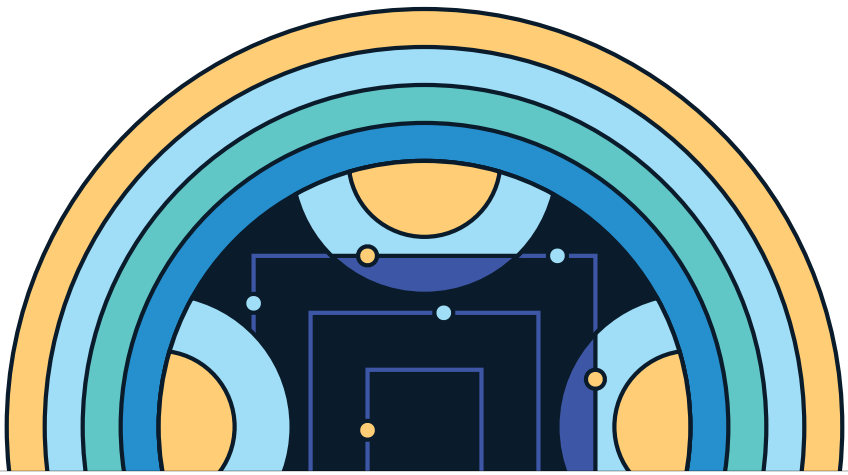
A few recent experiences in the solar industry show how promising products may not live up to expectations. In one case, engineers built a road covered in solar panels in Normandy, France. Despite careful planning, the solar road generated only about half of the energy anticipated because higher-than-expected traffic interfered with the sun's ability to reach the panels.

In another case, a US-based solar start-up called Solyndra developed innovative cylindrical panels composed of cells made of copper indium gallium selenide. This material differentiated the panels from those of competitors, which were primarily composed of polysilicon. But the price of polysilicon dropped dramatically beginning around 2009, and Solyndra's product became much more expensive than other panels. This development, combined with other factors, such as a drop in the price of natural gas, resulted in very low demand and contributed to Solyndra's bankruptcy. The company's experience shows that even solid innovations can quickly become obsolete if technology advances or external developments take the market in unexpected directions.

Recently, for instance, Lime decided to invest $55 million to expand its global bike fleet by 30,000—a 15 percent increase. Before making this investment, the company strengthened its offerings and vehicle technology while simultaneously building strong government relations in multiple markets to ensure that the company would satisfy all local requirements. Finally, Lime optimized its operations and adopted swappable battery technology to expedite maintenance and vehicle availability, leading to improved unit profitability and better growth prospects.

Torc Robotics is also among the many companies that have made some large but well-considered investments to stimulate growth. The company initially created autonomous platforms for many different vehicles, especially passenger cars and heavy-equipment carriers in the mining and defense sectors. Its focus narrowed in 2019, however, when Daimler Truck became the majority shareholder. The company now devotes most of its R&D funding to autonomous commercial trucks for the US market because of this subsector's promise. In addition to investing in AI, Torc Robotics is investigating sensor improvements and other technologies that satisfy the specific safety and navigational needs of trucks, such as the ability to spot obstacles far enough in advance to allow sufficient braking time. The focus on a single category increases the odds that Torc Robotics can fund all promising truck-related projects.

In the early 2000s, the most important mobility innovations included GPS navigation, Bluetooth connectivity for hands-free calls, massaging seats, and rear-view cameras. Today's innovations go far beyond these comfort and convenience features because ACES tech and digitization do not simply improve mobility—they transform it and could lead to a new age of growth. Although risk is inherent in innovation, too much is at stake to accept that most start-ups will fail. Rather than repeating past mistakes, today's entrepreneurs should learn from their predecessors and adopt winning execution and product development strategies that can accelerate their growth. Q



Kersten Heineke is a partner in McKinsey's Frankfurt office, **Philipp Kampshoff** is a senior partner in the Houston office, and **Timo Möller** is a partner in the Cologne office.

FROM THE
MCKINSEY QUARTERLY
ARCHIVES

Growth figures may be useful in monitoring progress, but growth targets should not be mechanistically set and then used as primary goals. Any quantitative growth targets must be based on a thorough understanding of how those targets might be attained, and at what cost.

"The dogma of growth: A reexamination,"
McKinsey Quarterly, 1986, Number 1

TotalEnergies' tightrope transition

A TALK WITH CEO **PATRICK POUYANNÉ**

Among oil and gas majors, TotalEnergies stands alone in its plans to shift a fifth of its business to renewable-led integrated power by 2030. It's a tightrope walk for the company's long-time CEO Patrick Pouyanné—essentially a strategy that's not "enough oil and gas" for traditional investors nor "enough renewables" for green ones. But after a decade in charge, the Frenchman is thinking about his legacy and remains confident his is a no-regret strategy that fosters innovation, has raised employee morale, and targets returns on an integrated-clean-power equivalent to what oil delivers through the price cycle.

Appointed after the tragic death of his predecessor in a plane crash, Pouyanné has led the business through turbulent times for the sector, including the decarbonization commitments in the Paris Agreement, the COVID-19 pandemic, and the war in Ukraine. While he counsels leaders to expect the unexpected, he has no doubt that the energy of the 21st century is electrons. He argues for both carbon prices and net-zero ambitions but also says the transition needs to be gradual, pragmatic, and affordable to bring society along.

Pouyanné recently spoke with Sandra Sancier-Sultan, a McKinsey senior partner, at TotalEnergies' Paris headquarters. The discussion provides an important and timely perspective on the broader energy transition and its implications. This interview has been edited for length and clarity.

The chairman and CEO of the French oil major talks about why he is sticking to his strategy to gradually shift from oil to electrons, which he calls 'the energy of the 21st century.'

© ALAIN JOCARD/AFP/Getty

Sandra Sancier-Sultan: *Today we're seeing a slowdown in the energy transition—not in the commitments, but in the actual projects. What's your view of this change?*

Patrick Pouyanné: What I see—and I'm a little surprised by it—is that for some people, having more pragmatism means backtracking on their commitments. But to me, pragmatism doesn't mean renouncing the ambition. I don't want to renounce the aspiration that TotalEnergies could achieve net zero by 2050, together with society, because it's a big motivator for our employees and our strategy.

But there are challenges to reaching that goal, like we see today with the slowdown in electric-vehicle [EV] adoption in the US. What the US decides will be fundamental to the pace of the transition everywhere. Europe may go faster, but in other big markets of the world—China, India, South America—the transition won't go faster than in the US.

We're also seeing a backlash to going too far in the net-zero-above-everything approach, so we need to rebalance. That's why I'm insisting that the targets we set for 2030 are pragmatic ones: reducing Scope 1 and Scope 2 emissions and continuing to grow via renewables. I don't know if collectively we will be able to reach the COP28 [28th UN Climate Change Conference] target of tripling renewables, but it's a bold objective. If we can make 2.5 times, we're not yet on the trajectory to reach the 1.5° target, but at least we will have made strong progress.

Sandra Sancier-Sultan: *In your view, what are the major misconceptions people have about the energy transition?*

Patrick Pouyanné: In 2015, when the Paris Agreement was signed, the target was well below 2°—if possible, 1.5°, which meant carbon neutrality around 2070. Then in 2017 or 2018, scientists said if you want to reach 1.5°, you need carbon neutrality in 2050. This was a huge acceleration. Immediately, a sense of urgency arose, and it ignored that a transition means gradual changes. Instead, it led to the belief that we could transform the energy system overnight.

The change in target also led to the idea that we need to urgently go to the ultimate solutions—that we need EVs and e-fuels tomorrow morning instead of having some time for gradual solutions, like more fuel-efficient internal combustion engine cars. Suddenly we want the perfect solution, as if tomorrow morning we will be in 2050. But perfect solutions are expensive. We need to

> **We won't make this transition if we forget that the fundamental characteristic of energy is affordability.**

bring them to customers and society gradually. For example, we're working with the marine industry to use liquefied natural gas [LNG] as marine fuel. It's not the ultimate solution, but it decreases emissions by 20 percent. During the past five years, we lost time talking about e-methanol and ammonia, which are a perfect, final solution but aren't available now, because they're expensive. Now the marine industry is coming back to LNG, which is good for 15 years, giving us time to develop better solutions.

Sandra Sancier-Sultan: *So you want to keep the ambition but be pragmatic about the way to reach it?*

Patrick Pouyanné: Yes. We won't make this transition if we forget that the fundamental characteristic of energy is affordability, because it's central to everybody's lives and to economic development. If we don't find a path for affordable energy, emerging countries won't accept it. And it's one of the difficulties for Europe, as well, which is the only continent where we have a significant price on carbon. And the desynchronization on carbon price with the other regions of the world has become a real problem for European competitiveness.

I signed the 2015 call for a carbon price. It's good for the climate because it's the right signal to influence economic choices; I'm absolutely convinced. But ten years on, Europeans haven't convinced other big countries about carbon pricing. And in the new geopolitical context, this is a major question for Europe: Are we going too far? Should we be more pragmatic?

Sandra Sancier-Sultan: *What about China's carbon price?*

Patrick Pouyanné: It's still low, and China will not change it quickly but gradually—it's pragmatic. It's ahead today in many low-carbon technologies because in 2010, when the price of oil reached $100, its bill was exploding. As the largest oil importer, China was fundamentally thinking of affordability but also of its own security of supply.

China was a strong believer in solar, wind, and batteries. It developed them very quickly, much earlier than the others. China has been super at driving costs down—which the rest of the world benefits from today. But it didn't do it with a real carbon price but by driving its own technologies to be affordable. Today its EVs are the best, but it also has too much renewable energy and can't cope with the intermittency. So it's reintroducing a carbon price, but I'm sure it will keep the price at a level where it remains competitive with the US and the rest of the world.

Sandra Sancier-Sultan: *Early in your tenure as CEO, you made a choice to expand the company from oil and gas to a multi-energy strategy that includes electricity. You talked about this as "walking a tightrope." What do you mean when you say this?*

Patrick Pouyanné: We're a successful oil and gas company. We restructured our portfolio to reach a $25 per barrel breakeven and have the highest profitability of the oil majors. At the same time, we observed the energy transition all around us, with society pressuring us to contribute to the new energy world. It wasn't an easy decision, but we've done it for several reasons.

The first is that, historically, we were an energy supply company. Our strategy was to supply more oil and gas, knowing the market would buy it. Suddenly in 2015, a new realization came to us: Maybe we were wrong. Maybe oil demand won't continue to grow proportionately to the population. So we needed to look at demand. And when we did so, there were many different scenarios. But in all of them, electricity was growing. There's no doubt that the energy of the

21st century is electrons. Our strategy is led by demand planning, not just by supply capacities. We then considered if we could find a way to use our fossil fuel skills to develop an integrated electricity business. We decided yes, it made sense.

The other motivation was our people. In 2018, when the net-zero debate arose, I was having lunch one day with some young drillers. They asked me, "What will I become in ten years?" For me, it was obvious: They would drill. But for them, it wasn't obvious. I realized we will have an issue if our own people, who are proud of the company and whose motivation is our best asset, begin to ask this question. So one key factor in our decision to move to the multi-energy strategy was to give our people a positive answer. And it's working. In our surveys this year, 92 percent of our employees are proud of the company and are convinced that the strategy is right and that it will succeed. That's much higher than ever before.

We're walking a tightrope at TotalEnergies. The people who tell us we should only do oil and gas aren't happy with us, because we invest 30 percent in renewables and electricity. And other people say to us, "You continue to put two-thirds into oil and gas; you aren't good citizens for the planet. Why not put more in renewables?" So today, we think we're doing well because we're building a strong renewable-integrated-power business that delivers good profits. But it's not enough for one, and it's too much for the other.

However, I'm sticking to the strategy, even as some of my peers backtrack. Consistency of strategy in such a fast-changing environment is the best answer because the energy business is a long-term business. I'm convinced that by 2030, these electrons will represent nearly 20 percent of our mix. It's a sizable transformation for us.

Sandra Sancier-Sultan: *What fuels that conviction when you have stakeholders who question it?*

Patrick Pouyanné: It's a no-regret strategy, and the board is unanimously supportive. Having said that, we face reality, too; we check our progress quarter after quarter. For me, it's a no-regret decision, and the motivation it creates for our people confirms it. It would have been more comfortable to remain an oil-and-gas-only company even if we had to face criticism. But I thought that if we didn't make that decision, our successors would regret it.

As a CEO, you also think about your legacy. I'm number ten in the series of CEOs of TotalEnergies over 100 years. I said to myself, "If you don't move in this electricity segment, it will be difficult to catch up. With all that we're doing this decade, we will learn, we will spend some money, and we will build teams and competencies. And yes, it will produce a legacy that will be different, and to be a little different from the others is also to differentiate in terms of business model. So why not?"

Sandra Sancier-Sultan: *The topic of the energy transition is very politically charged. You have been challenged a number of times, especially in your own country. How do you navigate this? What's your "true north"?*

Patrick Pouyanné: My true north is clear: It's the interest of the company. When you become CEO, your life is driven fundamentally by the interests of the company, not personal interests. There's a lot of politics and criticism. Yes, I'm frustrated by it. And strangely, it's in my home country that we're most criticized. It can have an impact on my children, sometimes, but not on me. It doesn't mean I don't question myself regularly. But if it's what I believe is good for the company, I have to stick with it. That's just part of the job.

Sandra Sancier-Sultan: *You've told the media that your main competitors don't like to take risk, so you do. What do you need to do as a leader to take that risk?*

Patrick Pouyanné: It's boldness. I'm not a poker player, to be clear. I'm quite rational. But being too cautious is also not best for the future of the company. Again, my driver is: Will taking that risk be good for the company or not? It's not an emotional decision, it's intuition. But the intuition is also based on my experience, not on emotion.

We faced a lot of criticism when the war in Ukraine started because we didn't immediately declare that we would leave Russia. But the company had $15 billion of assets in Russia. Emotionally, I could have said, "Let's leave," but it was in the interest of the company to take a little more time. I was quite heavily criticized in the newspapers at the time.

My team spent the summer of 2022 in a big exercise evaluating what we would do if we didn't have assets in Russia. Part of the answer was in the diversification to electricity; another part was to invest more in the US. I said to my team, "The US has oil, gas, LNG, and renewables. So let's redeploy the capital we were planning to spend in Russia and put it in the US instead." We found a new road map for the company, and then the momentum came back. In the US today, we're the largest LNG exporter and one of the top five renewable companies.

Sandra Sancier-Sultan: *You've communicated a very strong ambition for electricity: over 100 terawatt hours with a return on average capital employed [ROACE] of 12 percent—much higher than established utilities. What gives you the conviction that you will be able to get to that level of profitability?*

Patrick Pouyanné: First, the idea that oil is more profitable than electrons is true at $80 per barrel, but it's not true at $50 or $60. At $50 or $60, we're doing 10 percent—maybe 12 percent—ROACE. So this is where our target for electricity is coming from. I want this integrated-power business to be as profitable as oil and gas at $50 to $60. Why $50 or $60? When you take the average of the cycles, you will find that the average price of oil is around $50 to $60 per barrel. Of course, at $80, it's a bonanza. There's more upside in profits of oil and gas today, but I'm not sure that will be the case in 2040.

> **Consistency of strategy in such a fast-changing environment is the best answer because the energy business is a long-term business.**

Second, it's not renewables; it's integrated power. An energy product needs to be reliable. Renewables aren't reliable; they're intermittent. So we're developing flexible assets as well, with gas-fired power plants and batteries. And why are we doing that? Because our customers want firm power, but they want it with more green electrons. And when we add in some trading—because the more intermittent sources in the electricity system, the more there are imbalances—we can create additional value. And our strong balance sheet allows us to take merchant risk and sanction renewable projects with a different model from the competition. Our integrated-power business is really delivering: Today we make a 10 percent ROACE. That 10 percent could become 12 percent when we have some scale, better understand the business, and develop more integration.

Sandra Sancier-Sultan: *How are you going to do all that? How do you think about the balance between using your historical skills from oil and gas and getting in some new skills?*

Patrick Pouyanné: That's a major question. In the beginning, we were betting on people from outside by buying smaller renewable developers. We had some success, but they weren't really thinking the way we wanted them to think. They came with their experience of renewable infrastructure, and we wanted to build an integrated-power play. So I also took some of our best talent from our oil and gas business and transferred them into this new integrated-power business because they knew the company. And it worked.

The clear management lesson I drew is that, in this time of diversification, you can bring in external talent, but you also have the question of culture. If you want the new business to be a success, you must also transfer some of your strong people from your core business into the new activities to be able to overcome difficulties and move faster. Maybe they didn't know electricity, but they learned, and we learned with them. It was quicker to make some decisions because of the trust we had built up with them.

Sandra Sancier-Sultan: *In parallel to that big transition, you also have high ambitions for innovation in your core business. How do you foster that innovative spirit?*

Patrick Pouyanné: The climate challenge gave me a path to innovate—to say to my colleagues in oil and gas, "Your mission will be to produce

> **I'm convinced AI and digital tools will be at the core of the next wave of efficiency in the energy world.**

oil and gas but differently, with much lower emissions." We told them, "There's another KPI that's as important as production; it's emission reduction." This has created a lot of innovation in the company. I went to a production unit in Angola, and the engineers told me it was difficult balancing production and emission reduction because higher production meant flaring more gas. But they said they eventually found ways to produce with technologies that reduced flaring.

I'm convinced AI and digital tools will be at the core of the next wave of efficiency in the energy world. We set up a 300-person digital factory in the company to keep this innovative mindset.

Sandra Sancier-Sultan: *CEOs with a decade in charge are quite rare. What have you learned over the years?*

Patrick Pouyanné: I came young into the job. At the beginning, it was suddenly very different to be number one compared with number two or three. What's fundamentally different is that everybody is looking to you permanently. I made some mistakes during the first few months because I didn't realize I was no longer "normal" in the eyes of my colleagues.

In 2015, we faced some hard times because the price of oil dropped dramatically. Our breakeven was above $80 per barrel, and we had to reduce it to $25. It was a huge effort to convince my colleagues of that. You discover that you have to convince people; it's not a given. It's not because you are the CEO that they will follow you. You have to show them step by step. Of course, it's also very important to have strong unity at the top of the company, but that doesn't mean everybody has to be like you. Diversity is also good.

Year after year, I see what works and what doesn't work. I can't correct everything, but I think I'm a better CEO today than I was at the beginning.

Sandra Sancier-Sultan: *Can you tell us a bit more about how you bring your people along with you?*

Patrick Pouyanné: People look to you as the CEO because, in the end, the CEO will decide. But at the same time, your decision is the result of exchanges with others. You need to be a sponge: to listen and to create debate. Then you can make better decisions, people will follow you, and the execution will be in the right direction.

Sandra Sancier-Sultan: *What's the biggest challenge you see for TotalEnergies in the years to come?*

Patrick Pouyanné: We have to be ready to face the unexpected. At the end of 2021, I thought, "We've overcome the COVID-19 pandemic. Life will be easier." Oil prices were coming back. And then the war in Ukraine happened. 2022 was probably one of the most complex years for our company—even more than 2020. We're in a world where, unfortunately, we see more and more volatility. We have to be ready for the unexpected.

Maybe I'm optimistic because I'm very lucky to be at the helm of a company that has huge capacities and can absorb shocks. I feel we're ready to face the unexpected. Q

Patrick Pouyanné is the chairman and CEO of TotalEnergies. **Sandra Sancier-Sultan** is a senior partner in McKinsey's Paris office.

Comments and opinions expressed by interviewees are their own and do not represent or reflect the opinions, policies, or positions of McKinsey & Company or have its endorsement.

Returning to

by Aaron De Smet, Brooke Weddle, and Bryan Hancock, with Marino Mugayar-Baldocchi and Taylor Lauricella

the office?

Focus more on practices and less on the policy

The working model is far less important than the work environment leaders create. Five core practices can help organizations implement a policy that best fits their culture.

The world of work is still in flux as many companies continue to follow hybrid and work-from-home models. At the same time, Fortune 500 companies such as Amazon, JPMorgan Chase, and Nike moved to mandated in-office policies of at least four days a week in 2024, and more organizations, as well as much of the US federal workforce, are following suit this year.

Which working model is best for organizational performance? There is a general debate about whether return-to-office (RTO) policies are too strict, not strict enough, or just right. Our new data suggest this focuses on the wrong question. The policy mandate itself is far less important than the work environment organizations create and the practices that accompany a policy's implementation. Companies that hope to reach their stated organizational-effectiveness goals should look beyond RTO policies themselves to address the chronic problems that continue to take a toll on employee experience and productivity.

In a new survey of several thousand US employees across industries, most people in each of our tested models (in person, hybrid, and remote) say their overall work experience needs improvement, even if their work arrangement is satisfactory (see sidebar, "Our methodology").

In fact, respondents across working models say their organizations are doing a poor job of supporting five core practices that drive performance and strengthen organizational health: collaboration, connectivity, innovation, mentorship, and skill development. Leaders frequently cite these practices as top reasons for getting their people back in the office.

However, the research also shows that leaders have a much more optimistic view of how well their organizations support these five practices, which indicates that they might not be focusing on the core problem. In this article, we explore why embedding and strengthening these practices in the organization can help fuel performance and organizational health, no matter which working model leaders choose.

The working model won't automatically improve outcomes

We tested the perceptions of employees who work mostly in person, hybrid, or mostly remote, as well as the relationship between the working model and certain outcomes related to productivity.

The results show that there is no clear winner when it comes to a working model that provides a high level of employee experience and productivity. In-person, remote, and hybrid workers all report mostly similar levels of intent to quit, burnout, effort, and satisfaction. This pattern largely holds true regardless of gender, though there are slight differences across generations and caregiving status.

Most employees in each model report being satisfied or very satisfied with their working-model arrangement. (It's important to note that satisfaction may stem from the fact that many companies have already sorted their employees—or employees have sorted themselves—into working models.) For models with an in-person component, either hybrid or mostly in person, nearly eight out of ten workers are satisfied with this arrangement, compared with roughly nine out of ten remote workers.

Moreover, the number of employees who want to switch working models is generally low. Both remote workers and workers who are mostly in person report similarly low levels of wanting to switch, at 19 percent. That percentage is much lower than it is for hybrid workers, about one-third of whom say they would like to switch to a different working model.

This is all pretty good news for organizations. However, nagging levels of employee dissatisfaction are still evident—and the working model isn't solving the problem. Despite employees being satisfied with the working model and having low levels of wanting to switch, some of the leading workforce metrics are trending in the wrong direction across all models.

For example, overall intention to leave is 39 percent, which is comparable to the COVID-19 pandemic high of 40 percent during the Great Attrition. Intention to leave is also similar across working models, ranging from 38 percent (in person and hybrid) to 41 percent (remote). This pattern looks slightly different across groups. Baby boomers across working models have a lower intention to leave (21 to 26 percent) compared with Gen Zers, who have a higher intention to leave, particularly for in-person and remote roles (45 percent and 51 percent, respectively).

Women report a slightly lower intention to leave than men across all working models. Noncaregivers report a lower intention to leave than caregivers across models (30 versus 34 percent), which may be partly due to the additional responsibilities caregivers have outside of work.

Regarding employee perceptions of whether they are meeting their supervisors' performance expectations, in-person workers are more likely to believe they are exceeding expectations (25 percent), whereas hybrid workers are least likely (15 percent). This pattern holds true across gender, caregiver status, and most generation groups (with the exception of Gen Z employees,

“Nagging levels of **employee dissatisfaction** are still evident—and the working model isn't solving the problem.”

whose perceptions of exceeding their supervisors' expectations are consistent across all three models).

The amount of effort that employees report putting into their work is similar across hybrid and remote workers and slightly higher for in-person employees: 34 percent of in-person workers strongly agree that they put substantial effort into their work and consistently stay focused while working, whereas 29 percent of remote and 28 percent of hybrid workers say the same. This pattern holds true across gender, caregiver status, and all generation groups except for Gen Z, a cohort whose hybrid workers report slightly higher effort than the other working models.

This finding is important because although effort is linked to individual performance, one person's extra effort can also raise the game of an entire group. Increased collective effort can have a positive impact on helping peers and mentoring newer colleagues, which are important activities for the healthy social fabric of an organization and can accelerate the timeline by which new joiners are fully productive in their roles.

Our methodology

To continue to understand labor market trends related to employee retention, engagement, and attraction, we deployed our annual Talent Trends Survey, which we first launched in 2021. We surveyed 8,426 employees across 15 industries in the United States. The sample is not representative of the entire US workforce, nor does it follow census distributions. Rather, it provides a sampling of employees across key industries. We focused on three key subpopulations of interest for leaders: employees who were working mostly in person (that is, at least four days a week; 5,748 employees), in a hybrid format (two to three days a week in person; 1,213 employees), or in a mostly remote format (at least four days a week; 1,465 employees).

We also surveyed 3,531 executives working mostly in person (2,269 executives), in a hybrid format (719 executives), or mostly in a remote format (543 executives) in companies across the same 15 industries to find out how they perceived the effectiveness of the same organizational norms about which we queried their employees.

The survey was conducted between October 13 and October 28, 2024. All outcome measures of work effort, performance, satisfaction, burnout, and well-being, as well as employees' and employers' working-model arrangements, were self-reported.

The research is not intended to endorse or otherwise place a value judgment on any of the three working models; rather, it is intended to reveal the underlying organizational practices that are critical to the success of any working arrangement.

Finally, roughly one-third of all the workers we surveyed report experiencing burnout (36 percent of remote workers, 35 percent of in-person employees, and 28 percent of hybrid workers). These high levels of burnout (defined as a chronic imbalance between job demands and job resources) should worry leaders, particularly because these levels are higher than the global average seen throughout the pandemic, especially for remote workers.

Burnout is related to several other outcomes. For example, we found a significant positive correlation between burnout and intention to leave, as well as a significant negative correlation between the effort workers put into their roles and their perceptions of meeting supervisors' performance expectations. In many cases, burnout is related to navigating a high-stress environment with poor levels of collaboration, mentorship, and the other key working practices that elevate experience and engagement.

Five key practices: How are companies doing?

Our research shows that employees' satisfaction across working models is, on average, moderate but that employee experience and productivity rates are relatively lower. To dig deeper into why, we tested five core practices that our research shows spur organizational health and that were the most frequently stated reasons leaders gave for transitioning to RTO: collaboration, connectivity, innovation, mentorship, and skill development.

The data show that across working models, most employees perceive relatively low organizational maturity across these five key practices. In fact, aside from connectivity, roughly half or fewer of respondents in each model rate levels of collaboration, innovation, mentorship, and skill development as effective at their organizations, which has both direct and indirect implications for performance (Exhibit 1).

> “In-person, remote, and **hybrid workers all report mostly similar levels** of intent to quit, burnout, effort, and satisfaction.”

This means that changing the working model alone will not resolve or even change the nature of the problem unless organizations address why their employees feel this way.

Complicating the path to a solution, there is a disconnect between leaders and employees when it comes to evaluating the effectiveness and maturity of these five practices in each working model. Leaders' views of average maturity across practices are much higher than the views of employees in each model (Exhibit 2).

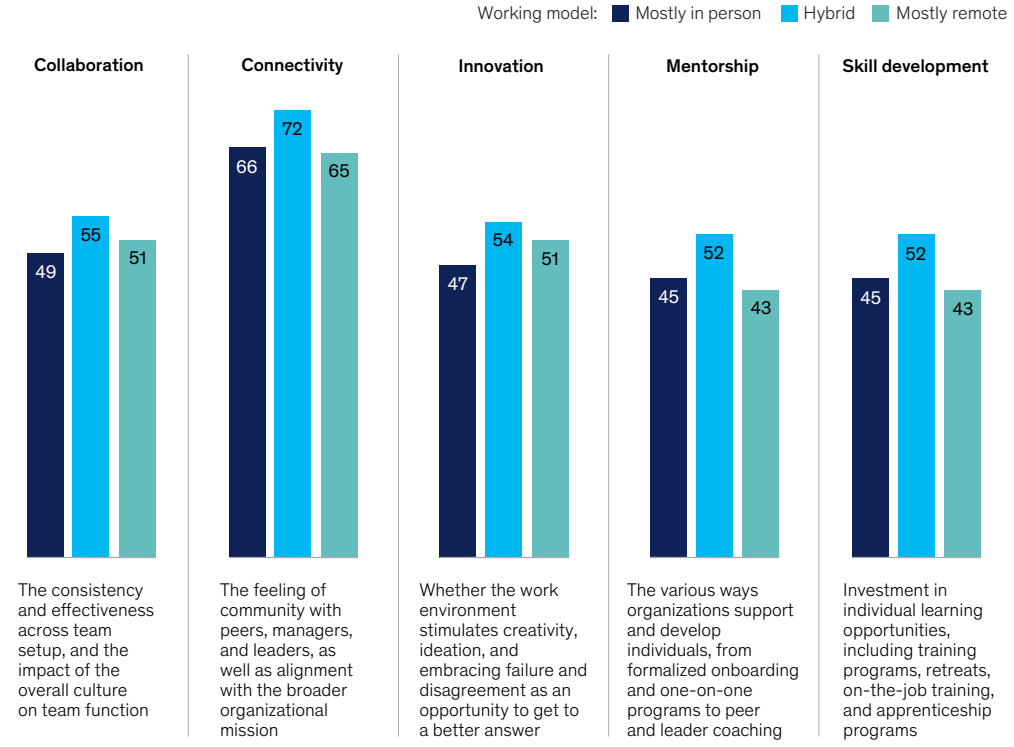
For example, 90 percent of surveyed leaders view connectivity as a mature and well-functioning practice, while only 67 percent of employees view it positively.

What may account for such a big gap in experience? Senior leaders have the skill, experience, strategic perspective, and autonomy to shape their own working model and collaboration pattern in a way that is optimal for them and the senior-executive teams they are a part of. And at that level, they are not beholden to scalable business processes, management practices,

Exhibit 1

When it comes to how well organizations support key working practices, the working model doesn't matter.

Employees' ratings of their organizations' maturity in 5 practices, by working model, %[1]



[1]Employee-only sample sizes: hybrid (2–3 days in person), n = 1,213; mostly in person (4 or more days in person), n = 5,748; mostly remote (4 or more days remote), n = 1,465.
Source: McKinsey Talent Trends Survey, US employees and executives across industries, Oct 2024

collaboration mechanisms, and enabling technologies to make the model work.

However, the larger organization often lacks the capabilities, empowerment, and enabling support mechanisms to achieve something nearly as effective as what most senior executives experience. This lived work experience creates a chasm in many organizations, harming the work environment, engagement, and, ultimately, performance. The first step is acknowledging that this problem exists.

The enablers: Behaviors and other key factors

After acknowledging the problem, leaders can look for concrete ways to strengthen the practices. Our research shows that each working practice has behaviors, policies, or norms that contribute to how well it functions. Some of these "enablers," as we call them, are more important than others, and together they influence the maturity of each practice, regardless of working model (Exhibit 3).

These enablers reflect the dynamics that are present in each model, including commonalities and differences in experience. Overall, all five working practices share at least two enablers across each of the working models, suggesting that what organizations need to get right is largely the same, allowing for nuances related to the working model.

Building (or restoring) the foundation of a high-performing organization

Next we discuss examples of how leaders can focus on the practices and tailor them with the behaviors, policies, practices, and norms that matter most in their chosen working model.

> When it comes to collaboration, **goal alignment is the most influential factor** across all working models.

Collaboration

When it comes to collaboration, goal alignment (having clear and shared objectives across the team) is the most influential factor across all working models. Regardless of model, leaders and managers should regularly clarify priorities and connect the dots on how work fits together. This includes aligning on the right partnerships within and across teams and tying the work to the broader strategic objectives of the company.

Effective collaboration requires a combination of formal weekly or biweekly check-ins and targeted one-on-one time. It can be enhanced with digital enablement tools such as a shared brainstorming workspace. With in-person and hybrid models, collaboration can mean a combination of formal and informal face time; remote work may demand a more formalized approach.

Connectivity

Organizations face the task of reconstructing workers' largely individual realities into a shared reality. They should be able to clearly communicate answers to key questions: Why is it important that we come together? What is the ideal frequency for being in the office? How do we balance time for connectivity with "heads down" work?

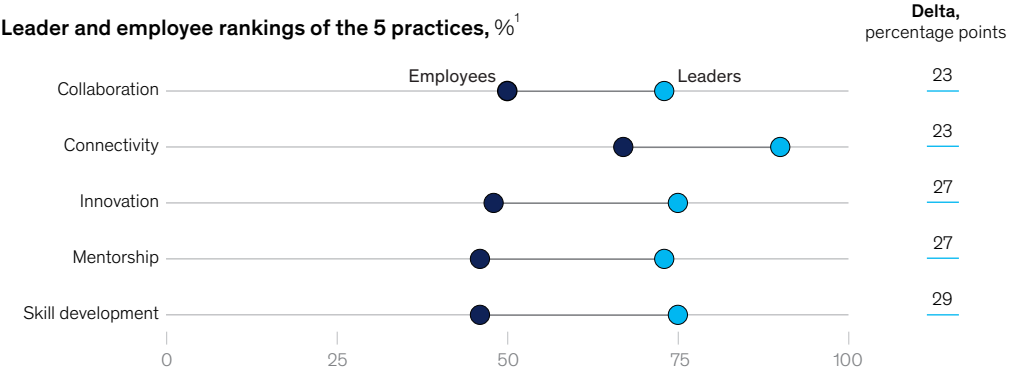
Communication is foundational for restoring connectivity. The cadence of communication and the messaging behind the why of in-person work requirements is crucial. From the CEO to frontline supervisors, managers must offer a transparent rationale for the time spent in person because this expectation is no longer the widespread norm. If leaders choose an RTO mandate, they should apply it consistently, following commonsense principles and using appropriate exceptions.

Communication is necessary but insufficient by itself. Leaders must follow through to ensure that the expectations around the why come to fruition in the day-to-day.

If workers are on the same page because the organization engages them in the communications part of change management, they are less likely to resist mindset and behavior

Exhibit 2

Leaders are much more optimistic about the effectiveness of their organizations' working practices than employees are.



[1]Sample sizes: executives, n = 3,531; employees, n = 8,426.
Source: McKinsey Talent Trends Survey, US employees and executives across industries, Oct 2024

shifts. Employees aren't unhappy working in person, as our data show, but they may need time and support to evolve to new norms.

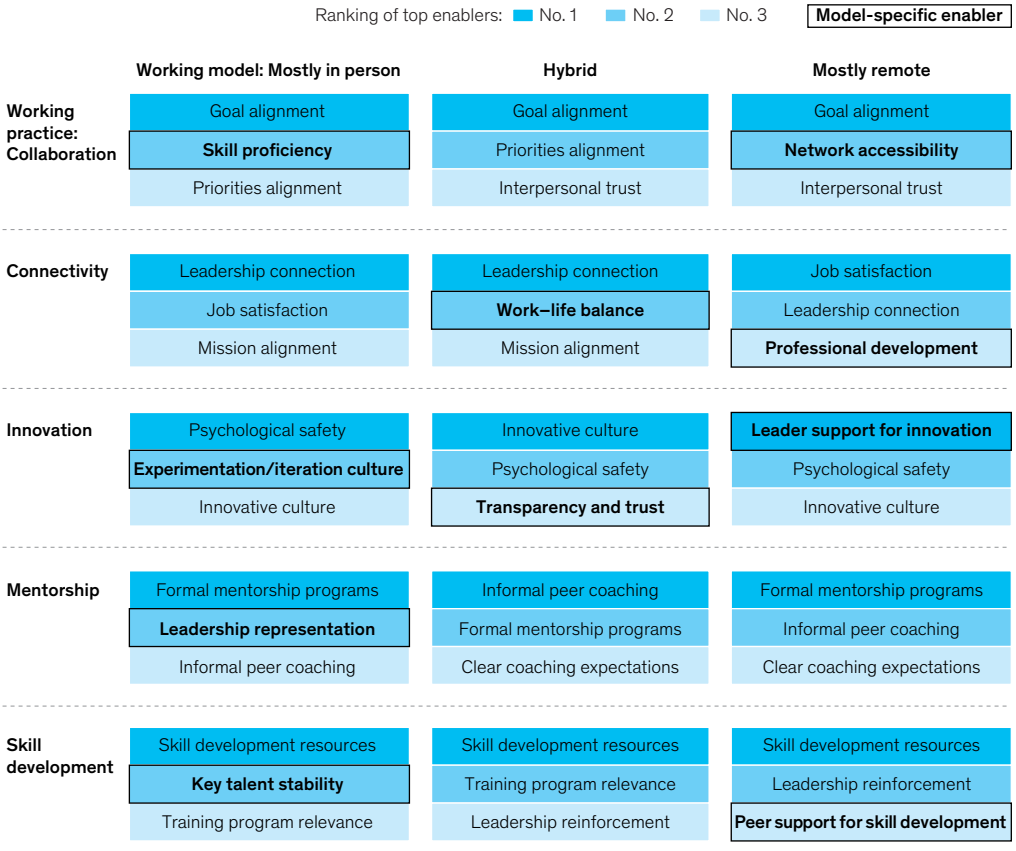
For connectivity, one of the most important enablers for all working models is leadership connection. This means leaders must carve out time to be visible and available for their teams, regardless of the model. Physically being in the same office but stuck on back-to-back calls does not create a leadership connection.

Managers can proactively block time in their calendars for coffee chats, one-on-ones, and skip-level meetings (virtual or in-person). They can regularly spend time outside of their office with on-site visits or "ride-alongs." If in person, they can make sure that time on their calendar is protected for impromptu working sessions and social activities such as lunch and happy hour. Many of these practices were routine before the pandemic, but we have

Exhibit 3

Across working models, the five practices are strengthened by unique but comparable sets of 'enablers.'

Top 'enablers' ranked by how they affect the corresponding working practice[1]



[1]Combined executive and employee sample sizes: hybrid (2–3 days in person), n = 1,939; mostly in person (4 or more days in person), n = 8,048; mostly remote (4 or more days remote), n = 2,018.
Source: McKinsey Talent Trends Survey, US employees and executives across industries, Oct 2024

seen, anecdotally, that both managers and employees are out of practice with respect to some core connectivity behaviors.

Innovation

Innovation is essential for the competitive advantage of organizations, especially with the disruptive impact of generative AI.

While an innovative culture and the presence of psychological safety are essential for innovation in every model, remote workers require additional leadership support, including guidance and guardrails on the tasks at hand, as well as securing buy-in or funding from other leaders.

For in-person workers, a "failing fast" culture that embraces experimentation and iteration is essential. In-person workers must be able to engage in discussion and healthy feedback with colleagues and leaders to test ideas and learn from shortfalls through structured after-action reviews.

For hybrid workers who are navigating a combination of synchronous and asynchronous work, transparency and trust with both leaders and peers play key roles in spurring innovation.

Mentorship

Across all working models, a combination of formal programs and informal peer coaching is necessary for effective mentorship. For hybrid and remote workers, clear coaching expectations are a key enabler to high-quality mentorship. In-person employees, on the other hand, expect more mentorship from leaders and peers since they are in the office together.

There is a real opportunity to use data and technology to increase the effectiveness of formal mentorship programs—for example, by leveraging generative AI to give mentors the tools, nudges, and coaching they need to be more effective. AI can be used to better match mentors and mentees or tease out the unique factors that drive better mentoring relationships.

Informal peer coaching and coaching expectations can be enhanced in every working model when organizations redesign roles to allow for mentorship and people leadership more broadly. This includes sharing guidance on what great looks like in terms of time commitment and cadence. Annual performance reviews can evaluate how engaged leaders and managers are in people leadership and mentorship and can be an effective way to increase accountability.

Finally, our research into employees' perceived effort shows that higher levels of perceived effort may positively affect helping behaviors in the workplace. For example, caregivers, younger workers, and in-person and hybrid workers report spending more time mentoring and coaching new joiners. These behaviors can affect colleagues' productivity and can help maintain or restore an organization's social fabric.

Indeed, if a chief reason for spending more time working in person is to preserve culture, these are productive activities and valuable behaviors that resonate beyond role responsibilities.

Skill development

Effective skill development is largely driven by resources—namely, how much the company invests in opportunities for learning. While this likely includes training across functional and technical skills, as well as adaptive and leadership skills, training is only one piece of the puzzle.

Cutting-edge organizations are investing time and resources into reskilling and upskilling key groups through virtual coaching (including avatar-based coaching and virtual reality tools), boot camps, partnerships with organizations offering certifications, and bite-size learning and nudges. They are also investing in apprenticeships, job rotations, and flexible career paths.

Beyond the opportunity and resources to learn new skills, a combination of leader reinforcement and peer support is critical to ensuring that teams can carve out time to engage in learning opportunities.

Leaders can also ensure that upon completing these reskilling and upskilling programs, employees can practice and apply their new skills. Workers should also receive regular feedback and coaching on the new skills; since this is less common in hybrid and remote settings, leaders should be more intentional about it.

Maximize the benefits of RTO (and other models)

What needs to happen to maximize the benefits of RTO so employees perform at their best and organizational health improves? Leaders, managers, and employees have different roles and expectations.

Senior leaders

A primary reason to return to the office is to be together in person doing work that is less effectively done virtually, including certain kinds of collaboration, connectivity, culture building, and skill building. If leaders are going to mandate that people come into the office, they should maximize

> “For connectivity, one of the **most important enablers for all working models is leadership connection.** This means leaders must carve out time to be visible and available for their teams, regardless of the model.”

> To improve performance, **leaders must reestablish the underlying practices** that drive organizational health and performance, then choose the working model.

the upside of the activities and practices that deliver on the promise of colocating with colleagues.

Complement RTO policies with the practices that create a healthier and more collaborative organizational culture. Conducting an organizational-health assessment is a great way to understand strengths and weaknesses and build a plan to address them.

Shape the physical environment to meet workforce needs. Make sure the space is set up to support in-person work, with enough seats and strong Wi-Fi. Leverage smart-room technology to help with scheduling meetings. In addition to available meeting spaces and huddle rooms, make sure people have enough private space to do their heads-down work.

Ensure that policies have enough flexibility to reflect workers' needs. This is particularly important for Gen Z workers, who tend to have the most positive outcomes in a hybrid environment. It pays to remember that organizations routinely operated with some flexibility before the pandemic. Finally, leaders should visibly model the changes they're asking from others. This should be obvious, but it doesn't always happen.

People managers

Spend focused time with team members. This is true whether a company's working model is fully in person, hybrid, or remote. This can be challenging because of the pressure put on managers, which may be exacerbated by cuts to management ranks. That said, spending time with team members helps with mentorship, skill development, and leadership connectivity.

Design the workweek with a combination of individual time, deliberate collaboration within teams, and cross-team connections, with clear goals for each set of time. The key is to plan when things are going to happen, not just assume they will. This approach can help with connectivity, collaboration, and innovation.

Regularly take stock of what is working well and what isn't across the model. It is unlikely that any individual team or leader will be perfect off the bat during a shift in work arrangements.

Employees

Make the most of in-person time by scheduling regular check-ins with managers, function leaders, and others. Don't slip into the habit of joining calls by video when everyone is in the building.

Embrace the increased connectivity but be mindful of the individual work that needs to get done. A learning mindset is crucial here, and workers will likely need to modify some habits. Align with managers on the right way to get quiet time. Having authentic conversations about personal constraints and team norms is the best way to jointly problem-solve and achieve the best outcomes.

To improve performance, leaders must reestablish the underlying practices that drive organizational health and performance, then choose the working model that best fits their culture. Organizations that do so can reap the rewards of productivity, engagement, and employee satisfaction—no matter where people work. Q

Aaron De Smet is a senior partner in McKinsey's New Jersey office; **Brooke Weddle** is a senior partner in the Washington, DC, office, where **Bryan Hancock** is a partner; **Marino Mugayar-Baldocchi** is a research science expert in the Miami office; and **Taylor Lauricella** is an associate partner in the New York office.

The authors wish to thank Crystal Zhu and Yueyang Chen for their contributions to this article.

How an AI-enabled software product development life cycle will fuel innovation

AI has the potential to fundamentally transform the development of software products, increasing the pace of the process and the quality of the final output.

by Martin Harrysson, with Aditi Chawla, Chandra Gnanasambandam, and Rikki Singh

Over the two years since generative AI (gen AI) emerged, much of the enterprise focus on the technology has revolved around its ability to foster increased productivity for software engineers and developers. Yet while such efficiency gains are a significant driver of the $2.6 trillion to $4.4 trillion that McKinsey estimates gen AI could add to the global economy, a growing number of organizations are taking a more expansive view of the technology's full impact on the entire process of creating software products.

By integrating all forms of AI into the end-to-end software product development life cycle (PDLC), companies can empower product managers (PMs), engineers, and their teams to spend more time on higher-value work and less on routine tasks. As part of this broad shift, they can incorporate more robust sources of data and feedback in a new development framework that prioritizes customer-centric solutions. This holistic redesign should ultimately accelerate the process, improve product quality, increase customer adoption and satisfaction, and spur greater innovation (Exhibits 1 and 2). Industry leaders share this perspective. Inbal Shani, chief product officer (CPO) and head of R&D at Twilio, emphasizes the transformative potential of AI: "With the implementation of AI, I believe the most relevant and unique change will be improvements in the quality of products, given the ability to better analyze, synthesize information, and make recommendations."

Reaching that lofty end goal doesn't happen overnight. An AI transformation of the software PDLC involves several changes, each bringing its share of necessary adaptation and potential challenges. Based on our research and interviews with industry leaders, this article examines five individual, critical shifts that AI is poised to bring to the software PDLC, as well as some key implications and impacts this broad redesign will have on various aspects of product organizations, including business model, capabilities, organizational structure, and data governance.

AI's five critical shifts for the software PDLC

As part of a broad overhaul of the product development process, AI is poised to bring five fundamental changes to the software PDLC, which should profoundly affect speed, quality, value, and overall innovation.

1. Significantly faster time to market

Many organizations are already experiencing the time-saving impact of gen AI in software engineering, but gen AI can do the same for the entire product management and development process. Much of this acceleration comes by shortening the journey from the early strategy and vision stages to late-stage product deployment and scaling. AI's ability to automate time-consuming routine tasks such as project management, market analysis, performance testing, and feedback analysis and documentation frees PMs, engineers, and designers to focus on higher-value, more satisfying tasks requiring human creativity and judgment. These range from product vision and strategy setting to concept development and feature prioritization.

This shift not only speeds up the development cycle but also offers unprecedented opportunities for innovation. The time savings and information AI tools provide can allow teams to create multiple iterations of a product, improving its market fit. As part of this acceleration,

organizations should be able to conduct faster market testing and respond more swiftly to user feedback, consumer changes, and shifting dynamics or trends, which should result in better products.

2. Products deliver customer value much sooner

Successful product development depends on realizing the value of market-relevant ideas. While development teams usually start with the right intent, it has typically taken a few releases to listen to and incorporate customer feedback to deliver real value. AI is remaking this process by integrating fragmented data sources of customer feedback and product usage into the development cycle, making it possible to build products in an accelerated manner that are linked to customer value from the outset.

For example, AI can stitch together data from initial customer research during the discovery and viability phases along with telemetry, service ticket data, and support feedback to track impact end to end. AI tools can also integrate real-time customer input, social media sentiment and interactions, and competitive research alongside historical data and market trends. Teams using this approach can gain actionable insights to help create more rigorous and customer-centric product concepts, thus increasing successful launches. Stack Overflow, an online developer community, uses AI to efficiently comb through past and current customer research and feedback and provide insights as teams iterate. "We are entering a new economy where knowledge as a service will power the future," says Prashanth Chandrasekar, the company's CEO. "This new set of business models depends on a community of creators that progressively create new and relevant domain-specific content based on high-quality, validated, and trustworthy data. Our product is always being updated to reflect what customers want and leveraging the powerful synergies between Stack Overflow and its AI

> "With the implementation of AI, the most relevant and unique change will be **improvements in the quality of products.**"
>
> **—Inbal Shani,** Twilio

partners, bringing a new level of productivity to the developer ecosystem through cutting-edge tools backed by an accurate data foundation trusted by millions of developers."

3. More good ideas see the light of day

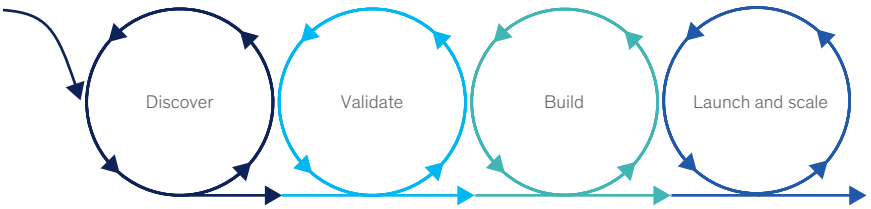
Some of the most essential but time-consuming and costly parts of the traditional software PDLC are identifying (or discovering) market opportunities and testing the viability of ideas for solving problems in a way that will appeal to customers. These two phases have typically had to be separate processes. The traditional prototyping process required so much time and resources—and involved so much risk—that companies had to focus initially on planning and research. AI eliminates that strict dividing line, enabling quick prototyping and automated A/B testing to validate various hypotheses and identify promising ideas. This lays the foundation for rapid iteration and data-driven decision-making.

Using AI for prototyping and testing new product ideas significantly reduces the resources required in the viability stage. As a result, product teams can run many more experiments, raising the odds of promising ideas getting due consideration. Organizations can also use AI to eliminate some of the guesswork. For example, organizations no longer have to take the sometimes unreliable step of stack-ranking ideas before testing their viability. Without data informing this decision-making process, the process has always been susceptible to the undue influence of the loudest voice in the room or the highest-paid person's opinion, known

Exhibit 1

Currently, the software product development life cycle sees fragmented ownership and multiple pain points.

Current software product development life cycle (PDLC)



- Disparate customer data across customer research, product usage, and customer success with lagging time
- Fragmented ownership across product management, product marketing management, engineering, customer success, and marketing

Steps of current software PDLC, by phase

Discover
- Set strategy and vision
- Empathize
- Define
- Ideate

Validate
- Experiment
- Learn
- Prototype
- Iterate
- Measure
- Adjust direction/pivot

Build
- Complete product backlog
- Conduct sprint planning
- Code
- Build
- Release and deploy
- Test
- Iterate
- Perform sprint review

Launch and scale
- Adopt
- Support
- Analyze product usage
- Iterate

Source: Gartner; Lean Startup; McKinsey analysis

as “HiPPO bias.” While it seems unrealistic to think that AI will do away with hierarchy-driven decisions entirely, it does have the potential to reduce the subjectivity of the process.

Twilio’s Shani thinks the impact of AI’s perceived impartiality could be significant. “Having more data points can change business leaders’ strategy and prioritization decisions,” she says. “AI can help analyze data sets and be an unbiased element in the conversation. After strategic decisions are made, AI can then help continuously monitor metrics and evaluate the progress.” In this way, AI accelerates the development cycle and increases the odds that resources will be allocated to the most promising ideas, reducing costs and the chances of failure.

Reddit’s product team exemplifies this approach. Its engineers use AI to help define and prototype innovative features rapidly. “New feature definition, prototyping, and testing are all happening in parallel and faster than ever before,” notes Pali Bhat, the company’s CPO. “Our teams can now dream up an idea one day and have a functional prototype the next. It’s that fast.”

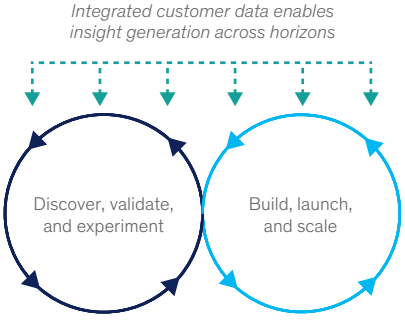
4. The idea of PMs as mini-CEOs finally comes to fruition

The traditional software PDLC has been a less than seamless undertaking. PMs have had to rely on a team of specialized roles to fulfill many essential tasks, with several handoffs taking

Exhibit 2

An AI-native software product development life cycle will enable faster, more customer-centric, and higher-quality innovation.

AI-enabled product development life cycle (PDLC)



AI-enabled PDLC fosters acceleration of the product development timeline, greater innovation, and a higher level of product quality

Key benefits

- Faster time to market (radically compressed PDLC)
- Products deliver customer value much sooner
- More good ideas see the light of day
- The idea of product managers as mini-CEOs finally comes to fruition
- Quality, risk, compliance, and accessibility addressed from the start

Steps of AI-enabled PDLC, by phase

Discover, validate, and experiment

- Set strategy and vision
- Empathize
- Ideate
- Experiment
- Learn

Build, launch, and scale

- Code, build, and test
- Release and deploy
- Customer adoption
- Product usage and analytics

> **New feature definition, prototyping, and testing** are all happening in parallel and faster than ever.
>
> **—Pali Bhat,** Reddit

place before launch. With AI, PMs can "shift right" (in industry parlance), taking on additional duties and oversight in the later stages of the process. They will now have the ability and capacity to have end-to-end oversight from ideation to value realization. They will run discovery and leverage AI tools to rapidly prototype products, create marketing collateral (including product one-pagers and pitch decks), and build technical proofs-of-concept (POCs) with minimal involvement from product marketers, designers, and engineers. PMs can also take on more complex and valuable work, such as long-term strategy planning, creative problem-solving, interviewing key customers and stakeholders, and assessing use cases.

This expansion of capabilities should allow PMs to move ideas from conception to tangible demonstrations more rapidly, with more end-to-end accountability, blurring the lines among product management, product design, and product marketing. In the process, this can also create better PMs. Just as gen AI tools can synthesize customer feedback, they can analyze meeting notes and call transcripts to provide valuable internal feedback, helping employees learn and receive coaching more frequently and efficiently.

As part of this expansion of responsibilities, the PM role may well subsume other separate positions like product marketing manager (PMM), product owner (PO), technical product manager (TPM), and user interface (UI) and user experience (UX) roles. Eventually, with AI tools enhancing PM capabilities in areas traditionally owned by other roles—such as market analysis and messaging or customer-centric research—the gradual convergence of positions may make the most sense. "The PMM and PM role will most likely converge under the same product organization," says Varun Parmar, general manager at Adobe and former CPO and COO of Miro. "As more PMM tasks such as messaging become automated by AI, the PMM function will need to go really deep into positioning and become fully integrated within the product team."

5. Quality, risk, compliance, and accessibility are addressed in parallel with coding and building

Given how much AI is expected to accelerate the entire software PDLC, organizations will want to embed risk, compliance, and accessibility testing earlier to avoid the risk of overlooking potentially costly errors or defects. Instead of being addressed at a relatively late stage, the issues will be top of mind for decision-making teams starting in discovery. This should help ensure product ideas align with requirements while laying the foundation for such safeguards to be an ongoing part of the software PDLC. Product teams, for instance, will need to include assessments and automatically apply coding standards and requirements throughout the development process.

AI makes this "shift left" (in tech vernacular) in the process necessary and can also help enable it. Solutions range from automated code compliance and accessibility checks to threat detection and prevention to vulnerability scanning when developers write code. For example, GitHub recently announced functionality that allows companies to set enterprise-wide security and compliance guidelines across code repositories so that developers' code can be compliant immediately. Additionally, GitHub Copilot is speeding up code reviews by up to seven times, finding and fixing vulnerabilities and stylistic issues.

"The greatest value will occur when we can remove the bottlenecks and ensure our products are compliant and high-quality from the get-go," Reddit's Bhat notes. "We are already doing that with accessibility, where we ensure that it is 'built in' from the start of the PDLC rather than bolting it on after the fact." By analyzing test results, teams can identify patterns and predict potential problem areas, enabling continuous quality enhancements. This early-stage testing for risk, compliance, and accessibility should ultimately enable higher-quality products that experience lower churn.

What this means for organizations

The shifts AI is poised to bring to the software PDLC will have profound implications for how product organizations are structured and operate. While some effects are already becoming apparent, others are less certain as leaders grapple with complex questions about how this new era will evolve.

Business model

As AI brings together disparate data sources, and software companies can link products to customer value much sooner than in the past, customers will increasingly expect a business model in which they pay based on outcomes rather than usage. Until recently, that has practically been unfeasible, with the fragmentation of accountability and data within the traditional software PDLC hindering companies from reliably measuring and clearly demonstrating the value realized from a given product. The data platform connectivity and the growth in the PM's role and responsibilities ushered in by AI should enable companies to link pricing to end-to-end value delivery. Some pioneering organizations are already experimenting with outcome-based pricing for select offerings—for example, marketing lead generation software. While it is still early days, with potential challenges surrounding visibility and control of end-to-end outcomes on the horizon, such a model is likely to become increasingly prevalent as more customers demand that providers make commitments that their products will deliver specific results.

> Knowing how to figure out whether the **content provided by the AI is actually the right answer** is going to be crucial.
>
> **—Thomas Dohmke,** GitHub

Tooling and platforms

To embed AI into the software PDLC, organizations will need to invest in new AI tools beyond coding assistance, including a comprehensive data platform and tools for AI-enhanced product development. However, relying on too many narrowly targeted tools can create a fragmented and suboptimal process. Instead, organizations may want to work toward integrated solutions that govern the entire developer stack. "The proliferation of point solutions is fragmenting the developer experience," Reddit's Bhat argues. "Engineering teams can only effectively use a certain number of tools as part of their core workflow. Integration will become more crucial, and we will see toolchain consolidation over time."

Bringing various development tools together is just the beginning. Industry leaders are considering whether separate product management, design, and development tools will eventually become one integrated solution. Such a fully integrated model would minimize the possibility of complicated handoffs or error-prone transitions along the journey from product road map to designer mockups to working code, enabling real-time cocreation and more informed decision-making. Twilio's Shani says, "Companies should invest more in tools that enhance productivity across roles, connecting the dots between discovery and commercialization."

One of the biggest challenges in the standard software PDLC that Shani highlights is the lack of data connectivity. A robust, AI-enhanced integrated data platform will be crucial for informed product decisions, consolidating diverse data sources from development artifacts to user feedback and market intelligence. An AI assistant analyzing this data can trace a feature's journey, identify correlations, and predict issues based on historical patterns. Only by breaking down data silos in this way can companies gain a holistic view of their product life cycle, enabling more user-centric decision-making.

Talent and organizational structure

The integration of AI into the software PDLC necessitates some significant changes in organi-

zational skill sets. As AI accelerates the timeline and automates certain low- and midlevel tasks, companies may need to rethink their talent mix and apprenticeship model to take advantage of these shifts. With gen AI automating more basic coding, for instance, there may be an increased need for senior and staff (L2 and L3) engineers who can expertly navigate complex architecture and review AI-generated code. Thomas Dohmke, CEO of GitHub, stresses that "knowing how to figure out whether the content provided by the AI is actually the right answer is going to be crucial."

The demand for more advanced skill sets will shift the labor pyramid toward senior engineers, yet how this will affect the mentoring and nurturing of new generations of engineers is still to be determined. After all, maintaining a robust pipeline of senior engineers requires strong onboarding and structured capability building, including giving junior talent early responsibility and providing frequent feedback. One answer may be that people do more of it on their own. Thanks largely to open-source contributions through platforms like GitHub, the paths for learning how to build mission-critical software are expanding and democratizing such that aspiring engineers can now effectively undertake self-apprenticeships.

Other important AI-enabled shifts for product-related technical capabilities include the following:

- Demand for skills solely focused on UI design will decrease, while the criticality of UX researchers skilled in "human in the loop" design will rise. Microsoft's Ritcha Ranjan, vice president of Microsoft Office Copilot, predicts, "On the design side, AI is enabling teams to prototype faster than ever before. However, this shift highlights a growing need for human expertise in spatial reasoning and systems thinking—skills that are essential for creating coherent and delightful products." This is particularly useful to navigate the challenges that adopting these tools will bring, such as bias in AI models and data sets, or user frustration due to the "loss of human touch," as Ranjan puts it.

  Site reliability engineering (SRE) tasks are already becoming automated, with AI taking over system checks, log analysis, and incident triage. This trend should continue under an AI software PDLC, enabling SRE roles to concentrate on higher-value work, such as developing tools for proactive maintenance, predictive anomaly detection, and self-healing systems, enhancing overall system reliability and performance.

- AI will push developers toward full-stack proficiency and require them to become AI-stack developers. With AI tools increasingly handling UI coding and automating routine operations, front-end developers will be expected to gradually transition into full-stack developer roles driving end-to-end innovation. Furthermore, this full-stack talent will be required to understand the tech and business implications of integrating AI into what they are building, such as the cost of AI capabilities. "AI is changing the PDLC by shifting human effort toward areas where we add the most value—those requiring deeper reasoning and problem solving," notes Microsoft's Ranjan. "Traditionally, engineers follow a process: scoping requirements, determining system integration, shaping the solution, writing code, testing, reviewing with peers, and refining the design. Today, AI accelerates code writing and testing. As the technology evolves, it will begin tackling more complex aspects of the process, but advancements will be limited to textural chains of thought to emulate human reasoning. These advancements will continue to shift where engineers focus their time."

- The new PDLC may redefine (or obviate) software development engineer in test (SDET) roles. As AI-enabled tools increasingly handle unit testing, integration testing, and predictive anomaly detection, organizations might consider absorbing testing into broader development responsibilities, including reviewing AI-generated code, devising testing strategies, and ensuring overall software quality.

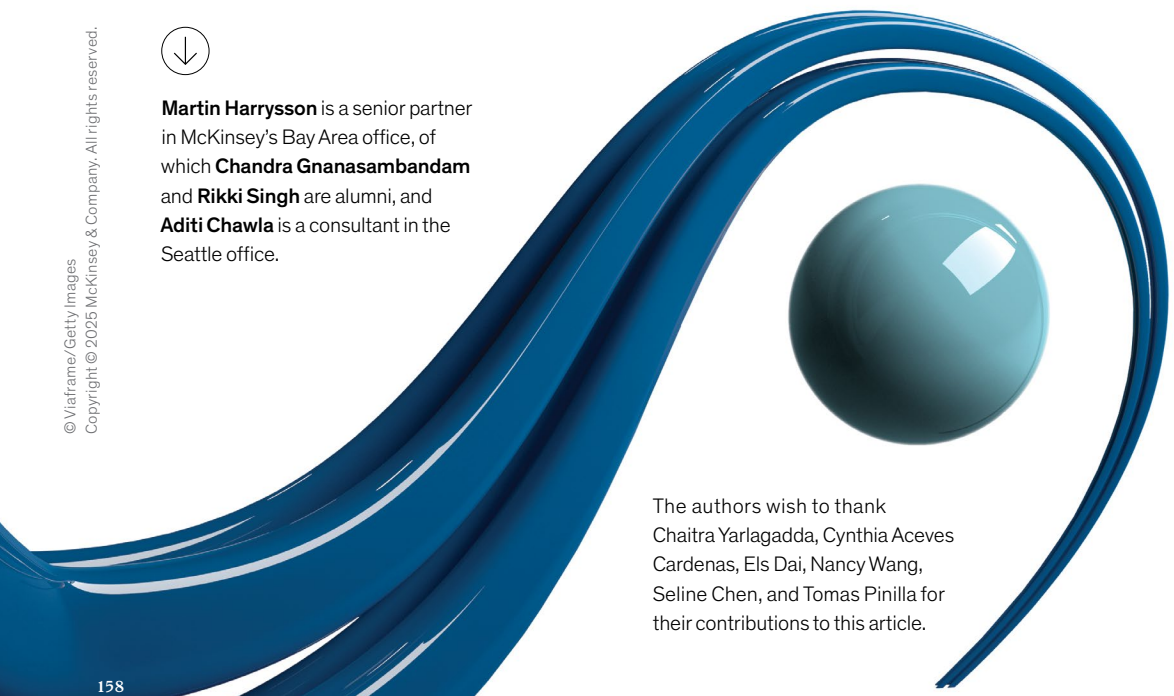
Beginning the AI transformation of the software PDLC

To fully leverage the AI-enabled software PDLC, companies will likely need to transform their approach across multiple dimensions. Organizationally, this involves investing in AI talent and upskilling existing employees, particularly in R&D, to meet shifting labor demands. Strategically, companies should prioritize diverse data sources to inform product decisions and realign business planning around outcome-based, data-driven metrics that fuel a focus on user adoption and continuous product evolution. Operationally, investing in AI-enhanced tools and integrated platforms can streamline development, foster cross-functional collaboration, and accelerate time to market.

However, organizations may realize the benefits of an AI-enabled software PDLC only with a fundamental shift in their ways of working. Just as agile tools didn't enable PMs to create business value faster, and DevOps tools didn't allow engineers to release more frequent updates without adopting new roles and operating models, merely adopting AI tools isn't enough to transform the software PDLC. Companies will want to strongly consider investing in new ways of working—retraining their teams to align with new organizational structures, talent and capabilities, and tooling and platform shifts.

Ultimately, this holistic transformation should result in higher-quality products reaching customers faster, putting their needs at the center of the development process and delivering greater value (to them and software providers) in the AI-enabled future. Q

Martin Harrysson is a senior partner in McKinsey's Bay Area office, of which **Chandra Gnanasambandam** and **Rikki Singh** are alumni, and **Aditi Chawla** is a consultant in the Seattle office.



The authors wish to thank Chaitra Yarlagadda, Cynthia Aceves Cardenas, Els Dai, Nancy Wang, Seline Chen, and Tomas Pinilla for their contributions to this article.

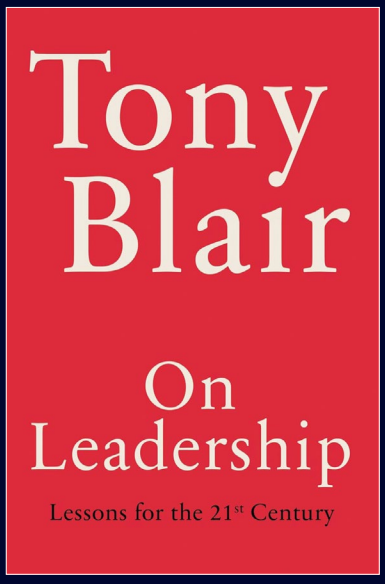
Dive in

Notable content on McKinsey.com to deepen your learning

Illustration by Ameesha Lee

Tony Blair on learning how to govern

The former UK prime minister shares his advice on leadership in modern politics, in conversation with McKinsey Global Publishing's Raju Narisetti.



What is the best way for a new leader or new governing team to bridge private sector expertise with government services delivery?

People often put politics first and policy second. It should be the other way around: Policy should come first, then shaping the politics around it.

Now this really matters during the current technology revolution. If I were back in government today, it would be the central mission of my government to understand, master, and harness this technology revolution, mitigate its risks, and, above all, access its opportunities. That's because government is all about the process.

We should be able to utilize AI, especially as it develops over time and becomes much, much better. As that happens, we get more and more data and these large language models that will allow us to do things like reform our planning system or automate our payment system—doing a whole series of things that will ameliorate the central problem for developed countries today. We're spending more, we're taxing more, and the outcomes are poor.

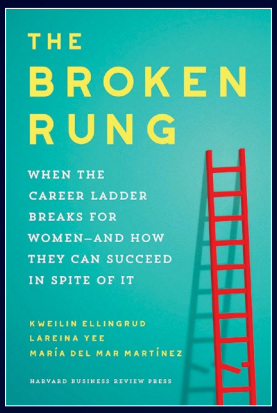
The politician's job is to construct the political narrative that allows you to put that policy—harnessing the technology revolution—at the center of government. It's not to say, "Well, you know, most people are a bit frightened of technology. I'm not sure it really works. OK, I'm going to leave that to one side." If it's a real-world event that's happening, if it is the 21st-century equivalent to the Industrial Revolution, you need to understand it. Then you need to bring a completely different skill set into government. You need to bring in the people who actually understand it and not expect the bureaucracy to do something it will never be capable of doing.

How would you advise leaders to avoid the pitfall of thinking they're the smartest people in the room?

You need to be confident in your own judgment. I say this to any leader in any walk of life: The one thing I've learned, not just in politics, but in life, is that if hubris is walking around, nemesis is a very short distance behind. It's very difficult to balance confidence and self-belief—because you need that to be a leader—with humility and curiosity.

The Broken Rung authors on women at work

McKinsey Senior Partners Kweilin Ellingrud, Lareina Yee, and María del Mar Martínez discuss how women can hurdle career path obstacles, in conversation with McKinsey Global Publishing's Alexandra Mondalek.



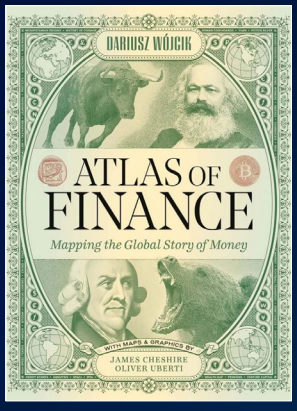
How can women enhance their skill development?

María del Mar Martínez: We put a lot of emphasis on the soft skills, and everybody might not understand the value of those skills. But there's a systematic way of building them. Getting along well with others and having empathy are not the only soft skills. Entrepreneurship is a soft skill. Communication is a soft skill. There are several categories of skills that we give advice on in the book that could be built systematically, including technology skills.

Kweilin Ellingrud: There's both the skill building and the skill signaling. How do you talk about your skills and communicate them to a prospective or current employer? How do you share why you should be promoted?

James Cheshire on mapping the evolution of money

The University College London professor of geographic information and cartography explains his efforts to chart the history of finance, in conversation with McKinsey Global Publishing's Richard Johnson.

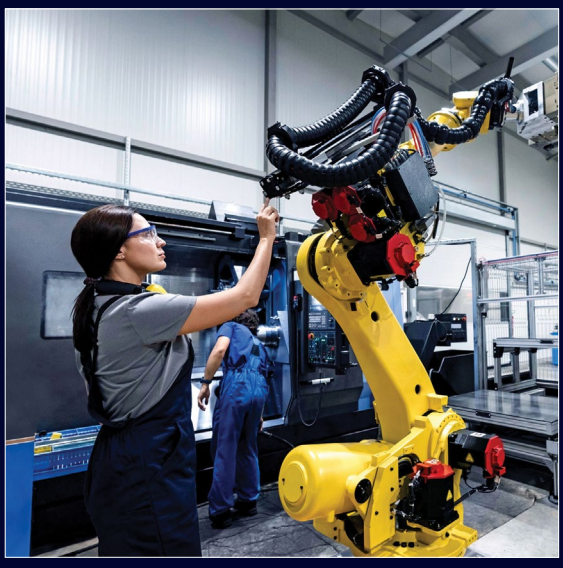


Has working on the book changed your understanding of money and the effects of geography on it?

What really struck me was the importance that geography still has in the world of finance. The internet has shrunk the world. Yet there are still so many different examples where geography matters.

My favorite example is the need to connect trading centers between Chicago and New York as quickly as possible because of the New York Stock Exchange. If you can get information from Chicago more quickly on the futures trading market, which is largely based in Chicago, you'll have an advantage in the trading systems from which you can profit.

I found it amazing when I thought of the significant lengths that companies go to for data connections between these two hubs to get it as fast as possible to secure that advantage. It is a geographical problem. They need to get data as quickly as possible from one point on the Earth's surface to another. Those who win that race get to profit from it.



If you were fascinated by the demographic data shared in this issue's "Outlook: The future of growth in charts," on page 11, be sure to read "Investing in productivity growth." Globally, the number of working-age people per person aged 65 and older is shrinking. Productivity growth could be at risk unless economies find ways to mitigate the effects of aging through reskilling, rethinking retirement policies, and other means.

McKinsey.com/productivitygrowth

If you were inspired by "How top performers use innovation to grow within and beyond the core," on page 70, take a look at "How innovation can accelerate industry momentum." Breakout innovations can lift a whole sector. But it's better to do the innovating, not just ride the wave. The companies that take the biggest risks tend to gain the most significant advantages. Some innovators even create new subindustries that feature no competitors.

McKinsey.com/industrymomentum

If you were edified by “Harnessing revenue growth management for sustainable success,” on page 78, learn more about levers such as pricing and promotions in “What’s on the menu? Revenue growth techniques for restaurants.” Data analysis and integrated planning can help businesses craft offerings that present customers with the right product assortment in the right place at the right price.

McKinsey.com/restaurantrevenue

If you enjoyed “Unlocking the next frontier of personalized marketing,” on page 100, be sure to read “How the world’s best hotels deliver exceptional customer experience.” No one strives to offer more personalized attention than the general manager of a luxury hotel. McKinsey spoke with a dozen, who shared tales about going above and beyond—for instance, by loaning a guest a pair of nice shoes during a sudden fashion emergency.

McKinsey.com/hotelCX

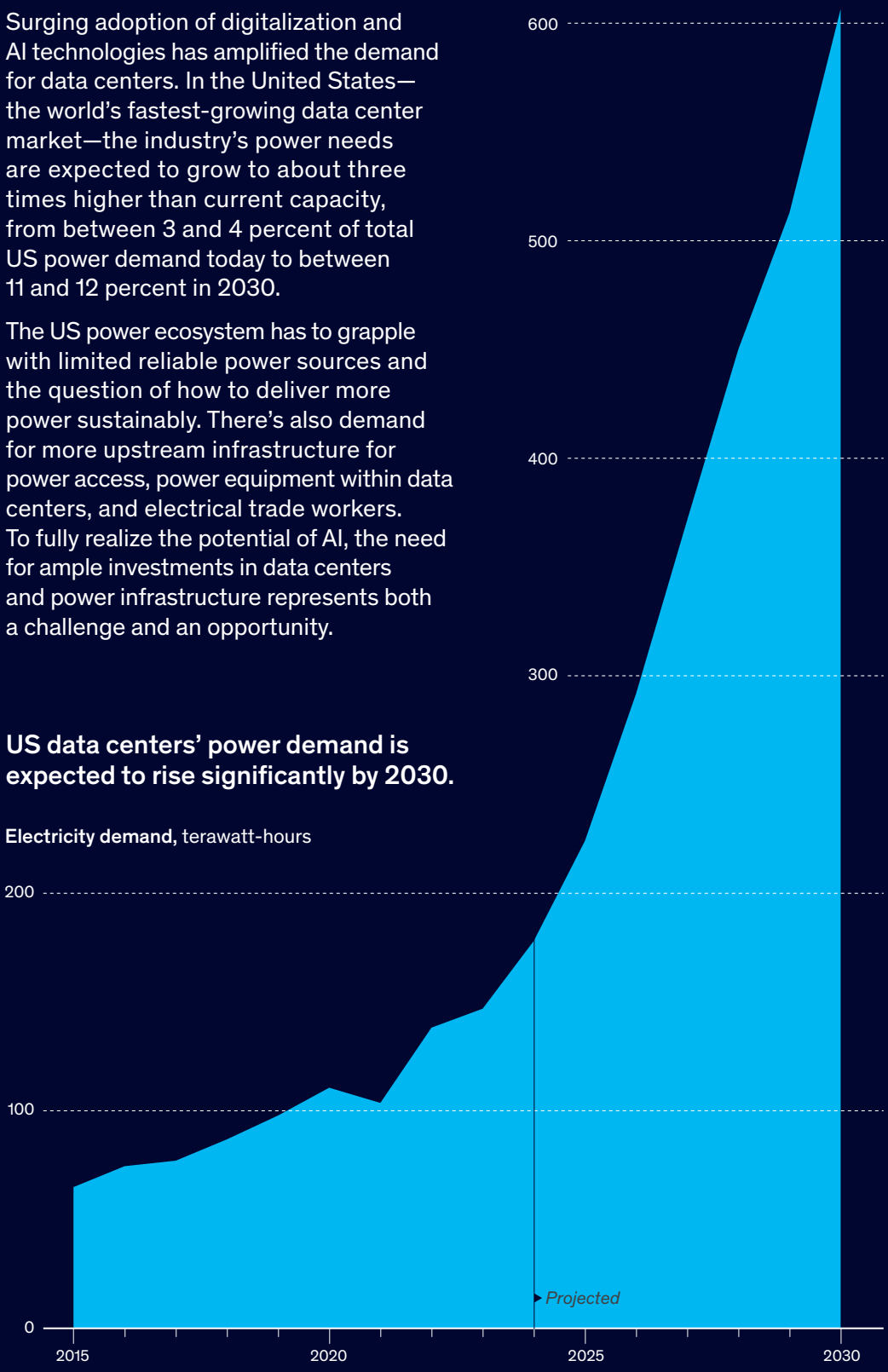
IT FIGURES

The AI future hungers for power

Surging adoption of digitalization and AI technologies has amplified the demand for data centers. In the United States—the world's fastest-growing data center market—the industry's power needs are expected to grow to about three times higher than current capacity, from between 3 and 4 percent of total US power demand today to between 11 and 12 percent in 2030.

The US power ecosystem has to grapple with limited reliable power sources and the question of how to deliver more power sustainably. There's also demand for more upstream infrastructure for power access, power equipment within data centers, and electrical trade workers. To fully realize the potential of AI, the need for ample investments in data centers and power infrastructure represents both a challenge and an opportunity.

US data centers' power demand is expected to rise significantly by 2030.



Source: *Global Energy Perspective 2023*, McKinsey, Oct 18, 2023; McKinsey analysis

Digital offerings:
McKinsey.com

To change your mailing address:
McKinsey clients and other recipients,
McKinsey_Quarterly@McKinsey.com

McKinsey alumni,
Alumni_Relations@McKinsey.com

To provide feedback:
Info@Support.McKinsey.com

To request permission to reprint an article:
Reprints@McKinsey.com

Archival quote artwork:
Andrew B. Myers

Gatefold illustration:
DAQ

McKinsey Global Publishing

McKinsey.com: The place to go for unlimited access to our latest reports, research, articles, videos, blog posts, and interviews with business leaders from around the globe, along with all recent publications from our industry and functional practices.

Connect with us on LinkedIn: Linkedin.com/company/mckinsey

Follow us on X (formerly Twitter): @McKinsey

Watch us on YouTube: Youtube.com/mckinsey

Download the McKinsey Insights app: Available on the App Store and Google Play

Newsletters: McKinsey offers a suite of newsletters, including *Leading Off* (on essentials for leaders and those they lead) and *Only McKinsey Perspectives* (delivering actionable insights on the day's news). Sign up here: McK.co/subscriptions.

Podcasts: *The McKinsey Podcast* features insights from experts on business and management. Recent topics include developing tomorrow's leaders, geopolitical uncertainty, and industries reshaping the global economy. Subscribe via your favorite podcast app or sign up here: McK.co/podcasts.

***McKinsey Live* webinars:** Join McKinsey experts for 30-minute live sessions, with a briefing and Q&A. Recent topics have focused on how women can accelerate career growth, mitigating geopolitical risks, and Davos 2025. Sign up here: McK.co/webinars.

McKinsey Global Surveys: Would you like to share your opinions on today's pressing business, economic, and management trends? To apply for McKinsey's Global Survey Panel—and see the results before everyone else—follow this link: McK.co/globalsurveys.

Scan to download

McKinsey Insights app

for a personalized reading experience

McKinsey.com/quarterly