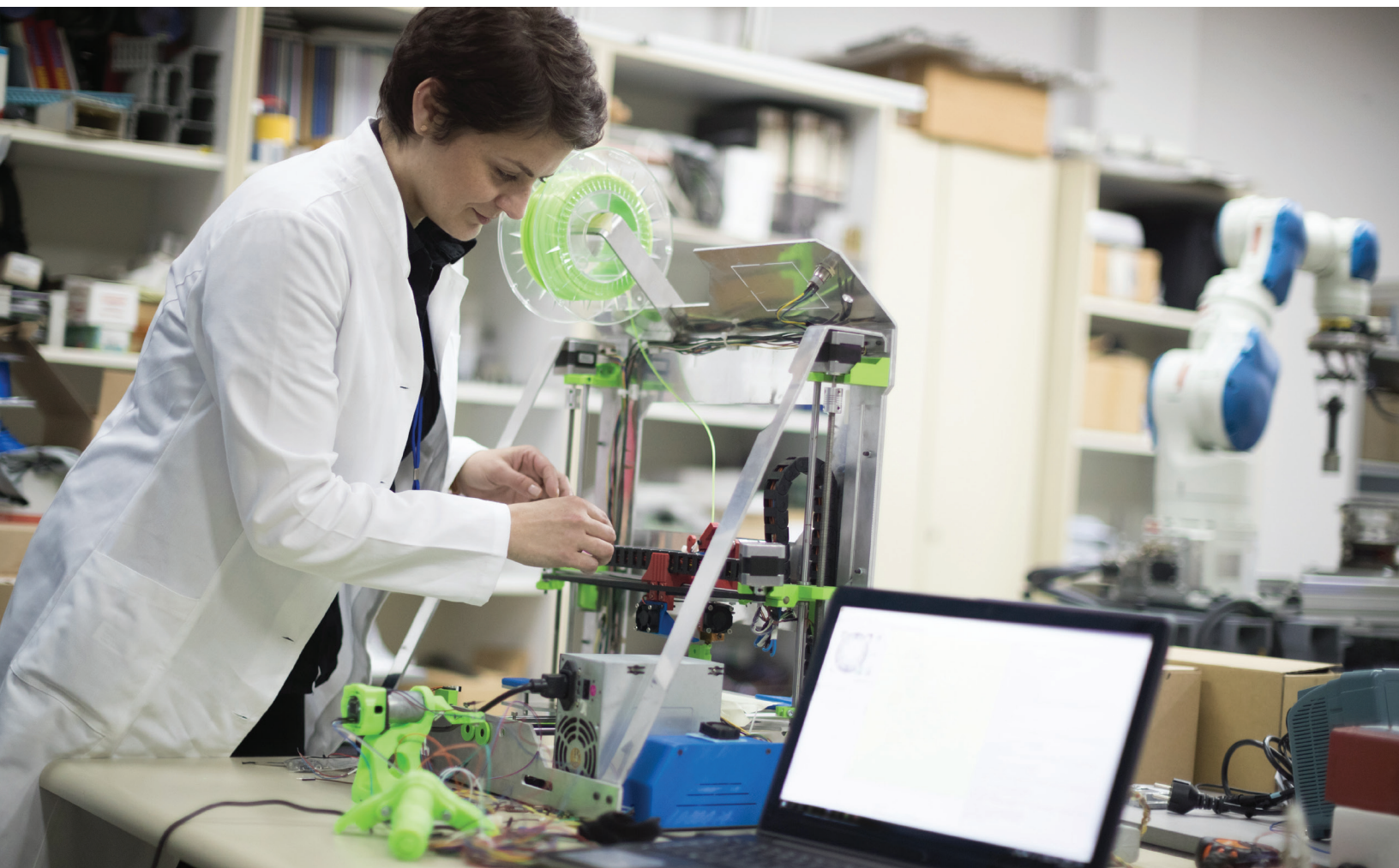


# Developing tomorrow's leaders in life sciences

In a sector undergoing unprecedented change, five muscles will define the successful leaders of the future.

Lucia Darino, Amaka Ogeah, and Ramesh Srinivasan



A new competitive landscape is emerging in life sciences as demographic shifts, mounting cost pressures, advancing digitization, emerging scientific breakthroughs, and powerful new competitors are reshaping the sector. Successful life-science organizations will look very different in the future than they do today. They likely will be smaller; more specialized, automated, digital, and agile in their operations; more sophisticated in their commercial approaches; and more integrated with providers, partners, and consumers.

The leadership skills needed to shape and lead these organizations will also be quite different. Progressive CEOs and chief human-resources

officers (CHROs) are investing in leadership development, focusing on the skills they will need to remake the business,<sup>1</sup> but often these investments are based on old models and assumptions.

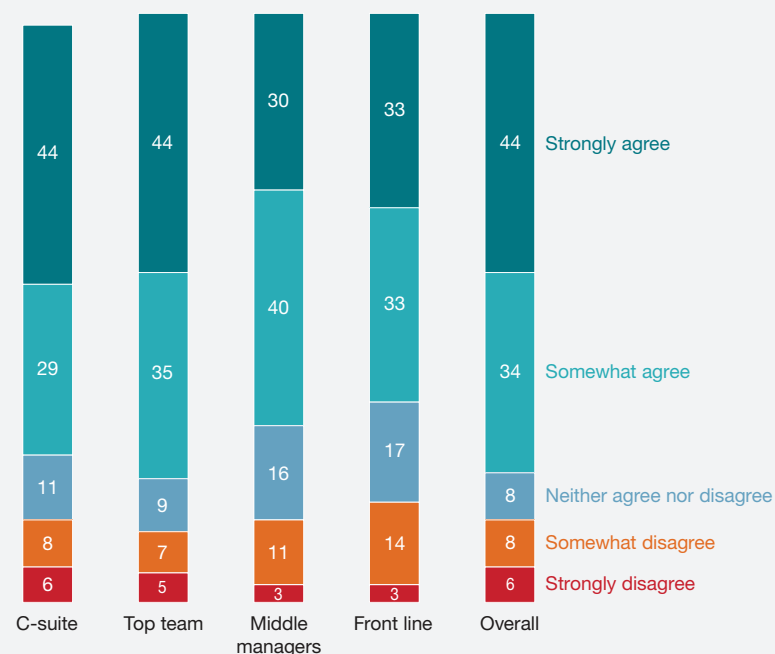
Our recent survey of life-science executives indicates there is uncertainty over which skills are critical (Exhibit 1).

Less than 50 percent of respondents strongly agree that they are clear about the two or three leadership qualities and capabilities in which their top teams should excel; that drops to around 30 percent for managers and frontline staff. As we have seen in other leadership-development research, leadership

## Exhibit 1

Survey respondents are unclear about leadership qualities and capabilities.

"My organization has a clear view of the 2–3 key leadership qualities and capabilities that it wants to be excellent at," %<sup>1</sup>



<sup>1</sup> Respondents answering "Don't know" not shown.

McKinsey&Company | Source: McKinsey survey on leadership development in life sciences, 2017

development is being conducted independently of corporate strategic objectives (Exhibit 2).<sup>2</sup>

And organizations aren't training their leaders fast or frequently enough. Only about 30 percent of surveyed leaders had participated in a leadership-development program within the past year; in smaller companies, only about 30 percent of participants had done so in the past three to five years (Exhibit 3).

As the life-science sector continues to evolve rapidly, the imperative to build the leadership muscle needed to deliver value becomes increasingly urgent. Based on our experience and recent research about the leadership qualities of high-performing teams, we have isolated what we believe to be five critical

leadership muscles and proven approaches that CEOs and CHROs can implement to develop them at scale.

## Distinctive muscles that will define next-generation leaders

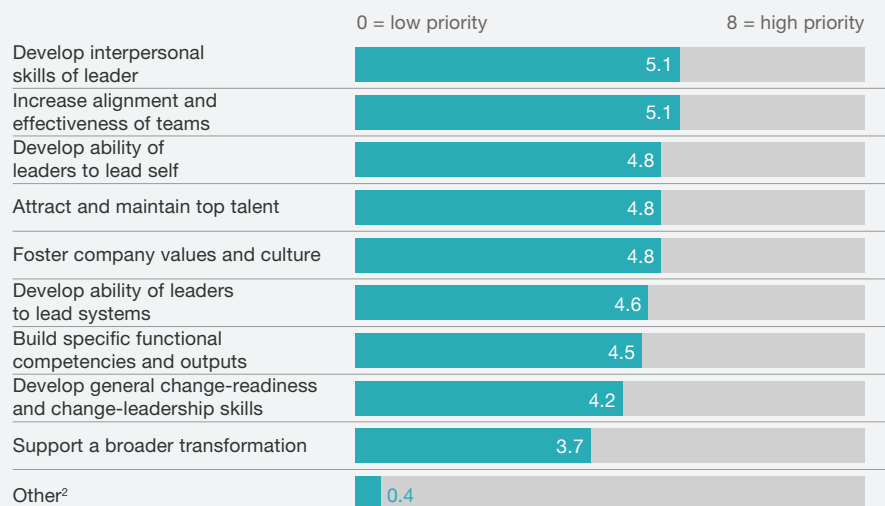
### 1. An adaptive mind-set

The life-science industry has enjoyed decades of success by approaching complex technical challenges with technical solutions (for example, the application of authoritative expertise, disciplined procedures, and best-practice ways of doing things).<sup>3</sup> However, today's world is filled with ambiguous, adaptive challenges where no reliable and well-tested solutions exist (for instance, creating new and novel therapies by leveraging combinatorial technologies) and where applying technical solutions has limited efficacy.

## Exhibit 2

Leadership development is often independent of corporate strategic objectives.

Main objectives of leadership-development interventions, average prioritization ranking according to business leaders<sup>1</sup>



<sup>1</sup>Original scale on survey was reversed.

<sup>2</sup>For all executives who said "other," none directly cited strategic goals of the company.

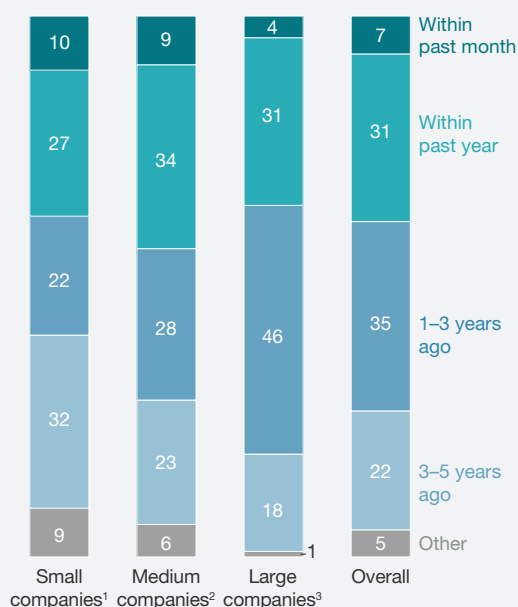
Source: McKinsey survey on leadership development in life sciences, 2017

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### Exhibit 3

Only around a third of leaders participated in a leadership-development program in the past year.

"When was the last time you participated in a leadership-development program?," % of respondents



<sup>1</sup><\$10 million annual revenue.

<sup>2</sup>\$10 million–\$1 billion annual revenue.

<sup>3</sup>>\$1 billion annual revenue.

Source: McKinsey survey on leadership development in life sciences, 2017

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Adaptive challenges call for a different problem-solving capacity and risk tolerance than technical ones. An adaptive mind-set requires being flexible and responsive to the environment. It poses novel questions, seeks diversity of thought, listens for patterns, and communicates cross-functionally to gain greater clarity and promote creative collaboration.

The adaptive mind-set enables leaders to steer their organizations through constant change with a blend of vision, empathy, creativity, and resilience.<sup>4</sup> Adaptive leaders manage the tensions between

seemingly opposed mind-sets and approaches and help their teams embrace paradoxes productively rather than battle them. Some adaptive challenges in life sciences include balancing the rigor and consistency needed to operate an existing pipeline versus embracing the innovation and experimentation involved in working together with partners and providers, the accountability to a function versus collaboration across a matrix, and the risk-management activities needed to produce high-quality R&D versus the risk required to make trials more efficient. There are also the abiding tensions between the deep technical knowledge required to develop a medical product (such as device settings, clinical knowledge, and support during procedures) and the broader, cross-product insight required to produce solutions for different customers.

#### Case example: Developing the next wave of adaptive leaders

With a generation of entrepreneurs retiring and with shifting demands in the business, a global medtech company realized that the next wave of success in Asia would be heavily dependent on developing the next generation of local leaders. The adaptive skills the company needed included shifting from operational to strategic thinking, using design thinking to work in a customer-focused way, creating clearer accountability within and across functions (including dialogues about performance), and maturing as a contributor to global innovation based on experiences in Asia.

To develop its new leadership bench, 150 of the company's top leaders were trained over eight months through face-to-face learning dialogues and digital programs enabling participants to learn at their own pace (while reducing onerous travel requirements). The program linked all participants to the strategic agenda and the key projects driving results. The digital learning allowed the company to measure learning progress continuously; when new skill levels were achieved, they were celebrated.

The Asia-Pacific board and critical country teams modeled leadership development through in-country workshops that combined strategy and leadership development. Most important, the leadership program was anchored in a new talent-management system, with deep dives on the critical 2 percent of positions necessary to achieve strategic goals, analytics to uncover leadership traits, and talent-management processes that fit the culture of the company. While the full transformation will take several years, these were the first solid building blocks toward a renewed talent foundation.

## 2. 3-D savviness

To harness the power of data, design, and digital (the three d's) and to stay on top of the changes, leaders need to build their personal foundational knowledge about what these advanced technologies are and how they create business value. In life sciences, machine learning, and artificial intelligence, technology modernization (for example, cloud and DevOps), digital customer personalization, design thinking, and digital product management are particularly critical as they apply across the full healthcare life cycle. To date, the impact of these technologies has been limited due to a variety of factors, including a lack of capability in many organizations, insufficient hiring from outside the industry, a lack of common understanding, and the challenge of changing legacy processes. Another constraint can be management's sometimes less than fulsome recognition of the importance of these factors.

The burden of improving skill sets falls heaviest on senior leaders. They have to navigate complexity and create value for the organization in an environment where often there are no clear answers. They may be charged with deciding which technologies to invest in for digital supply chains, how to use real-world evidence and analytics to make better decisions in clinical trials, or what business models to adopt to deliver more patient-centric solutions. Or they might consider how to embed design thinking in marketing

campaigns, or how to develop a digital culture in a scientific workforce. They also need to develop the ability to translate between technical and strategic experts to create strategic bridges. The breadth of these decisions would be challenging for anyone, but they are particularly hard for executives who grew up in an era in which these capabilities were not critical factors in their success.

The life-science sector has made some moves in digital yet remains one of the lowest private-sector industries (second to industrials) in regard to digital maturity.<sup>5</sup> A recent roundtable of digital-health leaders in pharma and medtech revealed that most players now have some type of digital center of excellence (CoE), encouraging 60 percent to feel they have sufficient capabilities for experimentation.<sup>6</sup> Largely, these CoEs have been built through targeted recruiting efforts, although some companies have also leveraged M&A to acquire digital capabilities. The challenge for leaders today is to manage the scale-up from pilots to day-to-day operations, and to build the basic 3-D fluency of the full workforce to capture digital opportunities at scale.

### Case example: Upskilling and training for digital success

A life-science company's medtech arm set out to lead in technology, just as for decades it had led in science. It quickly recognized that the future of pharma and medical devices would be predicated on technology and software; without the skills to design digital health solutions, it wouldn't be competitive. Accordingly, the company created an innovation and emerging-technology arm that reported to the chief information officer. The company hired experienced leaders from tech firms (rather than pharma) and charged them with recruiting world-class technology innovators and developers (for critical roles like scrum masters and product owners). It rotated legacy IT employees through the new technology arm and set up an internal academy to help employees transition to



new roles (for example, helping business analysts become product owners). The innovation and emerging-technology team drove “lighthouse initiatives” in partnership with other technology and digital teams, sharing successes and learnings to highlight the transformative results that could be achieved when teams worked across functions. The company has since developed a world-class set of tech partnerships and collaborative initiatives, hired hundreds of innovators, and launched dozens of agile IT teams, and it is well on its way to becoming a leader in healthcare technology.

This company’s EU pharma arm also runs a nine-month, field-and-forum immersive program biannually for its top 25 leaders centered around fieldwork projects addressing the company’s most critical business challenges. Its latest program included forums on how to lead yourself, lead others, and lead system change; day-long visits to 3-D labs; networking with health-tech start-ups to develop partnership opportunities; and professional executive coaching. It concluded with a business-case presentation to the company’s executive-leadership team where decisions on project implementation are made. The program has been running successfully for more than 12 years. Over half of the company’s most important business projects have emerged from or been shaped by this program, and over 35 percent of the current executive-leadership team has participated.

### 3. Partnership skills

Companies are becoming networked ecosystems with patients, partners, clinics, vendors, and health systems, and the ability to make the whole system work is an increasingly important skill. Partnerships, specifically, are a valuable way to build scale and skills quickly inside (and outside) the organization, and that goes beyond R&D. Approximately 40 percent of the executives in our survey believe leadership development will help deepen and broaden partnering activity and create more value.

Developing partnerships calls for the ability to look outside the industry for inspiration, as well as strong business-development capabilities, network management, and agile habits of mind (for instance, fostering value creation through customer-centricity, inclusion, cocreation, and systems thinking). It also requires partnership-management skills, as well as elements of public relations to promote a positive reputation as a partner.

Some life-science companies undertake acquisitions to enter new therapeutic areas, buying early-stage assets to expand their portfolios. They can then optimize those assets’ value by using their strengths in late-stage development and commercialization. Others license technologies and leverage them to develop new assets. Still others form a web of collaborators with specialized data, analytics, and digital capabilities that work on shorter assignments to help build particular solutions. Finally, some leverage partnerships for “coopetition” to enhance outcomes.

Case example: Can you partner with a competitor? Yes.

Partnership skills, an adaptive mind-set, and a broader field of vision came together as one pharma company entered a joint project with a competitor. Commercial leaders created a cross-functional team with business development, finance, new products, commercial strategy, and medical experience and tasked it with creating a partnering strategy to bring a novel treatment for a type of cancer to market. The team initially approached the mission through war-gaming scenarios and case-study reviews. In the end, the team took the longer view on how to create a step-change in therapy and a new standard of care. It assessed where commercialization would have the biggest impact and then which partner to choose—and found that the ideal partner was a direct competitor. This required open minds in both organizations. Both teams of leaders focused on the North Star (an agile must-have) and on the partner opportunities they had evolved (given that

the main opportunity cost is in choosing one partner rather than another). They then developed what was practically (as opposed to what was possibly) useful. This open, pragmatic approach enabled both teams to learn from and teach each other and to share the excitement of their commercial collaboration.

#### 4. Agile ways of working

If the new corporate imperative is adapt or die, agility is the key to staying alive. Agile organizations are like living systems, with networks of autonomous teams making rapid decisions. Leaders need to learn and then apply agile ways of working with their teams to enhance speed, efficiency, ingenuity, and impact in their operating model.<sup>7</sup> The skills required to do this include forming cross-functional teams with specific missions, agile development practices such as scrum and test-and-learn, design thinking, and end-to-end accountability with limited handovers. Leaders need to learn agile business-steering principles and processes, such as target setting, budgeting, and quarterly business reviews. They also need to determine how to shift their role from providing inputs to managing their teams to articulating a compelling vision and expected output to steer their teams—and then get out of the way. Finally, they need to refocus their talent to support an agile operating model (for example, managing talent pools as opposed to individual contributors, adapting performance management for empowered and autonomous teams with no bosses, and designing attractive career paths).

Leaders who apply agile ways of working can have significant impact on the business. This can include achieving accelerated and improved results in research through autonomy, interaction, and focus and developing campaigns on shorter timelines that can be adjusted in marketing. They can also identify unmet needs and then ideate, experiment, and create new possibilities in product development with flexible and transparent planning across the value chain (from suppliers to the market).

Our survey highlighted different views on the feasibility of agility in the life sciences. One executive suggested, “It is not insurmountable for large pharma to become nimble and innovative. But it requires well-trained, visionary executive leadership that can execute innovation in a nimble way, creating a future-minded company .... Without executive talent development, it doesn’t happen, and the cycle continues.”

**Case example: Transforming leadership at speed**  
Seeking to become a company that could better adapt to competitive threats and embrace technology innovations to pivot its business model, a top ten global pharma company’s CEO launched an agile leadership-development program for its top 600 leaders. The company put agile methodologies to work from the start, designing the entire program in six weeks. The immersive experience had a personal component that helped leaders shift from fear-based, reactive mind-sets to purpose-based, creative mind-sets, and an organizational component that trained leaders in agile design and operating practices and the skills and behaviors needed to build and lead agile teams. Rather than starting with an agile operating-model transformation, this company prepared its leaders for agile first, then invited them (without a top-down mandate) to implement it and bring agile leadership mind-sets and organizational practices to their own part of the organization. Many leaders started practicing new behaviors and said they could tell “who has been to the immersion experience and who hasn’t.” Multiple global commercial, R&D, and functional support groups held workshops to bring the principles back to their teams. At least six organizational units launched agile transformation efforts within the program’s first year, and over 1,200 leaders were trained in the first two years.

#### 5. A balanced field of vision

Life-science executives in our survey cited their top business priorities for the next three to five years as “increase revenues, drive innovation, and increase

productivity.” At first glance, growth and efficiency might seem like mutually exclusive goals. As one executive said, to lead a dual agenda, leaders need to “balance strategic business perspectives and tactical initiatives.” This entails combining hard skills (granular understanding of the industry and future value pools, data-driven decision making) with softer skills (a strong bias toward execution, a mind-set that can balance short-term achievement with long-term investment, the conviction required to articulate a clear vision and inspire others to achieve it, and the ability to make tough decisions).

A few leading life-science companies are finding that growth, productivity, and efficiency can go hand in hand; they have well-executed productivity efforts fueling growth initiatives and setting a virtuous cycle in motion with next-generation productivity levers like automation and digital platforms unlocking more cash that can be invested in growth.

#### Case example: Productivity and efficiency with a new mind-set

A specialty pharma company adopted agile principles to transform its R&D operations when its scientists complained they had no time for innovation. Within three months of setting its goals, the company had introduced agile sprints and scrums in each project team. This enabled researchers to investigate a group of molecules, identify the most promising ones, and test and refine them in an iterative manner. Project teams worked together in one large room surrounded by visualization tools that displayed the researchers’ progress toward objectives and milestones. Meanwhile, managers and scientists worked day-to-day with a team of 30 internal agile coaches to develop capabilities for supporting and directing research teams. They also learned how to create habits and rituals to solidify new team norms and behaviors. After 18 months, the company had increased its project capacity by 70 percent without needing to add resources, halved its lead time for

experiments, and transformed the operating model and mind-set of 600 scientists.

#### The road map to a leadership-development journey

Our survey highlighted a strong call to action for CEOs and CHROs of life-science companies for a focused leadership-development strategy and the investment that would enable it. As one executive stated, “Stronger CEO support of culture and talent development [will enable] stronger measurement of the effort and impact [and create] increased expectations [and accountability] for team members to own their development and to put effort into continuous personal improvement.”

In the leadership-development field, we know this is hard and there is no silver bullet.<sup>8</sup> Respondents to our life-science survey echo what we’ve learned in prior research about practices that hold companies back: only around 30 percent of leaders strongly agree that their leadership-development programs meet the company’s leadership-development strategy; 30 to 40 percent of leadership-development efforts are decentralized, limiting transparency into what skills are being built across the organization and what impact they are having; and only about 30 percent of programs link content to projects that stretch participants and require them to apply their learnings in new settings (Exhibit 4).

There are five core principles for effective leadership development:

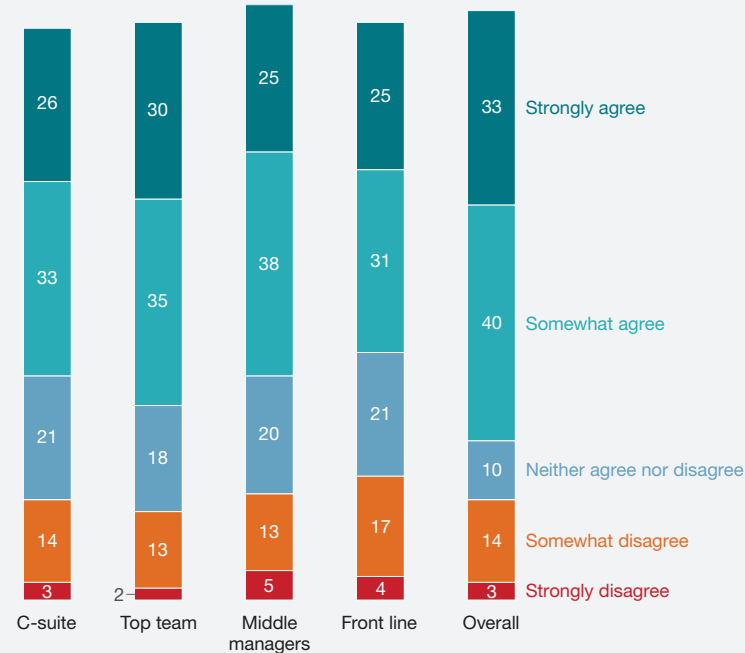
1. **Focus on the critical skills and shifts** that drive disproportionate value, not everything at once.
2. **Capture full value through blended learning journeys** that combine digital content, in-person forums, one-on-one or group coaching, and “stretch” pull-through projects that deliver on business priorities.



#### Exhibit 4

Relatively few programs require participants to apply what they've learned in new settings.

"Leadership-development programs link content to projects (either individual or group) that stretch participants and require them to apply their learnings in new settings over an extended period of time," %<sup>1</sup>



<sup>1</sup> Respondents answering "Don't know" not shown.

McKinsey&Company | Source: McKinsey survey on leadership development in life sciences, 2017

3. *Design programs that leverage the science of adult learning and behavior change.* Create immersive experiences with virtual reality, gamification, and social learning; customize content and delivery to the learner.
4. *Tie learning objectives and outcomes to formal talent mechanisms* to embed and sustain behavioral and mind-set changes.
5. *Measure business and organization-wide impacts* resulting from leadership-development

efforts and then build on them, as one would with any major business initiative.

Companies need to execute against these timeless basics with a modern approach; gone are the days of thinking it's sufficient to take a distance-learning course or spend a week at an educational retreat.

In some ways, designing leadership programs for top executives and their teams is easy; it's the next layer of leaders and employees that is critical, and many

life-science companies aren't designing adequate interventions for managers and frontline workers (Exhibit 5).

#### Case example: Changing culture through an immersive leadership program

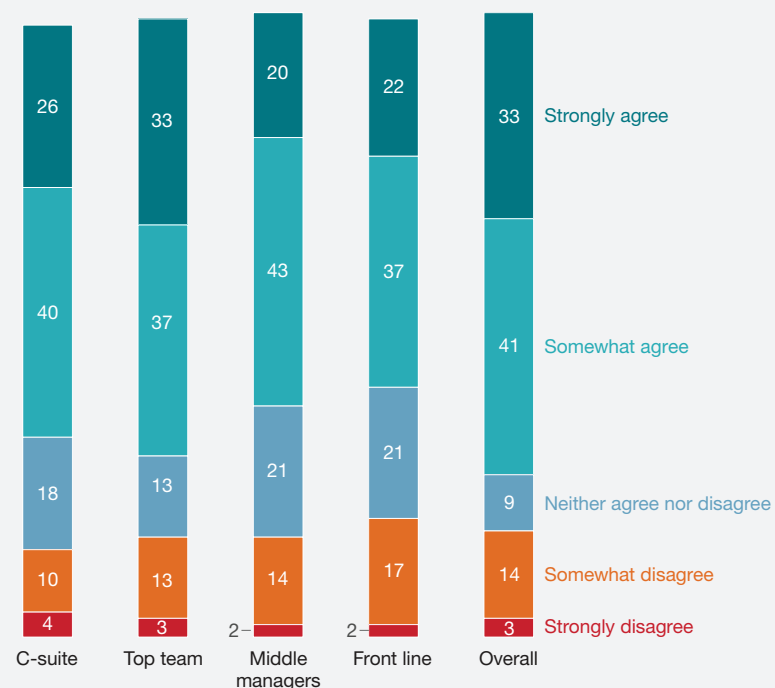
The CEO of a medical-device company used the acquisition of a faster and more innovative company as a catalyst to modernize the combined business's culture and operating model. The CEO and leadership team redefined the company's values through a company-wide conversation on how to make the organization more customer-centric. Next, the team rewrote the company's leadership standards

to reflect these new values. Finally, it developed a values-based leadership-development program through a leadership university. Starting with the top team, then the top 200, then the next 1,250, the CEO championed a year-long blended learning program designed to build capabilities to unlock value for the company. Access to learning and content was tailored for each cohort. Global minibords acted as peer coaches, as leaders incorporated new practices into the business and enabling functions. The enterprise-level impact was measured on organizational enablers (purpose and values, leadership standards, culture, and execution) and financial metrics, and the impact on leadership development was measured through

**Exhibit 5**

Designing effective interventions for managers and frontline workers is also important in leadership programs.

"My organization ensures leadership-development interventions cover the whole organization and designs programs in the context of the broader leadership-development strategy," %<sup>1</sup>



<sup>1</sup> Respondents answering "Don't know" not shown.

McKinsey & Company | Source: McKinsey survey on leadership development in life sciences, 2017

personal action plans and growth. This effort has become the foundation of the new company's culture, and it continues to use the program to onboard leaders into new roles and serve as a foundation for integrating the leadership team following another recent acquisition.



As life sciences move into a new era, companies understand that the future holds the promise of bringing more value than ever to patients and society at large. Delivering on this promise will depend largely on whether they can unlock the potential of their future leaders, and that requires commitment and discipline starting at the top. ■

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<sup>1</sup> Alan Murray, "What CEOs fear most right now," *Fortune*, January 31, 2017, fortune.com.

<sup>2</sup> Michael Bazigos, Chris Gagnon, and Bill Schaninger, "Leadership in context," *McKinsey Quarterly*, January 2016, McKinsey.com.

<sup>3</sup> Alexander Grashow, Ronald Heifetz, and Marty Linsky, *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*, Boston, MA: Harvard Business Press, 2009.

<sup>4</sup> Ibid.

<sup>5</sup> McKinsey's Digital Quotient, which includes more than 300 companies across industries.

<sup>6</sup> McKinsey Digital Health Roundtable Survey, June 2018.

<sup>7</sup> Sam Bourton, Johanne Lavoie, and Tiffany Vogel, "Leading with inner agility," *McKinsey Quarterly*, March 2018, McKinsey.com.

<sup>8</sup> Claudio Feser, Nicolai Nielsen, and Michael Rennie, "What's missing in leadership development?," *McKinsey Quarterly*, August 2017, McKinsey.com.

**Lucia Darino** is a senior expert in McKinsey's New York office, where **Amaka Ogeah** is a consultant and **Ramesh Srinivasan** is a senior partner.

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