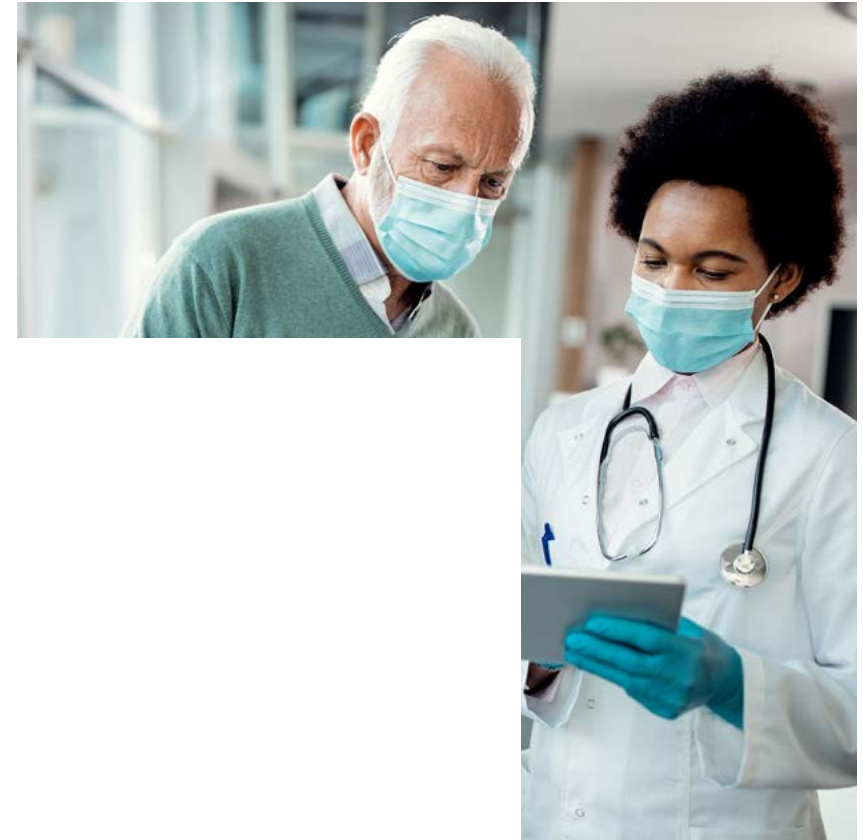


Life sciences

As the industry continues to navigate beyond the pandemic, life sciences executives are approaching their digital journeys with the customer in mind. They recognize the need to increase results from digital strategies, harness data to improve the customer experience and protect data through cybersecurity and cyberprivacy.

Read on for more insights into life sciences executives' top trends and priorities, along with recommendations for key actions they can take now to become more insights-led, customer-centric organizations.



Customers drive priorities and investments

With the shift to digital engagement due to the pandemic, life sciences executives recognize more keenly the powerful role customers play in driving change. Year-over-year, more executives say customers (the ecosystem of external customers) represent the greatest external pressure on their approach to digitization. Additionally, the top trend to become digital for customers is complemented by the top business priority to optimize operations and the top IT priority to digitize across the value chain to continue to break down silos and improve collaboration.

These insights are reinforced by a shift in budgets toward new applications and infrastructure, away from operations and maintenance, and continued plans for innovation investment in data analytics. Increasingly, life sciences organizations require a better understanding of their customer base as younger, “digital natives” bring greater expectations for their digital experience. Executives also must prepare to meet the digital expectations of employees as the future of work evolves into a fully-digitized hybrid model.

We see a significant rise in the number of executives who cite having an enterprise digitization strategy, and in those experiencing expected results from these strategies. However, as digitization increases, so does the cyber-attack surface. Cybersecurity resurfaces as a top concern for business leaders (it has remained a top concern for IT leaders), driven by events such as attempts to steal clinical data during COVID-19 vaccine development, evolving regulatory requirements around data privacy and integrity, and greater risks to be mitigated as more information traverses digital and cloud platforms.

Each year, we meet with client executives from around the world to get their views on the trends affecting their organizations and industries. Through the CGI Voice of Our Clients, we analyze these findings to provide actionable insights by industry to benchmark best practices, including the attributes of digital leaders. This report summarizes the trends and priorities from our discussions with 31 life sciences industry executives, along with recommendations for how to become insights-led, customer-centric organizations.

About the insights

In 2021, we met with 1,695 business and IT executives. This summary shares sample insights from 31 life sciences client executives representing pharmaceutical, biotechnology and medical device companies.

Interview demographics

45% Business leaders	55% IT leaders
39% C-level	61% Ops-level

Over the past 6 years, through the CGI Voice of Our Clients program, we've held 7,470 client discussions, collecting 1 million data points across the industries and geographies we serve. Our anonymized benchmarking data reflects insights from 5,500 client organizations located in countries representing 68% of the world's IT spend across all economic sectors.

Top trends and priorities

Top trends and priorities for life sciences executives showed some movement from previous years. While becoming digital remained the top trend, a focus on cyberprivacy and cybersecurity rose to become the second top trend. Digitizing and automating processes across the value chain rose significantly to become the top IT priority.

Top trends

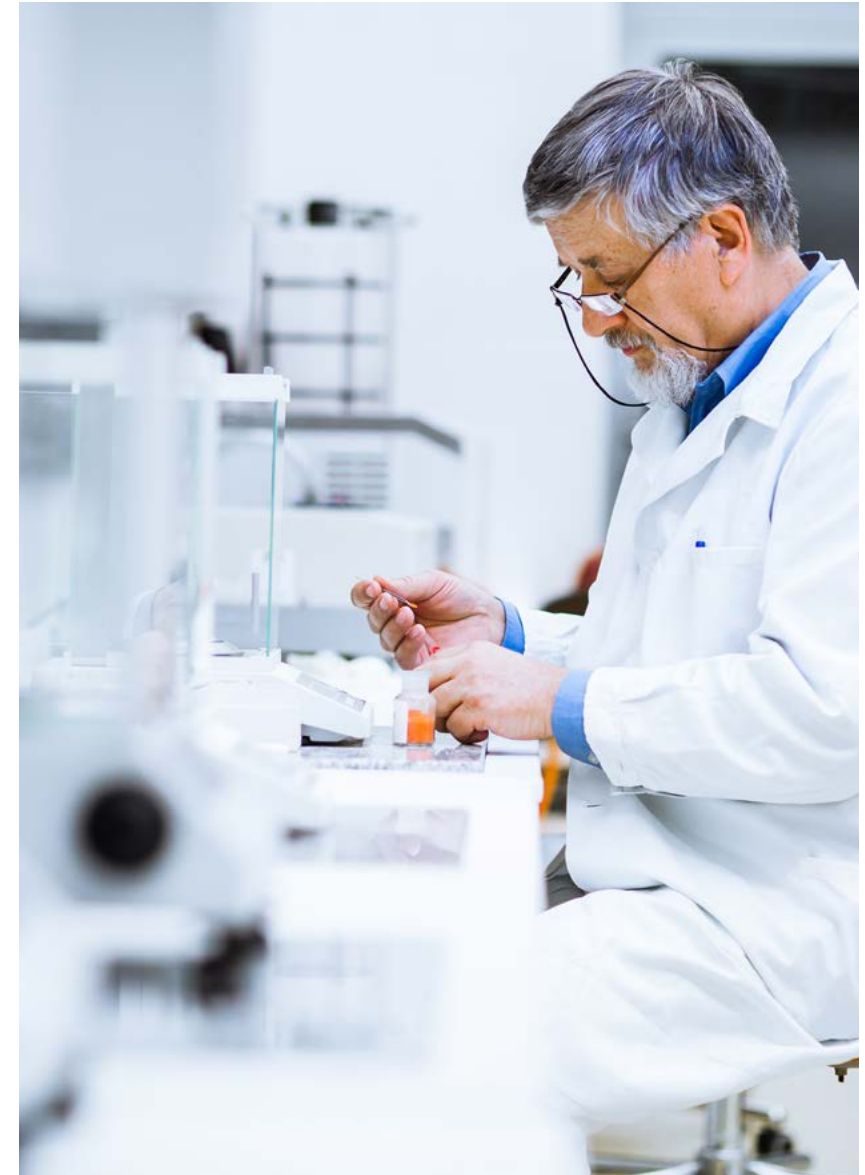
- 1 Becoming digital organizations to meet customer expectations
- 2 Protecting data and equipment through cyberprivacy and cybersecurity
- 3 Assuring regulatory compliance

Top business priorities

- 1 Optimize today's operations
- 2 Harness the power of data analytics to improve business and patient outcomes and reduce costs
- 3 Remain compliant with healthcare reform

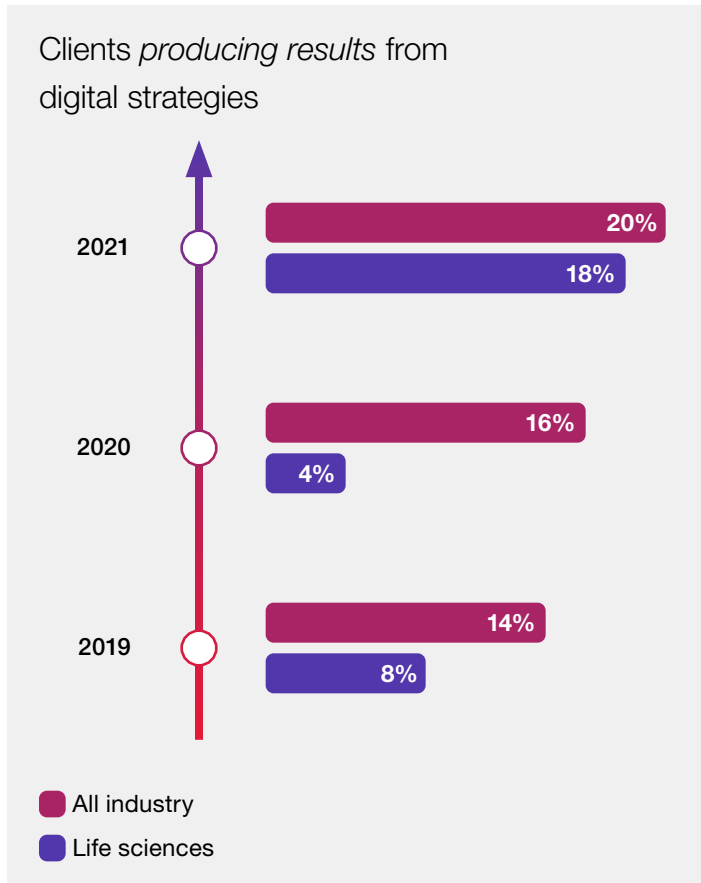
Top IT priorities

- 1 Digitize and automate business processes across and beyond the value chain
- 2 Drive IT modernization and new IT delivery models
- 3 Protect data and assets through cyberprivacy and cybersecurity



Top insights for life sciences

Our 2021 insights from life sciences executives reveal significant progress in producing expected results from digital strategies, as well as a sharp rise in those saying their organizations have robust digital strategies.



1 More digital strategies are producing results.

18% of life sciences executives say their organizations are producing expected results from digital strategies, compared to just 4% for 2020.

2 Enterprise-wide digital strategies rise significantly.

73% say their organizations have a digital strategy for the entire enterprise — a marked increase compared to 30% in 2020.

3 External pressure on digitization strategy from consumers rises to the top factor.

This year, 46% of life sciences executives cite external pressure from consumers on their approach to digitization, compared to 36% in 2020.

4 IT budgets shift from operations toward new applications and infrastructure.

32% are decreasing operations and maintenance budgets year-over-year, while 32% are increasing applications and infrastructure budgets. 41% say they are increasing IT spend overall, compared to 30% in 2020.

Top insights for life sciences

5 Majority plan data analytics innovation investment.

87% of executives say their organizations plan to invest in analytics in the next 3 years to support precision medicine and safer care.

6 Cybersecurity and privacy strengthen as a trend.

Protecting data and equipment through cyberprivacy and cybersecurity rises to be the second top trend (up from fourth last year) and continues as a top business and IT priority.

7 Robotic process automation (RPA) implementations grow.

The number of executives reporting they are “in progress” with RPA implementations rose 66% year-over-year.

8 Application modernization and cloud migration plans exceed all-industry average.

In the next 2 years, 79% plan to modernize more than 20% of their applications and 72% plan to migrate more than 20% of applications to the cloud. Both are well ahead of the averages across industries (63% and 55%, respectively).

9 Focus sharpens on digitizing and automating business processes.

The digitization and automation of business processes across and beyond the value chain rises steadily as an IT priority, from fourth in 2019, to third in 2020 to first this year.

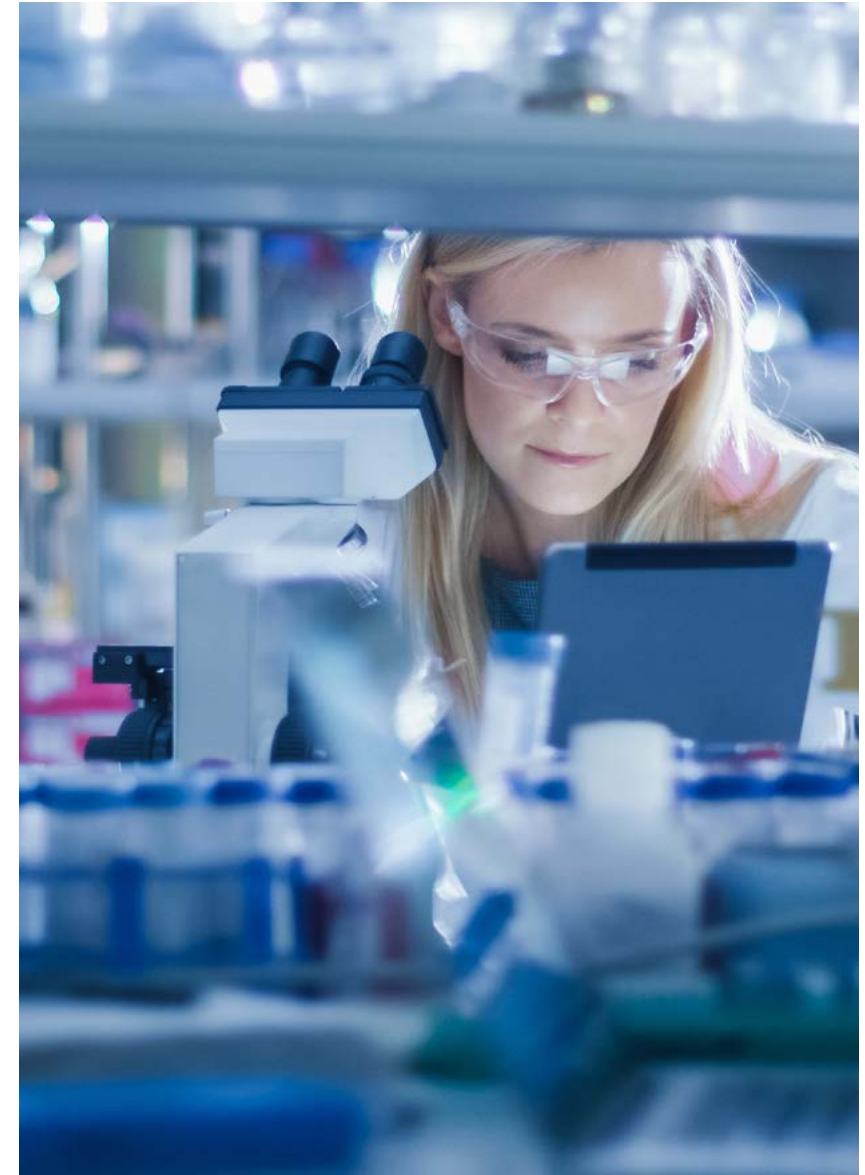


Digital leaders

Among life sciences executives, 18% report they are producing expected results from digitization strategies, closing in on the all-industry average of 20%. The following table compares responses to questions across industries between digital leaders (those 20% producing expected results from digital strategies) and those still building or launching strategies. While life sciences digital leaders are growing in number, sector-specific analysis requires a larger cohort.

Common attributes of digital leaders	Executives producing results from digital strategies	Executives building or launching digital strategies
Are better at introducing applicable innovation	39%	26%
Are better at aligning IT and business priorities	60%	43%
Modernize more of their applications	37%	26%
Migrate more solutions to the cloud	23%	15%
More often run a secure IT environment	69%	59%

* 8–10 on scale of 1–10, where 10 is high



4 recommendations for achieving your top priorities

- 1 Align on data-driven patient outcomes.** Executives feel increased pressure from customers to evolve their business models. Such models will be stronger and better serve the patient and customer when data-driven. Enterprise digital and data strategies increase alignment among departments and enable more informed decisions for investing in innovation and applying the right tools to the right strategy. Health authorities increasingly desire to handle direct data from organizations they oversee. They are evolving to require these inputs at greater speed to allow for more insightful, decisive and potentially faster analysis and decisions on the approval of life-protecting and life-saving products for patients. It is critical for both business and IT functions to continue to align on and accelerate their digitization and patient focus. The closer the alignment, the greater the progress on outcomes.



4 recommendations for achieving your top priorities

2

Accelerate digitization through modernization and data management.

Data is critical to every aspect of digital transformation, business model evolution, customer segmentation, and delivering patient outcomes. To realize the full value of advanced technologies, source data must be well governed, consistently and richly defined, mastered, and integrated across the enterprise. Target business processes also must be well understood and harmonized. This requires effective collaboration across business and IT and across sites, regions, operating units, affiliates and third parties. Benefits will extend beyond business insights and cost reductions. The same work to democratize data and improve its quality and visibility will contribute to streamlined discovery, faster regulatory reporting, improved investigations increased speed to market and more.

Cases in point:

Maximizing contract value and driving profitability.

A top-tier global pharmaceutical company sought to maximize organizational effectiveness and create a more sustainable foundation to optimize insight and decision making in support of future pricing and contracting trends. CGI's contract and pricing experts helped drive positive change using a data governance framework, streamlined business processes, and enhanced analytics.

Nexelis gains competitive advantage through digitization of business and IT workflows.

Following the successful launch of a managed security services platform, CGI developed a three-year IT strategy to support Nexelis' rapid growth. This IT transformation roadmap includes the delivery of full managed services for the company's core IT infrastructure and a portfolio of enterprise applications. Nexelis' first transformation priorities are the upgrade and international rollout of Infrastructure Managed Services (IMS) and a Laboratory Information Management System (LIMS).

[+ Read more](#)

4 recommendations for achieving your top priorities

3

Revolutionize customer engagement. Patient and physician engagement are undergoing upheaval at multiple points in the value chain, with the areas of highest impact in Clinical Operations and Commercial Operations.

Clinical operations. COVID-19 made the perfect case for the importance of decentralized or site-less trials powered by technology. The lessons learned are invaluable and should become the gold standard going forward. Among the many benefits include lower overhead burden, increased geographical options for patient enrollment, real-time data visualization and sharing, and the facilitation of global discourse surrounding real-time data. The adoption, adherence, and timely training of new technologies for all users will be critical to reaping these benefits.

Pharma strives for value innovation at every step of the patient journey. This means being able to make predictions and decisions, especially with the ongoing experimentation of hybrid medical and sales engagement models. Harnessing multiple data points, applying AI to help predictions, and building cohesive omnichannel platforms to understand customer behavior are some of the digital assets to realize meaningful customer engagement across the value chain.

Cases in point:

Gamifying clinical lab training with augmented reality. A large laboratory system sought to use augmented reality (AR) to transform its training program. Using human-centered design, we delivered a proof-of-concept to replace paper-centric training with an engaging AR game. Lab trainees now practice handling and classifying samples virtually, with better engagement and information retention.

Accelerating business value through intelligent automation.

A large pharma company made significant investments across its business divisions to automate both IT and business processes. They needed a partner to provide a flexible model that included automation, agility and design. Our intelligent automation factory solution delivered over 10 production bots and a flexible model to accelerate business value.

Increasing data processing efficiency with RPA. A global biotechnology company, serving plasma-derived therapy patients in more than 60 countries, was burdened with manual processing of email, account requests and system reports. With requests growing exponentially, our experts helped deploy robotic process automation (RPA) bots to automate request and report processing, making data processing more efficient and timelier.

4 recommendations for achieving your top priorities

4

Embed cybersecurity and data privacy. While the level of concern about protecting assets and data lessened in impact as a business priority in previous years, recent attacks and breaches remind executives that constant vigilance is needed. The more the industry digitizes and democratizes data, the greater the attack surface. Life sciences data is particularly sensitive (whether about patients, doctors or intellectual property). A secure IT environment is essential for trust in the system. Privacy and cybersecurity are fundamental to digital leaders in life sciences. This is expected by the patient and demanded by law and regulation. While the individual is the weakest link and doubling down on training is an appropriate high priority, a holistic view of continuous systems protection, detection and mitigation is essential and complementary.



About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 78,000 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

For a complete set of the CGI Voice of Our Clients industry insights, and to consult with one of our experts, please visit cgi.com/voice-of-our-clients or contact us at info@cgi.com.

