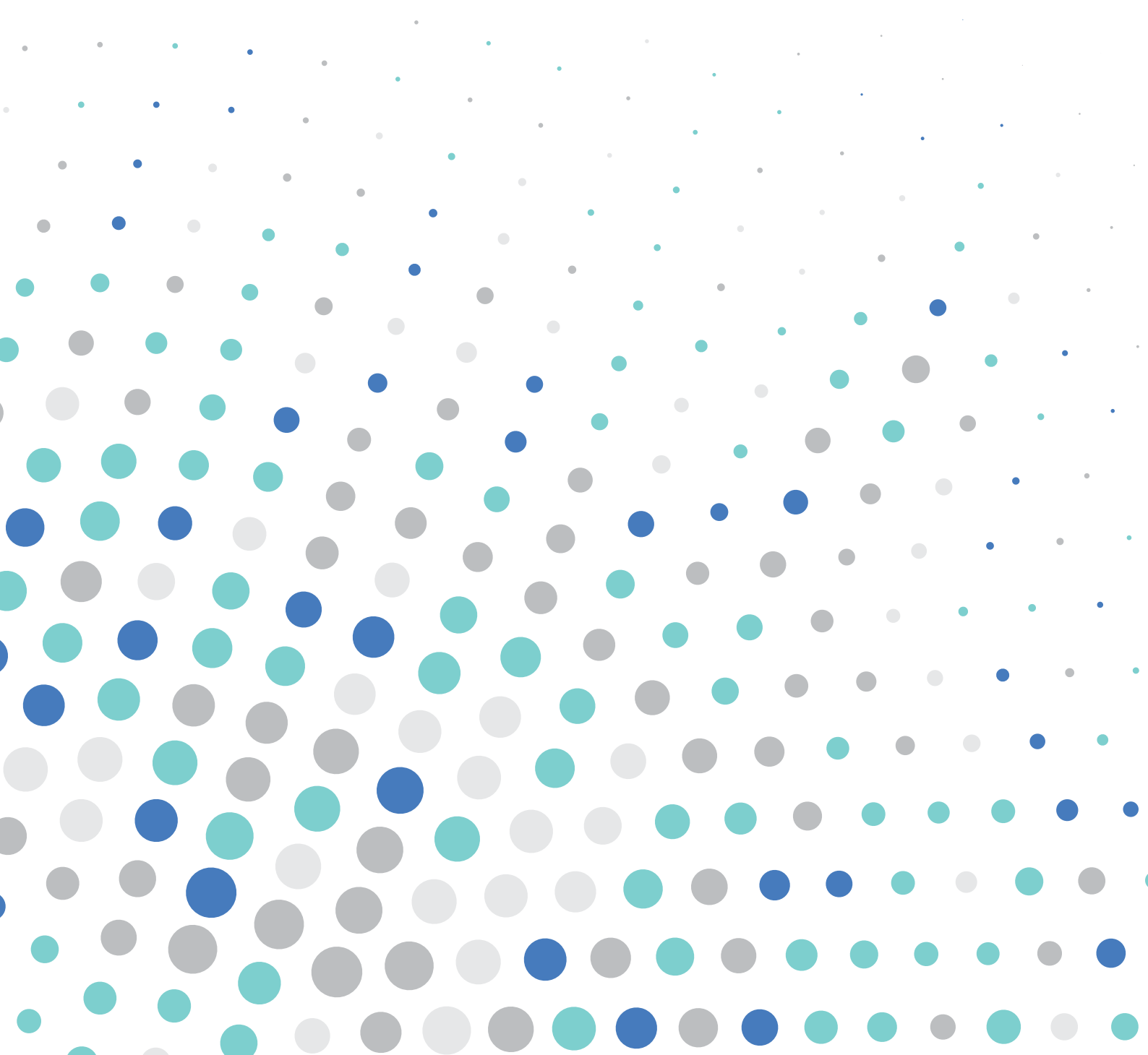


The speed of digital disruption: Sustaining transformation in health care and life sciences

An expert study investigating the challenges, successes and hopeful future state of the health care and life sciences industry



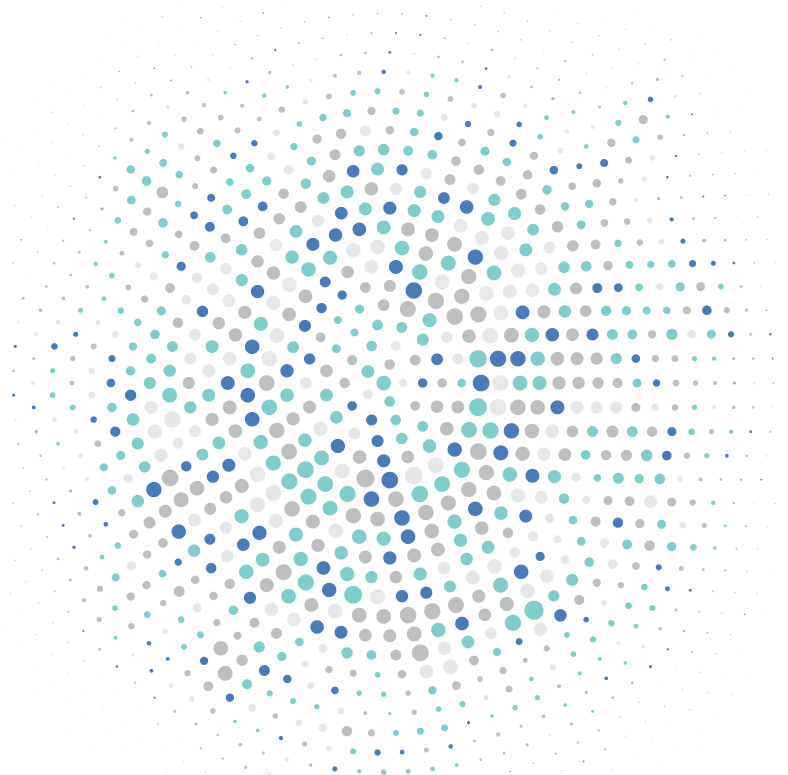
Executive summary

All around the world, organizations have realized a shift in ways of working through the pandemic. Companies are focusing more and more on being agile, adapting quickly and ensuring their value no matter the state of change. And in health care and life sciences, this shift is especially prevalent.

To investigate both the challenges and successes that health care and life sciences organizations have realized through recent disruptions, SAS conducted a series of semi-structured interviews between analytics experts within the organization and their counterparts at small and large external consultancies. As leaders with insight into multiple organizations across varying projects, industry consultants provide a unique viewpoint on the disruption and digital transformation health care and life science organizations are facing.

This report focuses on the findings from the 26 companies operating in the health and life sciences sector. Of these, 14 were from the Americas, 10 from Europe, the Middle East and Africa, and two from the Asia Pacific region.

From the interviews, it's clear that one theme stands out: COVID-19 has been a catalyst for digital transformation in health care and life sciences. But a pandemic isn't the only agent of disruption, and the ability to continue to transform and sustain long-term change is crucial to the future of the industry. In this expert study, we explore the challenges, successes and innovative outlook on the horizon for health and life sciences.



How the pandemic has accelerated digital transformation in health care and life sciences

It goes without saying: The pandemic has shifted how companies operate in nearly every sector. And in many cases, the changes that have occurred were already on the table before the pandemic. Flexible work, adaptive and agile technologies, and ideas of decentralization were discussed within health and life sciences for decades. However, with the massive disruption of the pandemic, those discussions became action, in many cases, overnight.

The progress that's been made thus far – as we've seen in areas such as telehealth or decentralized trials – continues to accelerate. There's a growing understanding that rapid digital transformation could push that progress even further to yield stronger outcomes and better results across the entire health care and life sciences industry.

The consultants who were interviewed for this expert study described a host of positive capabilities supporting digital transformation. At the same time, they provided a view into the challenges that organizations have faced, both leading up to the disruption of the pandemic and throughout the course of the transformation. And they also provided a unique view into the future of the industry within the realm of digital transformation and future disruption.

Understanding the top challenges of disruption

In both large and small consultancies, interviewees described a few key points that are seen as challenges when it comes to digital transformation. While the disruption and change was necessary, often the right tools, systems and processes weren't in place to manage through the disruption. The top factors that contributed to barriers to transformation across health care and life sciences organizations included:

Siloed data and organizations: The technology and processes needed to operate efficiently were not cross-functional, holistic or, in some cases, available.

Low digital maturity: Many of the key tools and systems needed to help mature an organization toward stronger digital platforms did not exist.

Future-state vision: Decision makers and leaders were often not thinking disruptively enough about the potential for transformation.



Addressing barriers, remaining compliant and seeing the wins

The digital transformation has triggered discussions on perceived benefits and trust, which makes sense in the worlds of health care, life sciences and digital technologies. When we combine those three worlds, the need for compliance, regulations, data integrity and quality assurance is astounding – and for all the right reasons. The lack of trust in digital tools and algorithms is a challenge that needs to be managed closely. At the same time, many benefits of a digital-first approach were identified by interviewees:

Improving trust in technology: Of course, it all starts with the tools and technology. By instilling proper health and life sciences data governance and regulation parameters, the industry will see an increased trust in the technology that is being used for customers. In an increasingly patient-centric age, combined with the uptick of consumerism demands and expectations, the opportunity to drive trust and deliver tools is immeasurable.

Using artificial intelligence (AI): Using AI as a strategic approach, rather than simply to enhance products or features, provides a strong opportunity to deliver high-quality care at a faster speed and develop decision support for treatment pathways underpinned by stronger data.

Scalability through AI: If an organization can deliver AI at scale, and within proper data governance parameters, teams can solve more complex problems that positively affect both their organization and the broader industry, including time to market.

Optimizing solutions with multidisciplinary teams: By breaking down silos and working more collaboratively with digital tools and technologies, teams can partner faster to deliver stronger outcomes for patients, payers, providers and drug development companies.

“The real promise of AI is unlocking that 97% of the data that goes underutilized. AI technology is a tool. It is not an answer, but it's a tool to help you get to the answer.”

Director
Platforms and Technologies in Health and Life Sciences
International Tech Company

The overall mindset: Key summary and key findings

There was an overall expectation of rapid growth in digitalization, coupled with organizational readiness for change at and across health systems, drug developers and related players in the space. Interviewees overwhelmingly believe that health and life sciences companies have the positive capabilities that would support digital transformation, but the right processes, support and leadership needs to be in place to realize those capabilities and add value. While many companies are moving toward digital transformation in stages, the contributions provided from advanced analytics tools are integral to the health and life sciences industry. By breaking down silos and opening doors to new opportunities, such as advanced decision support for treatment pathways or decentralized clinical trials, solutions are changing the future of care and access.

Just as we know that COVID-19 was a catalyst for change, we know that change in itself is a challenge. Transforming any industry is a long game, and even more so in health and life sciences, where lives are affected at every turn. Even so, interviewees have reported many successes that already exist across health care and life sciences that are a result of innovation and digital transformation at scale. Confidence in the sector isn't only justified at the current state, but also warranted as it grows toward a stronger, healthier future.

“

The pandemic made something go from a nice to have towards a necessity ... from an IT perspective and an organizational level, digital transformation is a must, and it is on the top of the agenda for a lot of customers.

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Health and Life Sciences Manager
International Management Company

Exploring the interviews in depth:

To start, it's important to dive into the challenges that organizations face, as reported by consultants during the interviews.

Ethics and bias concerns: Respondents discussed how to handle the potential for bias and other ethical concerns. It remains important to ensure that humans are involved in interpreting the results of analytics to put them into a clinical context.

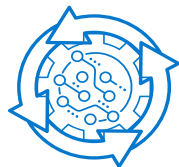
Trust concerns: Beyond the base ideas of transformation and digital solutions, respondents shared organizational concerns about trust and validity of new tools. While moving into a future state is important, proactively and transparently managing challenges around trust in both algorithms and AI is crucial.

Automation concerns: COVID-19 has driven change in how we access services, especially in health care. New providers and startups have thrived in that space through being able to provide solutions to known issues with automation.

Multidisciplinary abilities/concerns: Respondents highlighted optimizing solutions with multidisciplinary teams and increasing trust in technology across the team or organization. Some companies are just now setting up multidisciplinary teams to study how machine learning can work together with other technologies and systems that are already in place. There was recognition that AI and analytical process still required human validation and interpretation, which is crucial to build trust.



Trusted AI



Automation



Decision Science



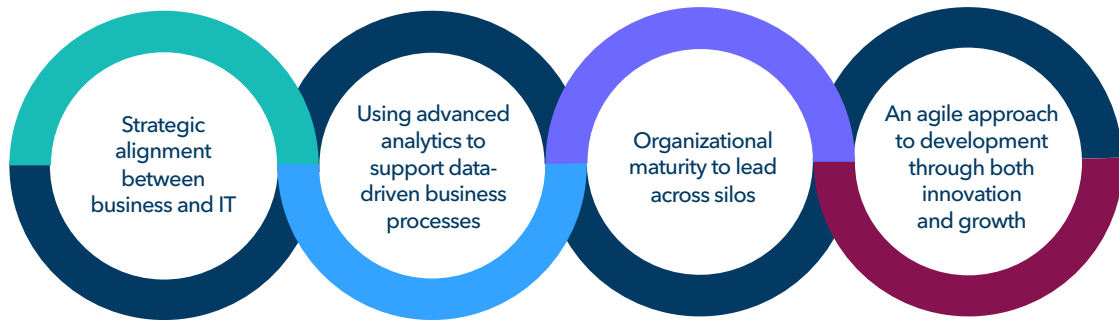
Privacy & Security

“There is an increased willingness to partner and take a ‘better together’ approach because they are realizing that the complexities of change cannot be managed by one point of view.”

Founder
Business Consulting Company

A promising outlook through promising capabilities

Overall, respondents were positive that their organizations, and those of their clients, had the potential to succeed at digital transformation. The most commonly mentioned capabilities included having a holistic approach for strategic and value alignment, aiming toward advanced analytics to have more data-driven business processes that find solutions faster, and mature internal and customer-facing technology.



Increasing competitive edge through digital transformation

Digital transformation is seen as a way to stay ahead of the competition and prove resilience both in operations and provision of services. Interviewees highlighted the importance of multiplying value using analytics and rethinking business processes. In health care in particular, we've seen a change in how we access services, especially within new providers and health startups. In related organizations, increasing the speed of digital adoption and multiplying the value of data through analytics and data science is key to staying ahead of the competition and providing the best care possible.

“What we really realize is the benefit of the technology is the analytics that we bring on the back end to really drive those operational improvements to the organization.”

VP
Healthcare Transformation
Healthcare Software Company



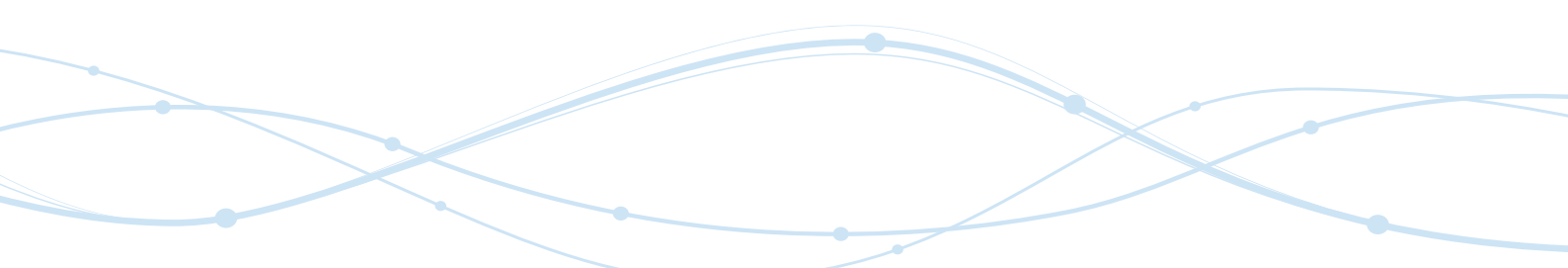
Though progress is evident, future transformative opportunities are on the horizon

Overall, the consultants interviewed were optimistic about the digital proficiency of health and life sciences organizations. More than one-third of the respondents rated organizations at a 9 or higher on a scale from 1 to 10, with 10 being the highest ranking. They were even more optimistic about the future. Within the next four years, the consultants believed that nearly all health and life sciences organizations will be digitally proficient, largely driven by the demands of market and customer expectations within the industry. From decentralized clinical trials to virtual care, digital solutions are becoming the first choice for delivering products and services to the market. Industry consultants interviewed for this research are confident that these changes will be realized.

Disclaimer

This study was carried out through 90 semi-structured telephone interviews between analytics experts in SAS and their counterparts in partner organizations, including both small and large consultancies. The interviews took place in 2021. This report focuses on findings from companies working in the health and life sciences sector.

The responses therefore reflect the views of people who are interested in analytics. Some of the less common answers could represent the bulk of opinion in the health and life sciences industry as a whole. A sincere thank you to the consulting organizations - including Deloitte, McKinsey, Accenture, PwC and many others - for their contributions to this expert study.



Discover how SAS® can help in your digital transformation journey by visiting sas.com/analyticsin20.

