SPECIAL REPORT

Digital Excellence in Healthcare and Life Sciences: Riding the Wave of Innovation
Contents

Executive summary.................................................................3
Introduction.............................................................................6
Methods ..................................................................................7
  The L.E.K. Digital Excellence Framework .............................7
  The L.E.K. and Galen Growth Digital Excellence Survey .........8
The current state of digital readiness .........................................9
Healthcare providers: Digital strategy lags digital infrastructure ....11
Biopharma: Underdeveloped digital strategy, governance and partnerships .........................................................13
Medtech: Underindexed on digital transformation ......................15
Insurance providers/payers: Continued investment results can still improve .................................................................17
A coming shift in digital acuity ..................................................19
Respondent demographics .......................................................21

About L.E.K. Consulting
We’re L.E.K. Consulting, a global strategy consultancy working with business leaders to seize competitive advantage and amplify growth. Our insights are catalysts that reshape the trajectory of our clients’ businesses, uncovering opportunities and empowering them to master their moments of truth. Since 1983, our worldwide practice — spanning the Americas, Asia-Pacific and Europe — has guided leaders across all industries from global corporations to emerging entrepreneurial businesses and private equity investors. Looking for more? Visit www.lek.com.

L.E.K. Consulting is a registered trademark of L.E.K. Consulting LLC. All other products and brands mentioned in this document are properties of their respective owners. © 2023 L.E.K. Consulting LLC
Executive summary

COVID-19 spurred greater interest in digital solutions as companies needed to ensure internal alignment via a virtual workforce while also ensuring adequate engagement for both customers and external stakeholders. As interest in greater flexibility continues, it is paramount for companies to ensure that they have a clear digital strategy and vision that will guide them moving forward.

Beyond virtual workforce solutions and digital customer engagement, it is also important to note that digital disruption, driven by exponentially growing hardware and software capabilities, will continue to surprise with new capabilities — as evidenced by the recent press around ChatGPT and its ability to pass the U.S. medical exam\(^1\) without special training.

While 2022 saw a temporary reduction in digital health investment, driven by macroeconomic conditions, it is clear that digital technologies and ecosystems will become an ever larger, more integral part of the healthcare opportunity and model. Tomorrow's healthcare winners will overindex towards those that develop greater digital capabilities and maturity.

L.E.K. Consulting's Digital Excellence Framework calibrates companies' digital readiness, positioning, and midterm goals and benchmarks them against competitors. The framework provides management and investors a method to guide digital strategy as well as support internal and external digital innovation opportunities. L.E.K.’s latest iteration of our Digital Excellence Survey was fielded in September-October 2022 to healthcare players around the globe, with 80% of respondents being C-suite/executive level. We are excited to present a look at the results, current trends and future anticipated changes across the major healthcare industries and markets in this report.

Presently, on average respondents believe that their companies are at a Novice or Intermediate stage of digital readiness, with only parts of their respective companies having a clear digital strategy. When looking at the data from a geographic view, the following trends emerged:

- Asia-Pacific (APAC) and the U.S. ranked higher than Europe and Latin America (LATAM) across all Digital Excellence components
- The U.S. and APAC had similar scores on most Digital Excellence components, with the U.S. slightly higher in leadership, organization and governance and APAC slightly higher in digital vision and strategy
Europe and LATAM had similar scores on most Digital Excellence components, with LATAM lower in developing new business models and markets and building ecosystems and partnerships

Regional differences may be due to a variety of factors, including the propensity for digital investment in the general economy (traditionally high in the U.S. given the venture capital and private equity industry there) and the affinity for digital progress in the general population (traditionally high in Asia).

When looking at the data through an industry lens, there were some clear takeaways:

- The majority of companies were clustered around the Novice-to-Intermediate stage of digital readiness, with healthcare providers and insurance providers/payers generally ranking higher than medtech and biopharma
- Healthcare providers assessed their digital strategies to be less developed than their digital infrastructure, operations, ways of working and several other digital competencies
- A high proportion of biopharmas ranked as Traditionalist or Novice within digital strategy and governance, which may contribute to lower scores within ecosystems and partnerships and other competencies
- Medtech ranked lowest among all industries across all nine components of Digital Excellence
- Insurers more commonly reported more well-developed digital strategies than the other industries

These differences across industries may be explained by legislation and/or government incentives driving investment in digital among healthcare companies and early investments in artificial intelligence (AI) by insurers. However, significant variation in responses existed within industries across the Digital Excellence Framework.

Looking ahead, many healthcare companies believe that they will move closer to an Advanced stage of digital readiness. However, there is no one-size-fits-all approach to digital innovation, and each industry will require a tailored approach. The survey clearly showed that on average c.50% of companies across healthcare industries do not yet have a well-developed digital strategy in place. Having such a strategy will be critical for success in the coming years, and L.E.K. strongly recommends all healthcare companies develop one. L.E.K. has supported multiple digital strategy and transformation projects tailored to each company’s unique business needs.
For those companies that already have a digital strategy, these findings show that there are still areas within digital governance, ways of working, operations, infrastructure, customer experience, data insights, business models and partnerships where many companies have gaps that can be filled in. For these companies, the L.E.K. Digital Excellence Framework can also be leveraged in a detailed manner (in more detail than shown in this global survey) to assess their digital readiness gaps in depth and support the setup of a corresponding prioritisation strategy and transformation program.

As patients and customers continue to become digitally savvy — and increasingly also switch providers based on their user experience — it is up to healthcare companies to remain agile and evolve to avoid being replaced by more digitally enabled competitors.
Introduction

Digital health funding continues to grow, with 2021 standing out as a stellar year for the digital health sector (see Figure 1). Despite the slowdown in 2022, tech companies with no previous knowledge of the healthcare sector continue to enter the space, with many hoping to capitalize on an older, wealthier industry that previously lacked digital investment.

Over the past five years, there has been a steady increase in the amount of funding for digital health startups. Funding has not been limited to later-stage investments; as of 2022, a larger proportion of investment dollars has been invested in earlier-stage companies, which promises a healthy pipeline of innovation for healthcare. However, to capture the value that will inevitably come from these investments, healthcare companies must evaluate their digital strategy as well as strengths and weaknesses in order to ensure that they are well positioned to incorporate innovative digital solutions.

Figure 1
Global digital health startup venture funding (2018-22)

Nine-month funding (Q1-Q3)*

*Total digital health venture funding across Early Stage, Series A, Series B, Series C, Series D and beyond
Source: Galen Growth
Methods

The L.E.K. Digital Excellence Framework

In 2020, we introduced The L.E.K. Digital Excellence (DEX) Framework outlining five key areas underpinning digital excellence for healthcare companies (see Figure 2). These five key areas can be further segmented into nine components. Additionally, we highlighted a way in which established companies can navigate the complex challenges of becoming more digital in light of continued investment in disruptive startups.

The framework provides a way for companies’ management, boards and investors to:

- Guide digital strategy and business case development
- Review digital aspirations and priorities
- Conduct digital readiness self-assessments
- Evaluate M&A opportunities (both buy- and sell-side) in terms of digital strategy and capabilities
- Support longer digital transformation engagements

When thinking about the digital readiness of companies, we assign companies to one of five categories that make up a spectrum of digital excellence. This ranges from Traditionalists, with missing or underdeveloped digital capabilities,
processes, structures, and strategies, all the way to Champions, with fully formed digital strategies, organization and operations.

The L.E.K. and Galen Growth Digital Excellence Survey

In order to understand the evolution of digital readiness of healthcare companies, L.E.K. and Galen Growth conducted a global survey, spanning the U.S., LATAM, Europe and APAC, of 200 healthcare executives and employees representing healthcare providers, biopharma, medtech and insurance companies/payers. Additional information regarding survey respondents can be found in the “Respondent demographics” section at the end of the report.
The current state of digital readiness

Our survey revealed that there is a wide range of self-assessed digital readiness scores across the healthcare industry and geographies. This is unsurprising, given differences in company size, culture, digital affinity, revenue and focus.

Looking by geography, the U.S. and APAC are more Advanced in their digital readiness than Europe or LATAM (see Figure 3). The U.S. and APAC tended to be closer to Intermediate across the nine DEX components. On average, U.S.-based respondents indicated they had greater proficiency in leadership, organization and governance, and digital operations, with APAC-based respondents indicating higher proficiency in customer experience and digital services as well as digital go-to-market and data insights.

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey
LATAM significantly lagged the U.S. and APAC. In contrast to the U.S., LATAM-based respondents rated leadership, organization and governance among the lowest components. As mentioned previously, reasons for lower ranking of LATAM may be due to a variety of factors including, for example, propensity of digital investment in the general economy (traditionally high in the U.S. given the venture capital and private equity industry there) and the resistance to digital progress among the general population.

Analyzing the survey responses further, differences arise amongst the four industries (see Figure 4).

**Figure 4**
Average current digital readiness by industry

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey
Healthcare providers: Digital strategy lags digital infrastructure

Beginning with healthcare providers, close to half of respondents have no well-developed strategy or digital customer experience/services (see Figure 5). With the increasing trend of "consumerization" within healthcare, companies lagging in customer experience and digital services are liable to lose patients as demand for more streamlined, easy-to-integrate services continues. This is important as patients do consider switching providers — for example, according to a U.S. patient survey published in 2022, nearly 50% of patients indicated that they were considering switching doctors in the coming year.²

Figure 5
Current and future healthcare provider digital readiness

![Figure 5](image)

However, despite lower scores in these components, healthcare providers believe that they have stronger positioning to take advantage of new ways of working, digital operations, and digital infrastructure and enablers, with over 70% of respondents ranking these as Intermediate and above. Interestingly, like what was seen with the overall average across industries, there is a bifurcation in the data with some respondents ranking their companies as Advanced/Champion. The overall higher rankings related to digital infrastructure likely stem from a history of implementing digital innovation as a result of regulations and incentives (e.g.,...
Obamacare in the U.S., Krankenhauszukunftsgesetz in Germany) and a drive to improve efficiency through more direct messaging of test results. This may also explain the low rankings for digital vision and strategy; historically, companies did not need to drive innovation because it was mandated.

While the current global picture of healthcare providers indicates an underperformance in digital strategy and in many areas across the digital excellence continuum, this picture will likely change significantly over the coming years. Within three years, fewer than 10% of healthcare providers see themselves as Novices in digital strategy, with investments occurring across all the DEX components. This may well be driven by COVID-19 which brought an acceleration of digital-only telemedicine and mobile app startups and saw early-stage companies gaining a high number of customers/patients. Post pandemic, many legacy companies began to fight back and increase their digital offerings via enabling patient engagement solutions (e.g., population health management, booking, patient communications, telemedicine services).
Biopharma: Underdeveloped digital strategy, governance and partnerships

Like healthcare providers, nearly half of biopharma respondents do not have a digital strategy or governance systems in place to drive digital innovation (see Figure 6). The combination of an unclear digital vision and strategy coupled with unclear internal digital leadership may also explain the Traditionalist/Novice score seen for ecosystems and partnerships, as companies struggle to identify partners that can or will enable improved digital transformation across the biopharma value chain.

Figure 6
Current and future biopharma digital readiness

More Intermediate and Advanced/Champion scores within digital operations may be partially explained by companies launching companion apps to help guide patients’ treatment decisions and patient digital journeys, given the focus on a successful product launch within biopharma and a focus on increasing patient awareness. For example, in Europe, Roche has partnered with Zur Rose (a healthcare ecommerce company building an ecosystem of telemedicine, online pharmacy and other related healthcare services for seamless patient care) on diabetes; additionally, Novo Nordisk has partnered with Zur Rose on obesity.
Interestingly, within biopharma, APAC-based respondents consistently indicated higher scores across the nine DEX components with more than 20% scoring themselves as Advanced or Champion. However, despite these high scores there is also significant variation of scores within DEX components.

Biopharma companies are looking to heavily invest across all DEX areas to further push their digital excellence in the next three years. A big change will likely be seen in the development of a comprehensive digital strategy, where the percentage of companies with no such strategy (the Traditionalist/Novice categories) is expected to be negligible at 3% (down from nearly 50% today). In our client experience, the right digital initiatives have the potential to increase earnings before interest, taxes, depreciation and amortization (EBITDA) by 10%-20% depending on the starting point of the company. In terms of value chain impact, much of this ROI can be realized in planning and inventory management as well as operational efficiencies (e.g., manufacturing/production).

In this survey, we also asked biopharma companies to assess investments in the value chain (see Figure 7). Overall, we can see that the past years were more focused on upstream investments, for example in drug discovery and supply chain and manufacturing. Going forward, investments are expected to be more balanced across the entire value chain.

---

Figure 7
Biopharma digital investment priorities

---

*Survey question: In which parts of the value chain has your organization invested the most for digital solutions over the past 3-5 years? Please rank your company’s historical investment priorities; please make at least one selection.

**Over the next 3-5 years, how do you expect your organization’s priorities for digital investments to change? Please rank your organization’s future investment priorities; please make at least one selection.

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey
Medtech: Underindexed on digital transformation

Unlike healthcare providers and biopharma, which had a more normalized distribution among digital readiness across the nine DEX components, more than a third of medtech respondents consistently scored each component as Traditionalist/Novice, with higher instances of Traditionalist compared to other industries (see Figure 8).

More than half of medtech respondents noted lower scores for digital vision and strategy, leadership, organization and governance, and digital go-to-market and data insights. Additionally, across the board, fewer than 5% of respondents indicated their company had Champion status for any DEX component, indicating there is a high ceiling for the improvements of digital readiness among medtech companies. Overall, it does not look like the industry has made digital innovation a broader strategic priority, despite smaller pockets of investment (e.g., in areas related to developing new business models and ways of working).

Figure 8
Current and future medtech digital readiness

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey
Looking three years ahead, it is expected that medtechs will continue to evolve digitally as they look to take advantage of digital technologies. While a meaningful change is expected for digital strategies, a larger change is expected for customer-facing technologies (“refocus”), where the percentage of respondents that are Traditionalist and Novice is expected to drop substantially. Select examples of leaders investing in novel digital solutions include established leaders in the space such as ResMed, Siemens Healthineers and Illumina. These companies have provided examples of digital innovation strategies that other medtechs may consider, including:

- Development of a connected portfolio of products through acquisition and internal development to improve patients’ clinical outcomes and further differentiate among competitors
- Adoption of a “freemium” model for a digital platform to drive use among customers and integration among third-party software apps
- Development of complementary digital solutions for core hardware products to increase utilization and customer stickiness
Insurance providers/payers: Continued investment results can still improve

Insurance providers stood apart from other industries, with the greater number of respondents indicating Advanced/Champion status and the fewest respondents indicating Traditionalist/Novice status across most of the nine DEX components. Insurers lead amongst all industries in rebuilding (e.g., digital operations and digital infrastructure and enablers), likely stemming from early investment in AI-driven technologies for risk assessments and automation of claims. However, they were similar to other industries within the realm of ecosystem and partnerships, which had a similar percentage of Traditionalist/Novice scores to those of biopharma and healthcare providers (see Figure 9).

Interestingly, Europe had a greater number of Traditionalist/Novice scores than other regions, suggesting that Europe will require greater operational improvements to drive digital transformations. Overall, Europe is far behind other regions in digital innovation, given the limited number of disruptors within the region (e.g., Adam in France, Ottonova in Germany) offering innovative approaches to help influence patient behavior.

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey

Figure 9
Current and future insurance provider/payer digital readiness

Reimagine Reorganize Rebuild Refocus Reinvent

Digital vision and strategy Leadership, organization and governance New ways of working Digital operations Digital infrastructure and enablers Customer experience and digital services Digital go-to-market and data insights New business models and market Ecosystem and partnerships

Percentage of respondents (N=35)

Advanced and Champion Traditionalist and Novice Intermediate

L.E.K. Consulting
Looking ahead, insurers indicated a significant digital transformation, again echoing the storyline of the other industries. While we will see continuing investment in analytics and AI for risk assessment and claims, we are also confident that more will be done in the prevention and incentives category.

Pioneered by Discovery Insurance’s Vitality program in South Africa, these approaches have now been leveraged by others, including Apple partnering with the Singapore government for incentives paired to an Apple Watch (the Lumihealth program), AIA insurance leveraging the Vitality program in Asia, the Virgin Pulse Welltok acquisition for employee healthy behaviors, and/or Qantas in Australia using their frequent flyer points to incentivize health behaviors for its Qantas Assure health and life insurance offering.
A coming shift in digital acuity

The above data implies that there is a significant target for improvements in digital readiness amongst healthcare companies and suggests that there will be large investments across industries and geographies to drive agile digital transformations. When looking at the average score across respondents for each of the nine DEX components, we see that within three years respondents expect to move closer to Advanced status (see Figure 10).

**Figure 10**
Average current and future digital readiness across industries and geographies (N=200)

Source: L.E.K. Consulting and Galen Growth Digital Health Readiness survey
However, when looking at individual industries and DEX components, emerging nuances can be seen:

- Across industries, digital infrastructure and enablers are expected to see a greater than 55% percentage point increase in Advanced/Champion scores from the present.
- Medtech is anticipating a greater than 65% percentage point increase in Advanced/Champion scores from the present for customer experience and services, digital go-to-market and data insights, and new business models and markets, and is expecting the greatest shift amongst Advanced/Champion scores across the nine DEX components relative to other industries.
- Insurance providers are expecting a roughly 63% percentage point increase in Advanced/Champion scores from the present for new ways of working.

As we pointed out previously, companies do not need a crystal ball to know they need to develop their digital capabilities, with studies showing that digital leaders outperform laggards in terms of revenue and/or valuation growth. As patients, healthcare providers and other stakeholders increasingly become more digitally integrated, it is up to companies to evolve with the times and ensure they can quickly adapt moving forward in order to avoid losing relevance and/or being left behind by increasingly digitally enabled competitors. To paraphrase a saying from the AI community: “Digital startups in healthcare, life sciences, Medtech and insurance will likely not replace most incumbents, but legacy companies that leverage digital will likely prevail over those that do not.”

L.E.K. has supported multiple digital transformation projects across the healthcare space, including:

- Global, scalable digital health strategies for pharmaceutical companies and healthcare providers
- Digital transformation and ecommerce strategy for a global dental supplies manufacturer
- Digital strategy and transformation program setup for a leading global specialist clinic chain
- Digital therapeutic and companion app strategy for a global pharmaceutical company
- Digital transformation (including omnichannel go-to-market strategies) of APAC subsidiaries for a global medtech company
About 200 healthcare executives and employees responded to the L.E.K. Digital Excellence Survey. Of note, approximately 80% of survey respondents were C-suite/executive level. The survey spanned four key regions: APAC, Europe, LATAM and the U.S. (see Figure 11).

**Figure 11**
L.E.K. Digital Excellence survey respondent demographics

About 80% of respondents were C-suite/executive level; remainder at least associate director level; respondents from broad set of company functions included; all generally familiar with their organization’s digital strategy and transformation

### Demographics by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Industry</th>
<th>Company revenue</th>
<th>Company size</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (N=60)</td>
<td>33</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Europe* (N=60)</td>
<td>33</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>APAC** (N=60)</td>
<td>33</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>LATAM^ (N=20)</td>
<td>25</td>
<td>25</td>
<td>20</td>
</tr>
</tbody>
</table>

- **Healthcare**
- **Biopharma**
- **Medtech**
- **Insurers**
- **Greater than $1 billion**
- **Between $100 million and $1 billion**
- **Less than $100 million**

### Demographics by industry (percentage)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Company size</th>
<th>Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare providers (N=35)</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Biopharma (N=65)</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Medtech (N=65)</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Insurance providers/payers (N=35)</td>
<td>29</td>
<td>14</td>
</tr>
</tbody>
</table>

- **U.S.**
- **Europe**
- **APAC**
- **LATAM**
- **Greater than $1 billion**
- **Between $100 million and $1 billion**
- **Less than $100 million**

*Europe respondents from France, Germany, Italy, Poland, Romania, Spain and the United Kingdom
**APAC respondents from Australia, China, India, Indonesia, Singapore and South Korea
^LATAM respondents from Argentina, Brazil, Chile, Colombia and Mexico

Note: APAC=Asia-Pacific; LATAM=Latin America
Source: L.E.K. Consulting and Galen Growth Digital Health Index survey

The survey participants represented healthcare providers, biopharmas, medtechs and insurance providers/payers; spanned different departments, including digital, IT, operations, strategy and business development, sales and marketing, and general management; and worked for companies across a variety of sizes. Additionally, respondents must have been generally familiar with their company’s digital strategy and transformation.
The authors would like to thank Hayley Tessler, Sinead Flahive, Joyce Sun and Alessia Xu for their important contributions to this special report.

For more information, please contact lifesciences@lek.com.

Endnotes


3 E.g., digital leadership studies by isobar and ExO Work
About the Authors

Klaus Boehncke  
SENIOR ADVISOR, MUNICH  
Klaus Boehncke leads Digital Health at L.E.K. where he joined the Munich office as a Managing Director in 2018. With over 25 years of experience across Europe and Asia-Pacific, Klaus is a recognized expert in disciplines including digital, technology and business strategy. He focuses on digital transformation for healthcare providers and life sciences companies, as well as innovative forms of care including telemedicine, digital therapeutics and AI application.

Monish Rajpal  
MANAGING DIRECTOR AND PARTNER, NEW YORK  
Monish Rajpal is a Managing Director in L.E.K. Consulting’s New York office. Monish joined the firm in 2008 and leads its Medtech practice. His client work focuses on biopharmaceuticals, life sciences, medtech/medical devices, healthcare services, and the emerging overlap and convergence among these various sectors.

Sheila Shah  
MANAGING DIRECTOR, CHICAGO  
Sheila Shah is a Managing Director in L.E.K. Consulting’s Chicago office, focused in the medtech and healthcare practices. Sheila’s experience covers a range of areas, with a particular focus on healthcare technology, due diligence, commercial strategy, healthcare supply chain, growth opportunity assessment and organizational design. Her expert commentary has appeared in Medtech Strategist.

Arnaud Bauer  
PARTNER, SINGAPORE  
Arnaud Bauer is a Partner in L.E.K. Consulting’s Singapore office and is Head of Healthcare Services and Healthcare M&A for Southeast Asia. Arnaud’s experience in the healthcare provider space spans the entire care continuum, as well as with government agencies for healthcare investment planning and promotion across the Middle East and APAC regions.

Jenny Mackey  
PRINCIPAL, NEW YORK  
Jenny Mackey is the Director of L.E.K.’s Healthcare Insights Center (HIC), where she is focused on generating insights and thought leadership on topics and trends with major impact across the healthcare industry. Previously, Jenny was a Principal in L.E.K. Consulting’s Life Sciences practice, where she focused on the biopharmaceutical sector.
About the Authors (cont.)

Parth Trivedi  
SENIOR ASSOCIATE CONSULTANT, BOSTON
Parth Trivedi is a Senior Associate Consultant in L.E.K. Consulting’s Boston office and is a member of the Life Sciences practice. Parth’s work focuses on corporate and business-unit growth strategy, R&D portfolio optimization and management, and transaction support across biopharma, diagnostics, bioprocessing and pharmaceutical services.