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The Work Ahead for Healthcare Payers: Gaining a Foothold in the Digital Health Future

Healthcare insurers need to continue applying intelligent automation and overcome skills gaps to realize expected digital gains, according to our recent research.

THE WORK AHEAD

Executive Summary

Healthcare payers must be nimble and inventive to stave off new threats while capitalizing on market dynamics, and digital technology investment will play a key role in shaping the outcome.

Healthcare payers largely evaded the worst effects of COVID-19. Yet, the digital health changes wrought by the crisis have amplified the call for improving the member experience through the use of digital tools and techniques. As expanding market opportunities continue to attract new and nontraditional competitors, payers must be nimble and inventive to stave off new threats while capitalizing on market dynamics, and digital technology investment will play a key role in shaping the outcome.

In our [2016 Work Ahead study](#), healthcare insurance executives were bullish on the technology potential but were unclear about its role and its implications. Today, crisis has led to opportunity, and digital technology is poised to play a non-trivial role as payers look to new business models to capitalize on it.

To understand the changing nature of work in a world dominated by digital and disrupted by COVID-19, Cognizant's Center for the Future of Work surveyed 4,000 senior executives at leading companies around the world, including 285 healthcare organizations, of which 50 were healthcare payers in the U.S. (see methodology, page 14). What we found is that payer executives are ready to apply advanced technologies such as chatbots and intelligent agents, artificial intelligence (AI) and the Internet of Things (IoT) to change how work gets done. While the pandemic has driven market churn, innovation will ultimately deal out the gains for the hard work ahead. (For our report on healthcare providers, see "[Digital Delivers at the Frontlines of Care](#).") This report is largely based on the study findings on the 50 payer executives.

A number of key themes emerged from our research and analysis:

1 **COVID-19 may fade, but its mark will endure.** All 50 payer respondents said they expect the current pace of industry disruption to accelerate. New digital platforms, guided by AI and machine-learning agents, are compelling a rethink of

strategy and business models. Among our payer respondents, the percent expecting to generate 10% to 20% of their revenue from digital channels is almost double that of the cross-industry average, and is expected to remain so through 2023.

2 **Payers are still at the early stages of augmenting business processes with technology** to become more flexible, responsive and data-driven to meet the demands of customers and employees. While the momentum is clear, especially in the area of chatbots (where payers far exceed the cross-industry average in adoption), little more than one-quarter have moved beyond pilots with AI.

3 **Machines will take on a greater amount of the lift, from collating data to automating rules-based routines.** Machine adoption is expected to steadily increase by 2023 across a broad range of tasks, and potentially move into decision-making.

4 **While there is scant evidence that machines are replacing healthcare jobs,** it's clear that payers must be prepared to upgrade skills to leverage a digitally augmented work environment.

5 **Payers are targeting specific areas for operational benefits.** The priorities are stability and market growth, with a focus on finance, sales and marketing.

Crisis = digital opportunity

The pandemic affirmed payers' previous investments in digital technology as they pivot toward new market opportunities. A majority said they will increase their use of digital channels to deliver services to customers.
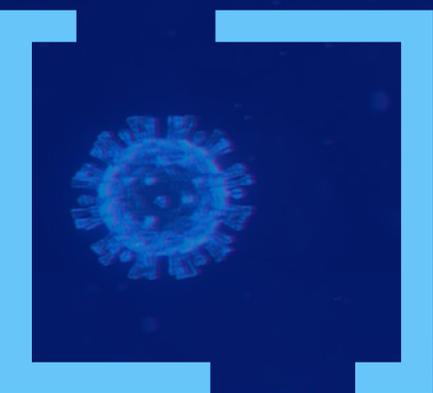
Health payers generally fared better than most industries impacted by COVID-19. While 46% of all respondents in our global cross-industry study cited a negative impact from the pandemic, only 8% of payers said the same.

The economic downturn did create customer churn, driven by the loss of commercial members and an increase in Medicaid rolls. Still, payers generally benefited from fewer reimbursements as providers all but eliminated high-margin elective procedures due to social distancing requirements.
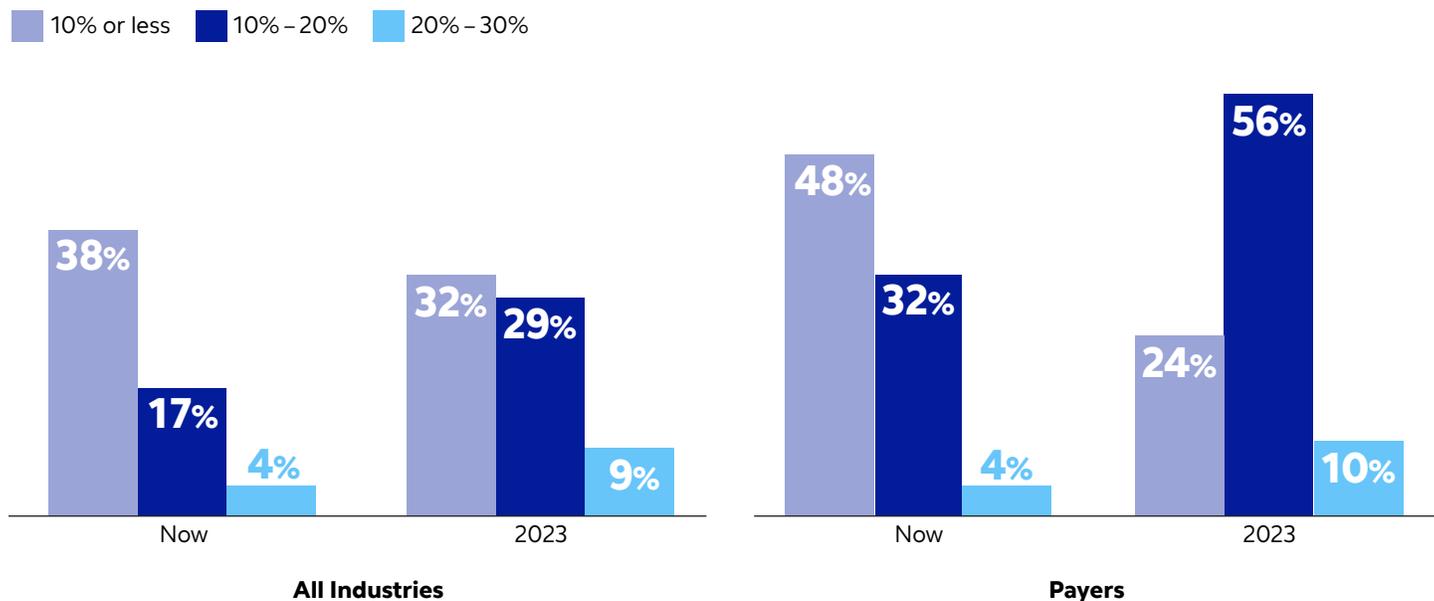
If anything, the pandemic affirmed payers' previous investments in digital technology as they pivot toward new market opportunities. Targeting cost control, a majority (60%) of payers said they are looking to digital technologies to achieve operational efficiencies through automation. By 2023, those

who said they will see large to very large gains in these areas will double, to 18%.

In pursuit of new revenue, a majority of payer executives said they expect to increase their use of digital channels to deliver services to customers. Almost one-third of payers said they are now generating 10% to 20% of their revenues through digital channels – double the percent of the cross-industry average who said the same. As even more payers shift into this revenue range in 2023, that ratio between payers and the cross-industry average is expected to be maintained (see Figure 1).

Payers make a play for digital revenue channels

Respondents were asked to identify the percent of company revenues they receive from digital channels, now and in 2023. (Percent of respondents)

Legend: 10% or less | 10% – 20% | 20% – 30%

All Industries
- Now: 38%, 17%, 4%
- 2023: 32%, 29%, 9%

Payers
- Now: 48%, 32%, 4%
- 2023: 24%, 56%, 10%

Response base: 50 U.S. healthcare payers; 4,000 total respondents
Source: Cognizant Center for the Future of Work
Figure 1

Payers' IT budget growth outpaced by other industries

Respondents were asked about the percent of revenues invested in technology, now and in 2023.
(Percent of respondents)
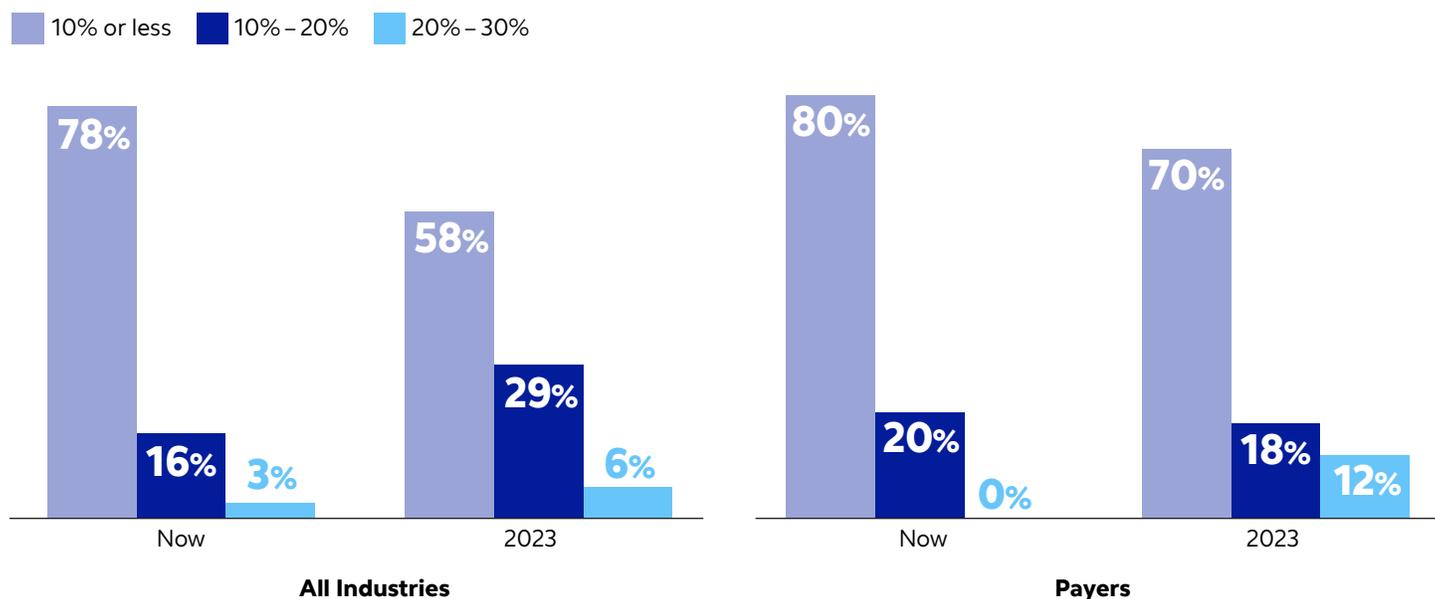
10% or less   **10% – 20%**   **20% – 30%**

All Industries

Payers

Response base: 50 U.S. healthcare payers; 4,000 total respondents
Source: Cognizant Center for the Future of Work
Figure 2

Yet, current IT budget projections call into question whether all payers will realize their digital goals. While payers' current IT spending is in step with other industries, it falls behind heading into 2023 – particularly among those increasing IT expenditures by more than 10% (see Figure 2). While in some cases the cost savings derived from automation will help fund these new initiatives, it's also likely that a subset of the industry will move forward with digital platforms, while the remainder struggle.

> While payers' current IT spending is in step with other industries, it falls behind heading into 2023.

Implementation picks up steam

Almost half of payers said they have deployed chatbots, which is more than double the average of all industries in this study.
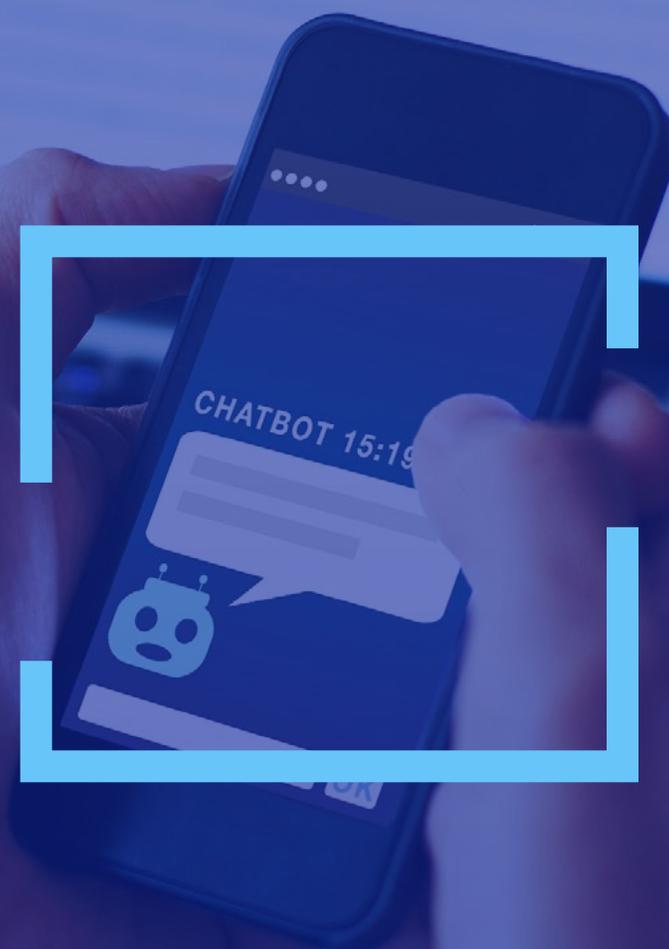
A key differentiator between our current study and 2016 is that payers are now better positioned to derive value from the volumes of medical data generated by health information technology (HIT). Leveraged though AI and analytics, this data will be an essential building block to provide more accurate, real-time insights to guide policy development, population trend analysis and customer marketing.

Across the six technology categories highlighted in our study, 30% of payers said they had implemented these technologies either widely or to some degree, which is similar to the cross-industry average of 29%. Of the specific technologies, payers are ahead of the cross-industry average in their implementation of chatbots and IoT (see Figure 3).

The strongest area of adoption is in chatbots, which draw from a wide span of data sources to automate the sales effort or manage enrollee benefits – both priority objectives and high ROI opportunities. Almost half of payers (46%) said they have implemented chatbots, which is more than double the average of all industries (19%) in this study. A majority (74%) of payers confirmed they are now using digital technology to augment their sales process, while 90% said they expect their use of digital to improve the sales effort by 2023.

Forty percent of payers said they are now using IoT, which is above the cross-industry average, at 26%. This uptake is fueled in part by t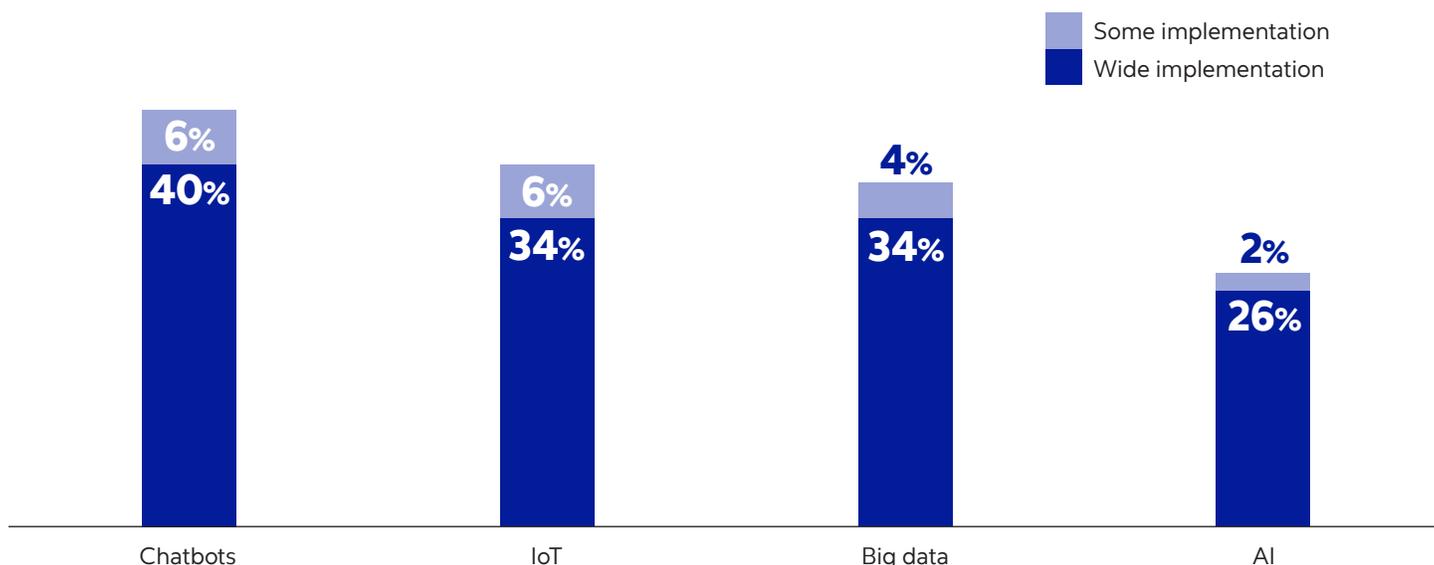he increase in wearable devices used for remote care monitoring. The weakest areas of adoption are in physical robots, virtual reality and software robots. While there are scant blockchain implementations, 40% are now piloting this technology, suggesting it will have a purposeful role in the not-so-distant future. AI adoption is also at a relatively nascent stage, with less than one-third reporting some degree of implementation.

Defining a role for machines

With 90% of payers saying they expect to automate many elements of work, it is clear where the future lies. Healthcare insurers will steadily adopt intelligent machines to replace mundane, repetitive processes. Using the mean measure of adoption across all the tasks in our study, on average 18% of work is performed by machines today (the cross-industry average is 17%), and that percentage is expected to grow to 24% by 2023 (see Figure 4, next page).

Chatbots, IoT, big data lead digital technology implementations

Respondents were asked about the progress they've made in implementing a variety of technologies to augment processes. (Percent of respondents)

Legend:
- Some implementation
- Wide implementation

Technology	Some implementation	Wide implementation
Chatbots	6%	40%
IoT	6%	34%
Big data	4%	34%
AI	2%	26%

Response base: 50 U.S. healthcare payers
Source: Cognizant Center for the Future of Work
Figure 3

Machine adoption steadily advances

Respondents were asked to what extent the following activities are carried out by machines vs. employees, today and in 2023. (Mean percent of work executed by machines)
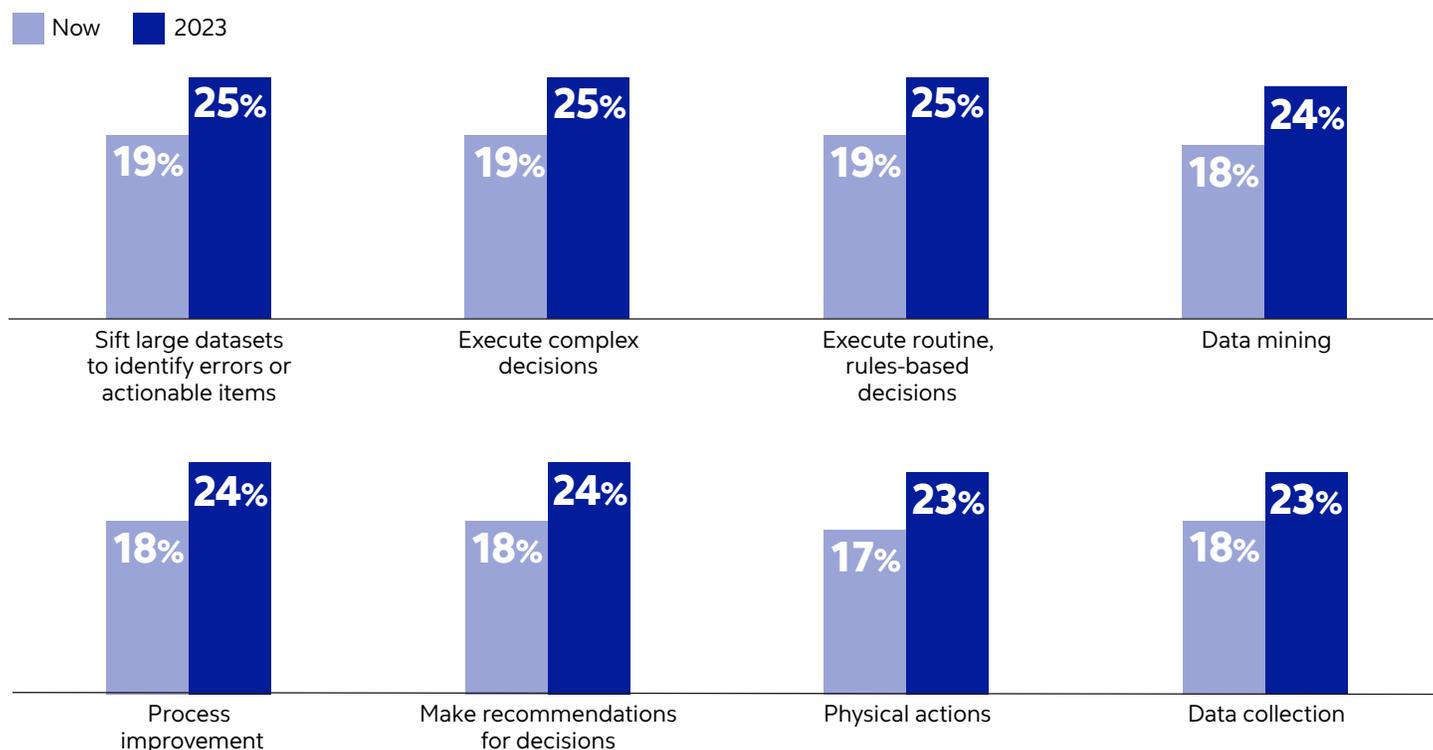
Response base: 50 U.S. healthcare payers
Source: Cognizant Center for the Future of Work
Figure 4

What stands out, though, is the prospect of machines taking on more complex tasks. Already, 42% of respondents said they expect digital technology will help them make better decisions. This is reflected in the biggest areas of machine use by payers, which includes executing complex decisions, (based on real-time information and multiple inputs) and making routine, rules-based decisions.

What is unclear, so far, is whether the increased use of machine learning will eliminate (some) jobs or simply change them. Among all industries in our study, payers expressed the most concern (70%) about automated technology resulting in job displacement. Yet, at the same time, the vast majority of payers (94%) said they expect to collaborate with smart machines that augment job effectiveness.

"Technology will not replace the workforce," said the chief operating officer for a very large U.S.-based payer organization in our study. Over the next five years, the organization will use AI to increase process augmentation to support direct customer interaction. "Once this is possible, our employees will be able to focus more on case management and human aspects of the customer experience. Both man and machine would support each other. The assumptions and logic required in the machine are based on the experience of humans, so that's what we would leverage more in coming years."

While most payers said they have the internal technical and business expertise to manage automation efforts, expertise gaps exist across key areas, from process optimization to automation technology. In fact, 98% of respondents said they will face global talent shortages in the coming years (54% "to a significant degree"). The most in-demand skills going forward include sales, increasing from 17% of respondents naming that skill as highly important today to 50% by 2023, and innovation skills, which will increase from 26% of payers to 44%.

Strategic priorities set the pace

With their sights set on financial stability and market capture, almost three-quarters of respondents are currently augmenting sales and marketing processes, and 92% expect to do so by 2023.

The strategic advantage in digital healthcare is determined by the functions and processes that organizations prioritize for automation. Currently, one-third of payers said they are now augmenting specific business process areas. And in a separate study we conducted in 2019, we found that the top benefits payers are deriving from automation are operational efficiency (38%) and improved performance (25%).[1]

The challenge that this heightened focus on automation poses to industry executives is not merely a technical one; this goes to the heart of operational culture. Employees will not only need to undergo upskilling to collaborate with machines; they'll also need to gain trust in the role and performance of machines as they, themselves, become "bot masters." It will be these employees who will provide the mental model for machine algorithms and manage their refinement.
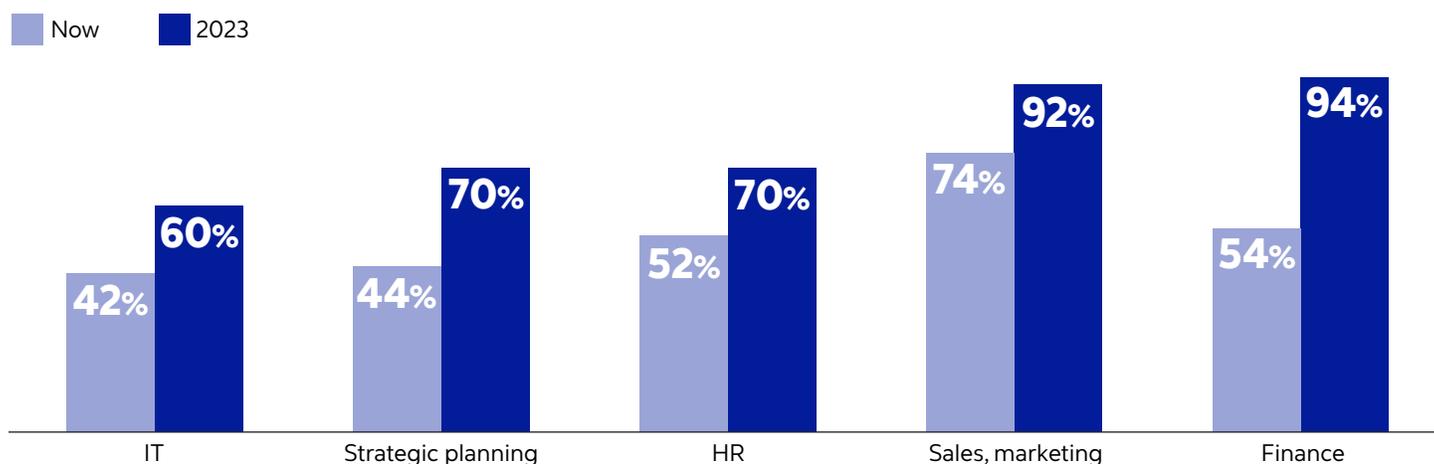
With their sights set on financial stability and market capture, almost three-quarters of respondents are augmenting sales and marketing processes, and 92% expect to do so by 2023 (see Figure 5). In our 2019 study, two out of five respondents (40%) said digital technology would enable them to serve customers better by 2023, which could support efforts like claims processing and provider management.

At one large U.S. payer organization in our current study, for example, an AI-based platform is used to monitor and flag suspicious claims and customer interactions, according to the payer COO. The platform's algorithms perform a risk management assessment for each claim by analyzing numerous variables to determine the probability of fraud. "This is one of the key business functions of our operations – pick the major work area to refine, and that's where most risk management exists," the COO said.

While these digital efforts are in their early stages, payers are clearly pushing forward. Currently, most of the implementations targeting process areas have achieved "some augmentation" at payer sites. Respondents expect that half of their process areas will be augmented to some degree by 2023. It will be seen whether that is an ambitious goal, as currently very few payers have what they would describe as "good" or "widespread" implementation.

Process augmentation priorities

Respondents were asked to describe their progress today and by 2023 in implementing emerging technologies to augment workforce performance in the following business processes. (Percent of respondents who said they had achieved some level of augmentation: implemented projects/some augmentation, implemented projects/good augmentation or widespread augmentation)

Now ■ 2023

	IT	Strategic planning	HR	Sales, marketing	Finance
Now	42%	44%	52%	74%	54%
2023	60%	70%	70%	92%	94%

Response base: 50 U.S. healthcare payers
Source: Cognizant Center for the Future of Work
Figure 5

Setting a course for the future

Digital healthcare momentum is growing, fueled by shifts in consumer behavior, the easing of regulations and the adoption of powerful new technologies.

To meet the challenges of the post-pandemic world, we recommend that payers address the following imperatives, adapting these to their business vision, local market conditions and financial strengths.

▎ **Take out costs.** Payers can achieve greater operational efficiencies by consolidating and standardizing on clinical and non-clinical applications (such as revenue cycle management) and migrating these to cloud-based platforms. With the average cost of a manual transaction at almost $7, according to the CAQH Index, the industry could save $16.3 billion annually by converting common administrative transactions to digital.[2]

▎ **Accelerate the pace of digital initiatives**. Digital healthcare momentum is growing, fueled by shifts in consumer behavior, the easing of regulations and adoption of powerful new technologies. Almost half (54%) of payers said they expect the pandemic to accelerate the destruction of many non-digital businesses that don't keep pace.

▎ **Update skills to reflect the digital future.** The automation of processes and the introduction of new roles (such as "bot masters") require an updated skill set. Payers must think hard about how their staff will intersect with and use robots in their organization. New evaluation metrics such as "robotics quotient," which scores employees' ability to work effectively with robots, should be explored to help ease the change management challenges introduced by automation and AI.[3]

▎ **Improve payer and provider collaboration.** Payers and providers should invest in new models to drive system value to reduce costs and improve care. Opportunities exist to jointly use AI, analytics and social determinants data to identify patients and at-risk populations in need of specific care management services.

Toward a digital-health future

Coming out of the pandemic, healthcare payers have demonstrated the ability and desire to embrace new technology to stabilize their business and prepare to launch into new, digitally-generated revenue opportunities. As they increase implementation of AI and machines, they are betting that they can garner cost-efficiencies that help fuel the development of new operating platforms.

By pulling their customers into their operational process, the next level for payers will be to predict and identify risks and rewards before they happen. The work ahead calls for more than technology and talent – it will require tying it all together into a new, digitally-powered, healthcare ecosystem.

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Methodology

Cognizant commissioned Oxford Economics to design and conduct a study of 4,000 C-suite and senior executives, including 285 healthcare organizations, of which 50 were U.S. healthcare payers. The survey was conducted between June 2020 and August 2020 via computer-assisted telephone interviewing (CATI). Approximately one-third of the questions were identical to those included in the 2016 Work Ahead study, allowing us to compare responses and track shifting attitudes toward technology and the future of work.
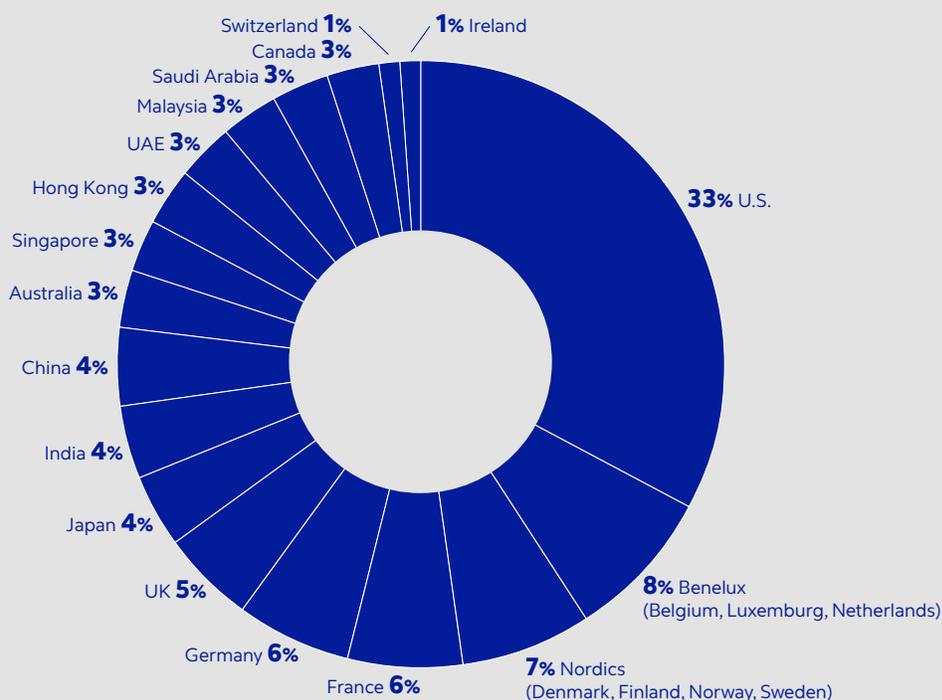
Respondents were from the U.S., Canada, UK, Ireland, France, Germany, Switzerland, Benelux (Belgium, Luxemburg, Netherlands), Nordics (Denmark, Finland, Norway, Sweden), Singapore, Australia, Malaysia, Japan, China, Hong Kong, India, Saudi Arabia and UAE. They represent 14 industries, evenly distributed across banking, consumer goods, education, healthcare (including both payers and providers), information services, insurance, life sciences, manufacturing, media and entertainment, oil and gas, retail, transportation and logistics, travel and hospitality, and utilities. All respondents come from

organizations with over $250 million in revenue; one-third are from organizations with between $250 million and $499 million in revenue, one-third from organizations with between $500 million and $999 million in revenue, and one-third with $1 billion or more in revenue.

In addition to the quantitative survey, Oxford Economics conducted 30 in-depth interviews with executives across the countries and industries surveyed. Interviewees who responded to the survey have a track record of using emerging technology to augment business processes. The conversations covered the major themes in this report, providing real-life case studies on the challenges faced by businesses and the actions they are taking, at a time when the coronavirus pandemic was spreading around the world and companies were formulating their strategic responses. The resulting insights offer a variety of perspectives on the changing future of work.

The following figures represent the demographics of the 4,000 respondents from the full global study.

Respondents by geography

Switzerland **1%**
Canada **3%**
Saudi Arabia **3%**
Malaysia **3%**
UAE **3%**
Hong Kong **3%**
Singapore **3%**
Australia **3%**
China **4%**
India **4%**
Japan **4%**
UK **5%**
Germany **6%**
France **6%**

1% Ireland
33% U.S.
8% Benelux (Belgium, Luxemburg, Netherlands)
7% Nordics (Denmark, Finland, Norway, Sweden)

(Percentages may not equal 100% due to rounding)

Respondents by role

13% Vice President
13% Chief Operating Officer
13% Director reporting to senior executive
13% Senior Vice President
12% President
12% Chief Executive Officer
12% Chief Financial Officer
12% Other C-suite Officer

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William "Bill" Shea is a Vice-President within Cognizant Consulting's Healthcare Practice. He has over 20 years of experience in management consulting, practice development and project management in the health industry across the payer, purchaser and provider markets. Bill has significant experience in health plan strategy and operations in the areas of digital transformation, integrated health management and product development.

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Endnotes

1   "Applying Automation to What Ails Healthcare," Cognizant, 2019, **www.cognizant.com/whitepapers/applying-automation-to-what-ails-healthcare-codex4633.pdf**.

2   "Closing the Gap: The Industry Continues to Improve, But Opportunities for Automation Remain," CAQH Index, 2020, **www.caqh.org/sites/default/files/explorations/index/2020-caqh-index.pdf**.

3   J.P. Gownder, "RQ 2.0: Assess Your Readiness For Artificial Intelligence, Automation, And Robotics," Forrester Research, 2019, **www.forrester.com/report/RQ+20+Assess+Your+Readiness+For+Artificial+Intelligence+Automation+And+Robotics/-/E-RES142612#**.

THE WORK AHEAD

See the full Work Ahead study series: **www.cognizant.com/theworkahead**

Center for The Future of Work

About the Center for the Future of Work

Cognizant's Center for the Future of Work™ is chartered to examine how work is changing, and will change, in response to the emergence of new technologies, new business practices and new workers. The Center provides original research and analysis of work trends and dynamics, and collaborates with a wide range of business, technology and academic thinkers about what the future of work will look like as technology changes so many aspects of our working lives. For more information, visit **Cognizant.com/futureofwork**, or contact Ben Pring, Cognizant VP and Director of the Center for the Future of Work, at **Benjamin.Pring@cognizant.com**.

About Cognizant

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