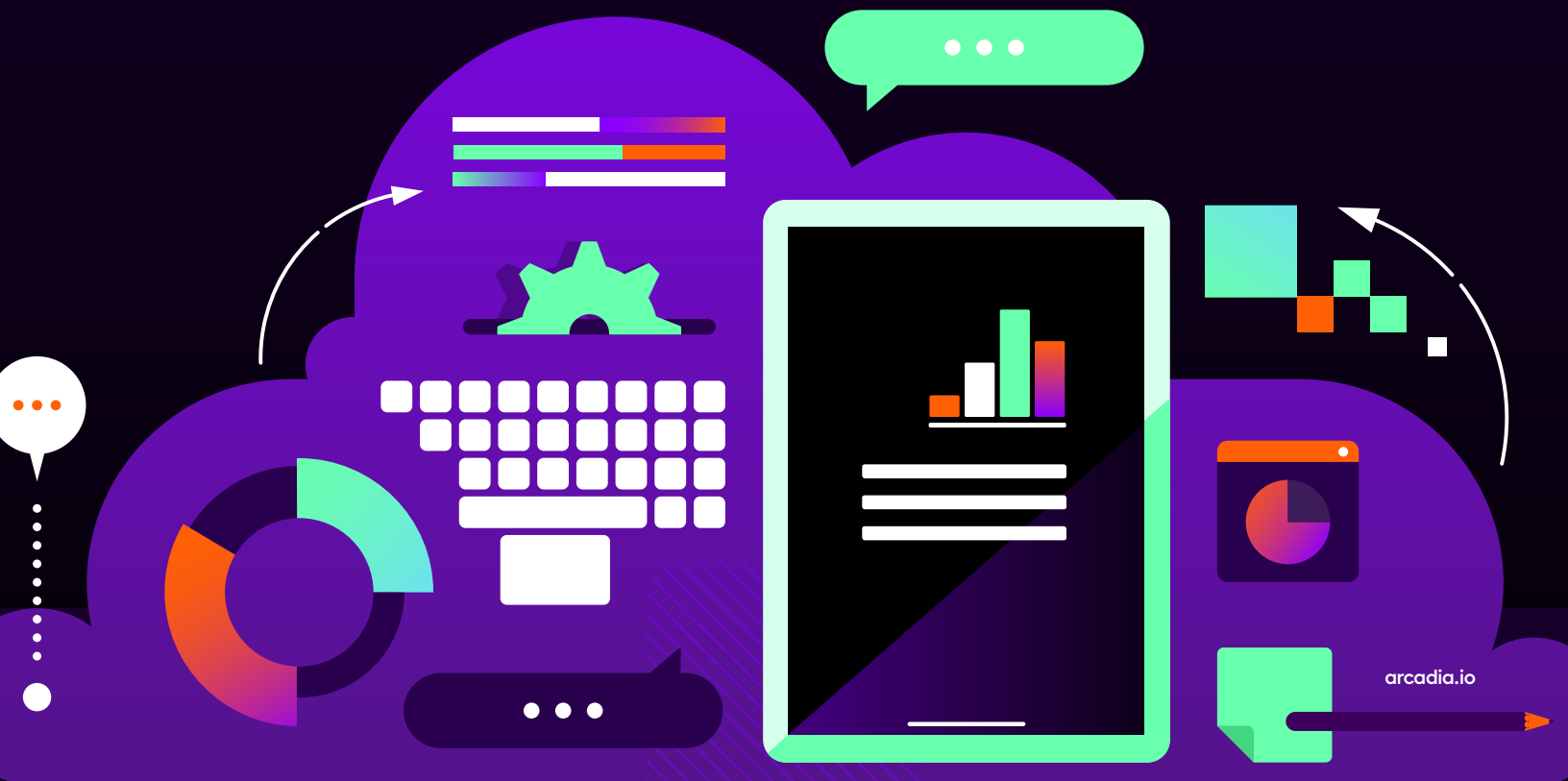
ARCADIA®

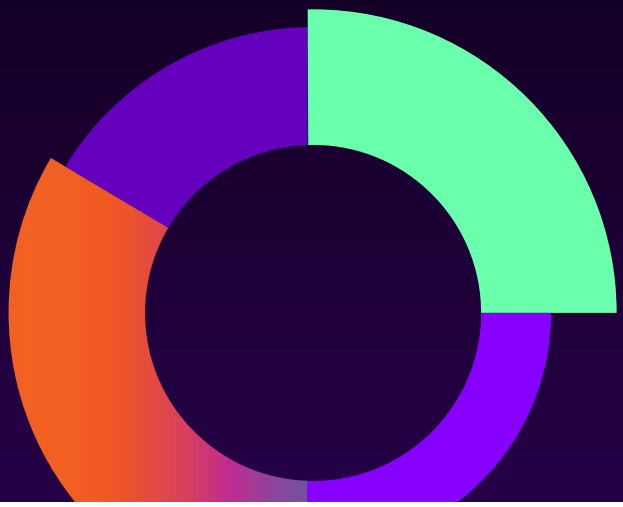
The Harris Poll

REPORT

The Healthcare CIO's Role in the Age of AI



Introduction



In an evolving age of technological innovation, we partnered with The Harris Poll to better understand the perceptions of healthcare IT senior leaders and decision-makers around health analytics platforms and the emergence of AI.

Read on to discover the transformative potential and pressing challenges of AI in healthcare, uncover the key priorities of industry leaders, and explore how CIOs are evolving to become strategic visionaries.

Insights from the research

Among others, the research sought to uncover:

INSIGHTS

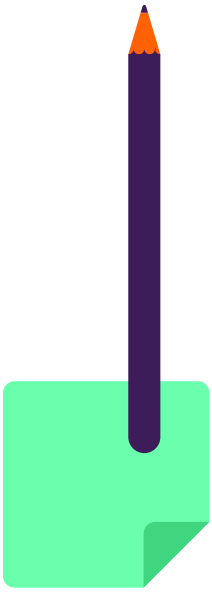
The ways in which the CIO role is evolving and the ways in which it is becoming more strategic within the organization.

The extent to which CIOs appreciate that a strong data foundation is critical to AI applications.

The primary challenges that organizations face in implementing AI solutions and adoption of those solutions.

A survey of your peers

This report includes insights from senior healthcare leaders and decision-makers in IT.



CRITERIA

To qualify, respondents:

- had to be 18+
- live in the US
- be employed full time in the healthcare industry
- work in a relevant healthcare setting[1] with a title of director or above in IT with involvement and influence in data analytics platforms, information systems, or software/platform integration

For brevity for the remainder of the report, we will refer to this audience as "IT decision-makers" or "leaders."

1. Relevant healthcare settings included an academic medical center, integrated delivery network, or multi-hospital system.

Key findings

The vast majority of IT decision-makers see the role of AI as very important or even vital in their organization currently, and even more so in the next five years.

They admit feeling the pressure from all sides to implement AI at their organization. Leaders largely see AI as a way to analyze large patient data sets to identify trends and create population health intervention strategies and analyze individual patient data. They express overall confidence in their organization's capabilities around AI but identify possible challenges implementing AI primarily in terms of sourcing talent and personnel experience with AI. Leaders expect to see shifts in the skills and expertise organizations are hiring for. But, they see these technological shifts as opportunities for current employees to spend less time on mundane tasks and more time on intricate skill-building.

Most CIOs are leading or influencing strategy at their organization and their level of strategic influence is only expected to grow.

However, CIOs are also heavily involved in day-to-day operations, with most leaders reporting that CIOs' roles are primarily centered around tactical execution currently, with an emphasis on the day-to-day operations rather than long-term strategic development. Further, technical teams spend most of their time on tactical tasks and as a result struggle to contribute strategically to the organization.

IT decision-makers consider tech-related business priorities among their organization's top priorities.

In regards to an enterprise data analytics platform, most leaders identify elements like robust security and governance controls, minimized latency, and real-time access to be very important elements for such a platform, and yet far fewer report that their current platform supports these elements. While leaders overwhelmingly agree that organizations that effectively harness data are better equipped to remain competitive and resilient, they recognize that communication between IT teams and clinical staff is often the biggest hurdle in implementing new tech.

The need for health analytics platforms

In the current healthcare environment, IT decision-makers consider tech-related business priorities among their organization's top priorities (84%) — namely, establishing an enterprise approach to data and data analytics (44%), augmenting decision-making about patient care with AI (41%), and simplifying the organization's technical ecosystem (32%). Improving the overall patient experience is also a high priority for these leaders (40% consider it a top priority), such as through improving patient outcomes (35%) and patient engagement and care (29%).

These priorities have a common thread of the need for technological advancement to properly address priorities for organizations and patients. Further, over 8 in 10 IT decision-makers (83%) overwhelmingly agree that organizations that effectively harness data are better equipped to remain competitive and resilient in the face of evolving financial and digital transformation forces.

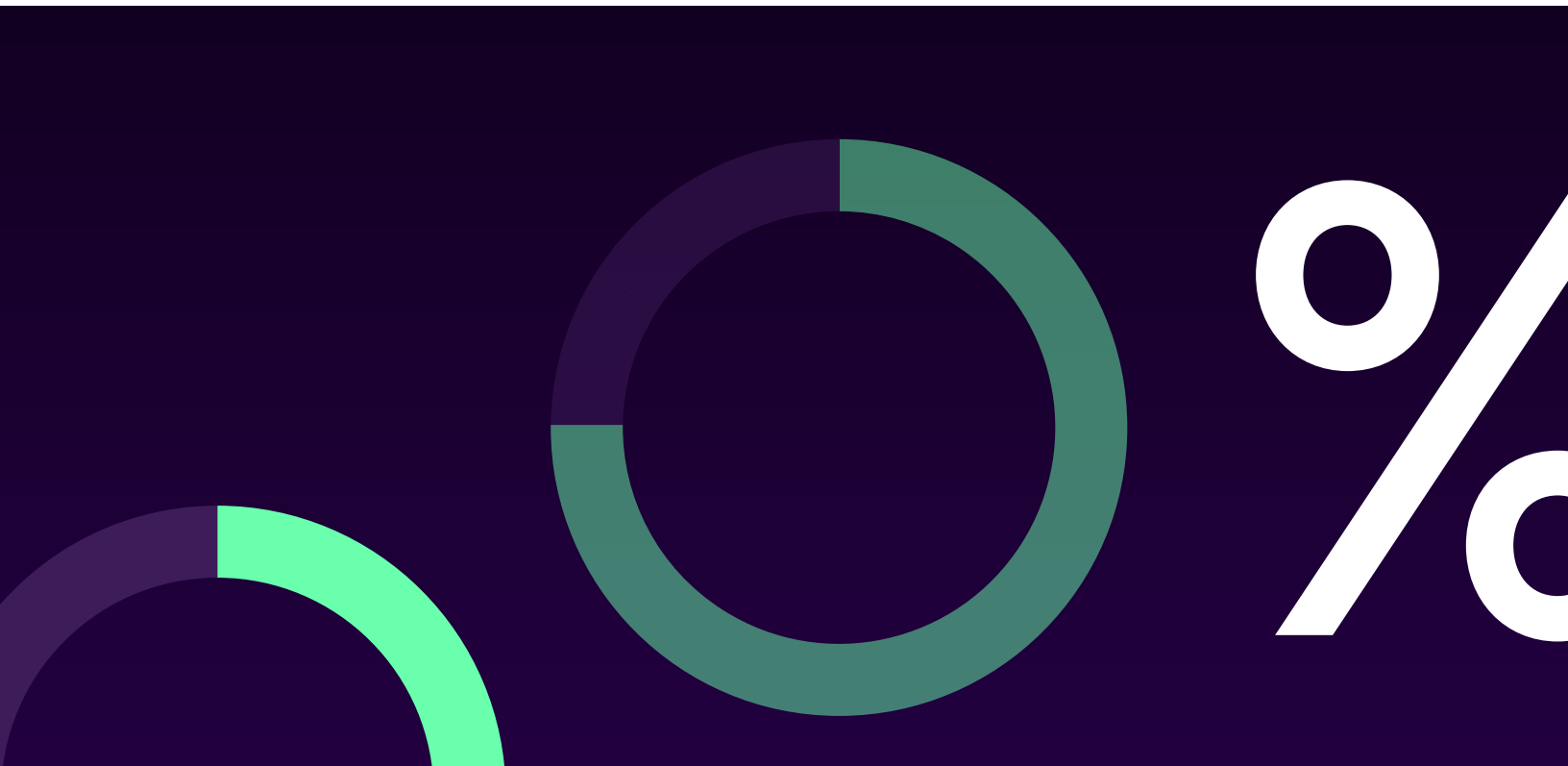
All IT decision-makers say they have integrated some application/technology with a data analytics platform, primarily those focused on risk and quality management (70%), patient engagement (58%), and business intelligence (56%). Around half of these leaders also report that they have integrated an application/technology related to care management (53%) and population health management (43%) with their data analytics platform.

In regards to an enterprise data analytics platform, 3 out of 4 leaders (75%) find robust security and governance controls to be a very important element for such a platform. Slightly more than half find minimized latency (57%), real time access to crucial data health indicators (56%), the ability to support AI/machine learning (53%), and enhanced connectivity support for directional streaming and/or mirroring between cloud environments (53%) to be very important in an enterprise health analytics platform.

Interestingly, only around half or less of IT decision makers say that their current data analytics platform supports these important elements — 49% say their platform supports robust security and governance controls, 41% say the same for minimized latency, 50% for real-time access to crucial data health indicators, 48% for the ability to support AI or machine learning, and 36% for enhanced connectivity support for directional streaming and/or mirroring between cloud environments.

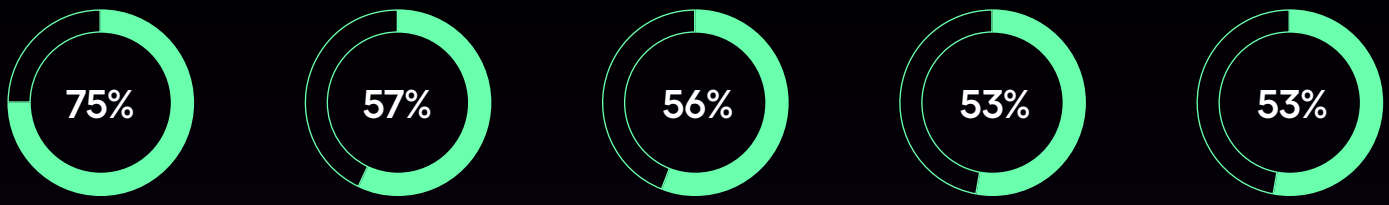
Effective communication and staff readiness are key to adoption. Though the implementation of applications and tech with a data analytics platform is widespread, nearly three-quarters (72%) say that a lack of effective communication between healthcare IT teams and clinical staff hinders successful implementation/utilization of new tech and two-fifths (40%) say that the clinical staff at their organization is not equipped to make the best use of data analytics. While nearly all (99%) say that their current health analytics platform is effective, just over half (54%) say their platform is very effective.

> Our findings reveal a strong consensus among healthcare CIOs on the need for a solid data foundation to fully leverage AI's capabilities. By adopting a platform that solves the challenges of data integration and analytics at scale, healthcare organizations can improve patient care and operational efficiency while advancing strategic capabilities.
>
> — Michael Meucci, President and CEO, Arcadia



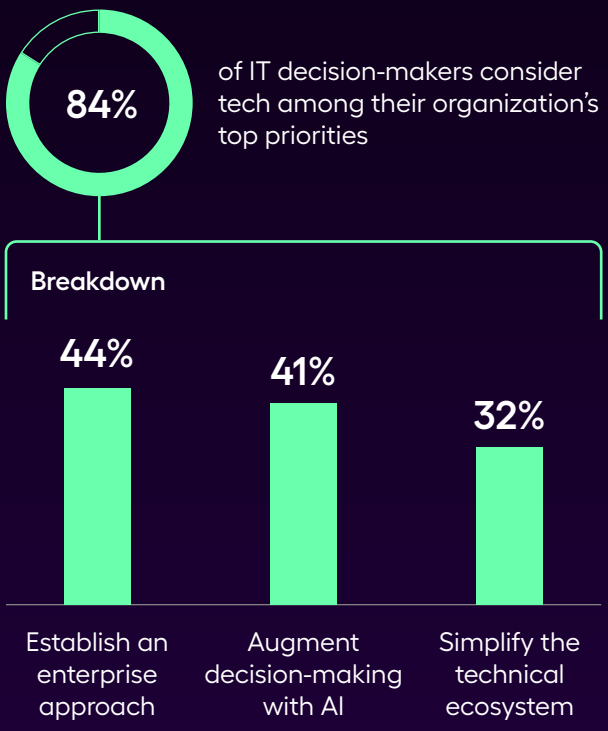
Essential capabilities

Percentage of leaders who find each capability to be very important to a data analytics platform

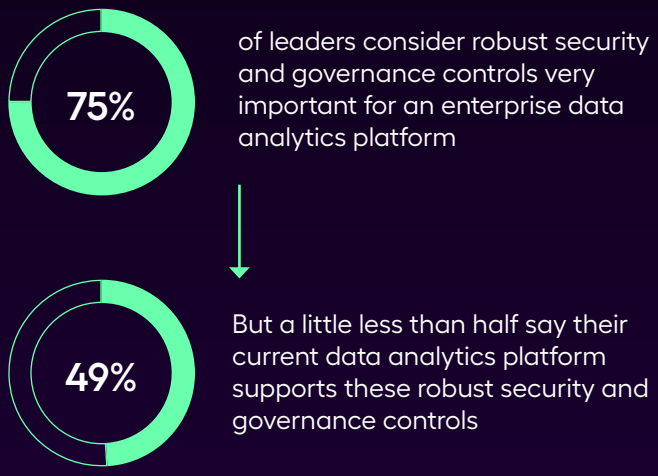


Tech and agility are vital

Prioritization of tech advancements



Effectiveness and support of data analytics platform



The evolving role of health system CIOs

Many IT decision-makers recognize the importance of the CIO's role in both implementing and setting strategy around health system technology solutions that enhance business processes. Nearly 2 in 3 leaders (65%) say that the procurement of data analytics platforms at their organization is led by the office of the CIO, leaving more than one-third of leaders (35%) who say that business partners in their organizations lead the procurement process.

Most CIOs are leading or influencing strategy at their organization and this is expected to grow. Nearly 9 in 10 (87%) would describe the current role of the CIO at their organization as either a strategy influencer[2] (47%) or a strategy leader[3] (40%), emphasizing their heavy involvement in setting, refining and executing business strategy, whether set by themselves or others. Only 13% believe the CIO to be a strategy implementer only and uninvolved in strategy setting. In fact, almost 6 in 10 (58%) believe that the role of their CIO in the next five years will evolve into that of a strategy leader.

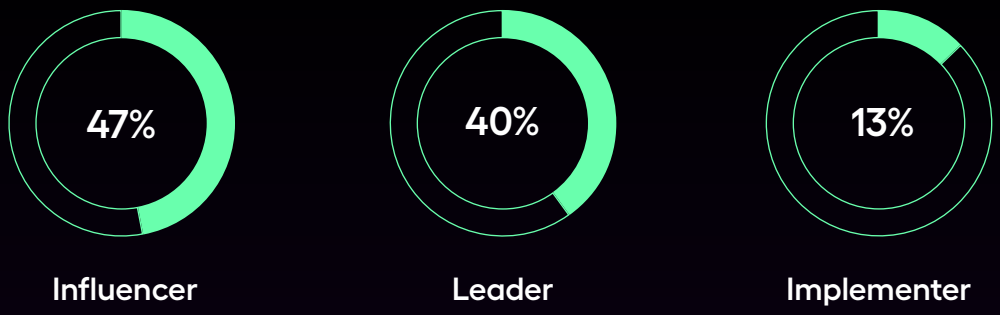
Yet, many CIOs are involved in day-to-day operations. While the role of CIO may be seen as more strategic, many IT decision-makers (58%) feel that CIOs are primarily centered around tactical execution currently, with an emphasis on the day-to-day operations rather than long-term strategic development. Almost two-thirds (65%) also agree that technical teams are overwhelmed with addressing the tactical "ticket taking" and struggle to contribute strategically to an organization. However, for the CIO to be able to be a strategic leader in setting business strategy, leaders believe that the majority of their time should be spent developing (41%) and implementing strategy (34%), rather than addressing tactical issues/ day-to-day problem solving (25%).

> Healthcare leaders are thoughtfully preparing to harness the full value of AI in care delivery reform. As safe, secure data sharing scales in healthcare, technology leaders are prioritizing data platforms that can organize fragmented patient records into clinically relevant insights at each step of a patient's journey.
>
> — Aneesh Chopra, Chief Strategy Officer, Arcadia

2. A strategy influencer is defined as the CIO acting as an important partner in refining and executing business strategy set by others.
3. A strategy leader is defined as the CIO acting as a key leader in setting business strategy.

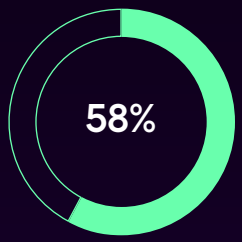
The strategic role of the CIO

Most CIOs describe the current role of the CIO at their organization as a strategy influencer, leader, or implementer:



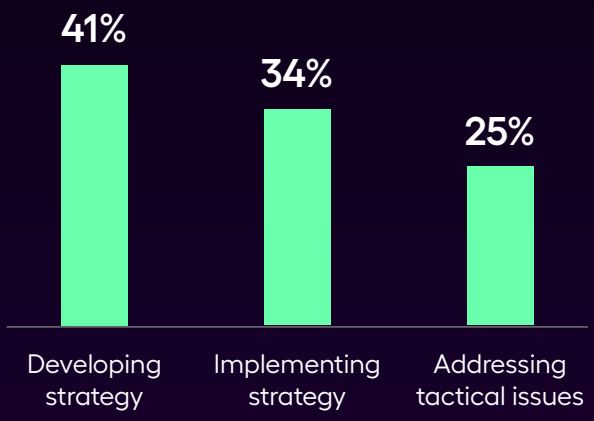
Tactical execution vs. strategic development

While the role of CIO may be seen as more strategic...



IT decision-makers feel that CIOs are currently centered around tactical execution

...leaders believe that the majority of their time would be better spent:



New technology to further strategic goals

As the CIO role expands, so too does the use of technology to support business processes. For many IT decision-makers, they are feeling the pressure from all sides to implement AI at their organization: from data and analytics teams (82%), other IT and tech teams (78%) and from the top by executive leadership (73%). That pressure perhaps is because over 8 in 10 (82%) see the role of AI as very important or even vital in their organization currently, and almost all (97%) think that it will have an important role in the next five years.

Leaders largely see AI as a way to analyze large patient data sets to identify trends and create population health intervention strategies (63%) and analyze individual patient data to identify opportunities to improve specific patient outcomes (58%). Around half see AI being used to optimize management and analysis of electronic records (47%).

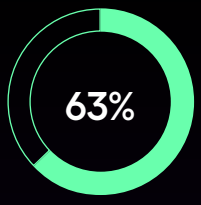
Leaders express confidence in organizational capabilities around AI. Though leaders may be feeling pressure to implement AI, they are also confident in their organization's ability to successfully implement and adopt AI solutions (96%), with over half saying that they are very confident (54%). IT decision-makers cite that this confidence is primarily driven by executive leadership support/alignment (57%), robust and well-maintained data infrastructure (56%) and skilled/trained professionals (55%).

Though decision makers report general confidence with AI, they are not blind to possible challenges. The three biggest challenges IT decision-makers believe their company may face in implementing/adopting health AI is the lack of the right talent to facilitate adoption of AI (40%), limited organizational experience with AI (39%), and concerns with ethics, privacy, and/or security (35%).

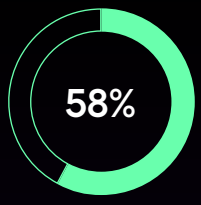
As AI changes the way business is done, staffing will likely change too. Many IT decision-makers believe that the adoption of AI will shift employees' skills by empowering them to focus on more intricate dimensions of their job responsibilities (93%) and drive workforce satisfaction by alleviating burdens from mundane tasks (96%). IT decision-makers think there will be an increased demand for candidates who can contribute to data-driven decision-making (71%), for roles related to data analysis, machine learning and system integration (66%), and for training and support roles to facilitate the transition for healthcare staff (59%). These leaders also believe that there will be a decrease in hiring domain experts in IT for candidates with background in prompting AI in more useful ways (39%).

Benefits and challenges of AI

Leaders largely see AI as a way to:

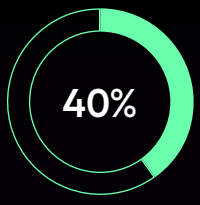


Identify trends and create population health strategies

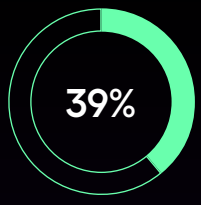


Identify opportunities to improve specific patient outcomes

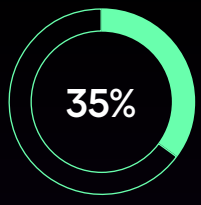
The 3 biggest challenges companies face in adopting AI



Lack of talent to facilitate adoption



Limited experience



Ethics, privacy, and/or security

Impact of AI on business staffing

↑ Shift in employee skills

Increase workforce satisfaction[1]

Focus on intricate job responsibilities

↑ Increased demand for skills

Data-driven decision-making

Data analysis, machine learning, system integration

Training and support roles for healthcare staff

↓ Decreased demand

Fewer domain experts in IT[2]

1. By reducing mundane tasks
2. More emphasis on AI prompting skills

> Regardless of the changes or worries, one thing remains clear to decision makers — organizations that effectively leverage AI gain a competitive edge over those that do not (96% agree).

Next steps

Transformative healthcare leaders know that data is diverse as the people it serves. That's why they leverage next-generation technology that accelerates outcomes, amplifies impact, and delivers rapid insights to thousands of users across their organizations.

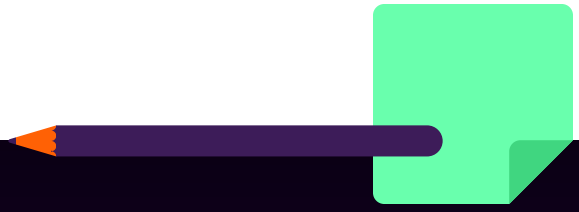
Visit **arcadia.io/platform** to see how the data lakehouse for health can help your teams unify data sources, power AI models, and make better informed decisions — all on one platform.

Methodology

This survey was conducted online within the United States by The Harris Poll on behalf of Arcadia between January 11–25, 2024 among 102 senior healthcare leaders or decision makers in IT.

All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate, including sampling error, coverage error, error associated with nonresponse, error associated with question wording and response options, and post-survey weighting and adjustments. Therefore, Harris Poll avoids the words "margin of error" as they are misleading. All that can be calculated are different possible sampling errors with different probabilities for pure, unweighted, random samples with 100% response rates.

These are only theoretical because no published polls come close to this ideal. Respondents for this survey were selected from among those who have agreed to participate in online surveys.



About Arcadia

Arcadia helps payers and providers put their data to work so they can transform healthcare. We do that through an interoperable data platform that uses advanced analytics to shape strategies, inform decisions, and facilitate actions. In turn, payers and providers can focus on what matters most — whether that's patient outcomes, operational efficiencies, or financial performance. We're trusted by the institutions driving the future of healthcare, including Southwestern Health Resources, Tandigm, Castell, Rush Health, and Beth Israel Lahey Health. To learn how Arcadia is shaping the future of healthcare with innovative solutions that deliver data-driven insights, visit **arcadia.io**.