

HFS

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# Enable cloud-native and AI-powered healthcare digital platforms to manage rising costs, risks and demand

JULY 2021



# Introduction

## Healthcare digital platforms emerge as the “have-to-have” strategy for over 90% of C-level (CXO) health plan executives.

A “healthcare digital platform” is the integration of applications and emerging technologies to provide a tailored healthcare solution that drives business outcomes—a significant modern and accelerated approach to disintermediate legacy core administration processing systems (CAPS).

HFS Research, in partnership with Infosys, surveyed 100 CXOs at health plans across the US to learn about their key business objectives and the fit for a “healthcare digital platform.” Our survey revealed several key insights:

- The survey respondents listed reduction of administrative costs, better risk and compliance management, and supporting increasing demand as the top three business objectives that a healthcare digital platform can address.
- As such, most healthcare CXOs believe that IoT, blockchain, and AI will play a significant role in driving the desired business outcomes from digital platforms. Cloud emerged as the “have-to-have” technology to deliver the desired business outcomes.
- Despite the business imperatives and enthusiasm for adoption, fewer than 50% of the digital initiatives have scaled.
- While there are several improvement opportunities across the health plan value chain, tech debt, quantifying value, and cultural change management are the key barriers to adopting digital platforms.
- Recognizing that transformation will require investments, there is an opportunity to disrupt legacy health plan economics over the long term. In the meantime, pay-as-you-go and business-outcome-driven KPIs are considered the most important features for a digital platform to drive adoption and acceptance.

# Digital platform strategy has become an urgent priority for meeting business objectives

Health plans will continue to experience increasing pressure to reduce premiums and the cost of care while enhancing member experience to maximize reimbursements (STAR) and improve retention rates. There are further complications driven by other market dynamics, including rental provider networks, direct to provider contracts, interoperability, price transparency, and changing competitive landscape to list a few.

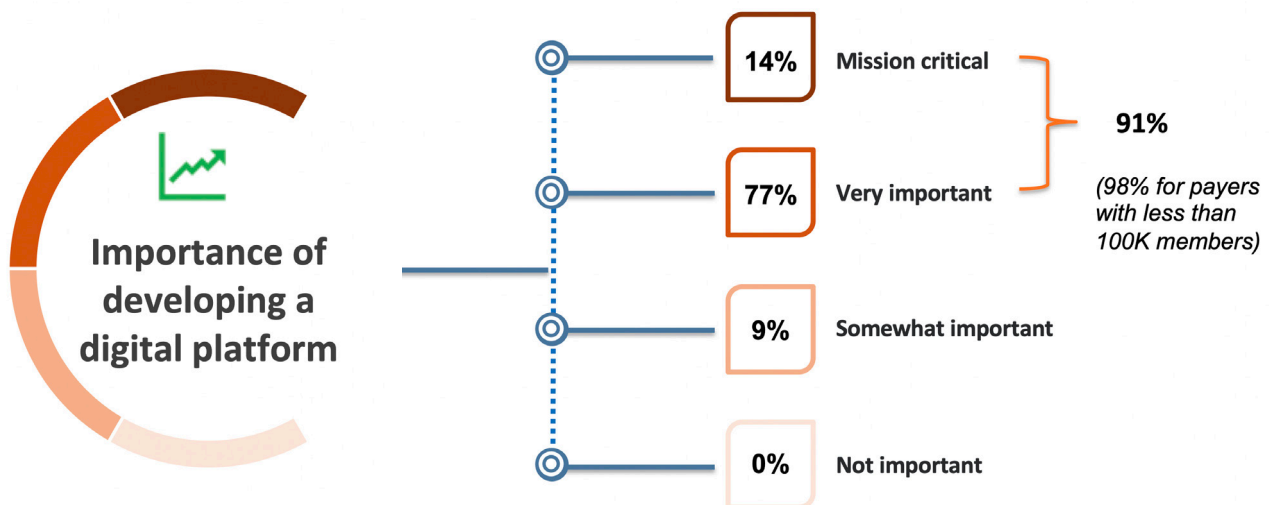
It's no surprise then that, over 90% of the health plan CXO's surveyed indicated that a digital platform strategy is mission-critical or very important (see Exhibit 1) for meeting their business objectives, indicating urgency and a willingness to support the change. Now is the time to execute the change.

## Exhibit 1: 90% of C-level executives believe a digital platform strategy is very important for meeting their business objectives

### How important is it to develop a digital platform strategy to meet your business objectives?

(A healthcare digital platform is the integration of applications and emerging technologies to provide a tailored healthcare solution that drives business outcomes)

Percentage of respondents



Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021

# Reducing administrative costs, managing risks and compliance, and supporting increasing demand are the top three objectives for deploying digital platforms

Health plans face increasing competition as employers are increasingly self-insuring (approximately 80% of employers with more than 1,000 employees), provider-sponsored plans are evolving, and digital native players are nipping at their heels.

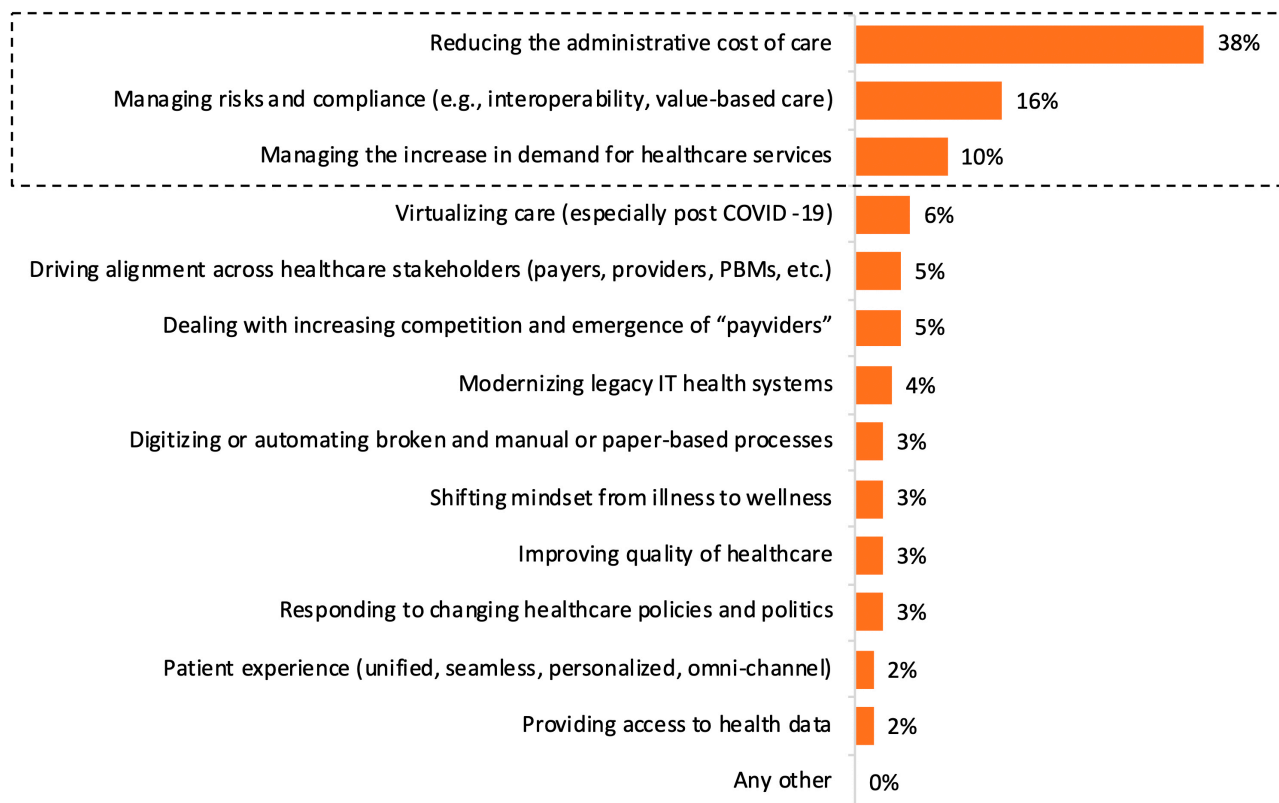
In the context of that competitive landscape, CXO respondents (see Exhibit 2) identified the top three objectives that have a direct economic impact on health plans and can be addressed by leveraging a cloud-enabled AI-powered digital platform using an economically prudent approach.

- The administrative costs (non-clinical per member, per month [PMPM]) account for 10% to 15% of every premium dollar generated. Any reduction in those costs can aid in investments for the future.
- Similarly, it is critical for managing risks and compliance at the regulatory level (HIPAA, HITECH) and industry level (NCQA, HITRUST) and for meeting client-specific requirements (value-based care). A lack of compliance typically results in financial penalties or other types of sanctions that could impact the bottom line and cause reputational damage.

## Exhibit 2: Digital platforms are key to managing administrative costs, risks and compliance, and managing increasing demand

### What are the key objectives (goals) for deploying digital platforms?

Percentage of respondents



Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021

“We expect increased reliance on data analytics to help with operations, clinical delivery, and patient experience.”

Chief Digital Officer with a large health enterprise

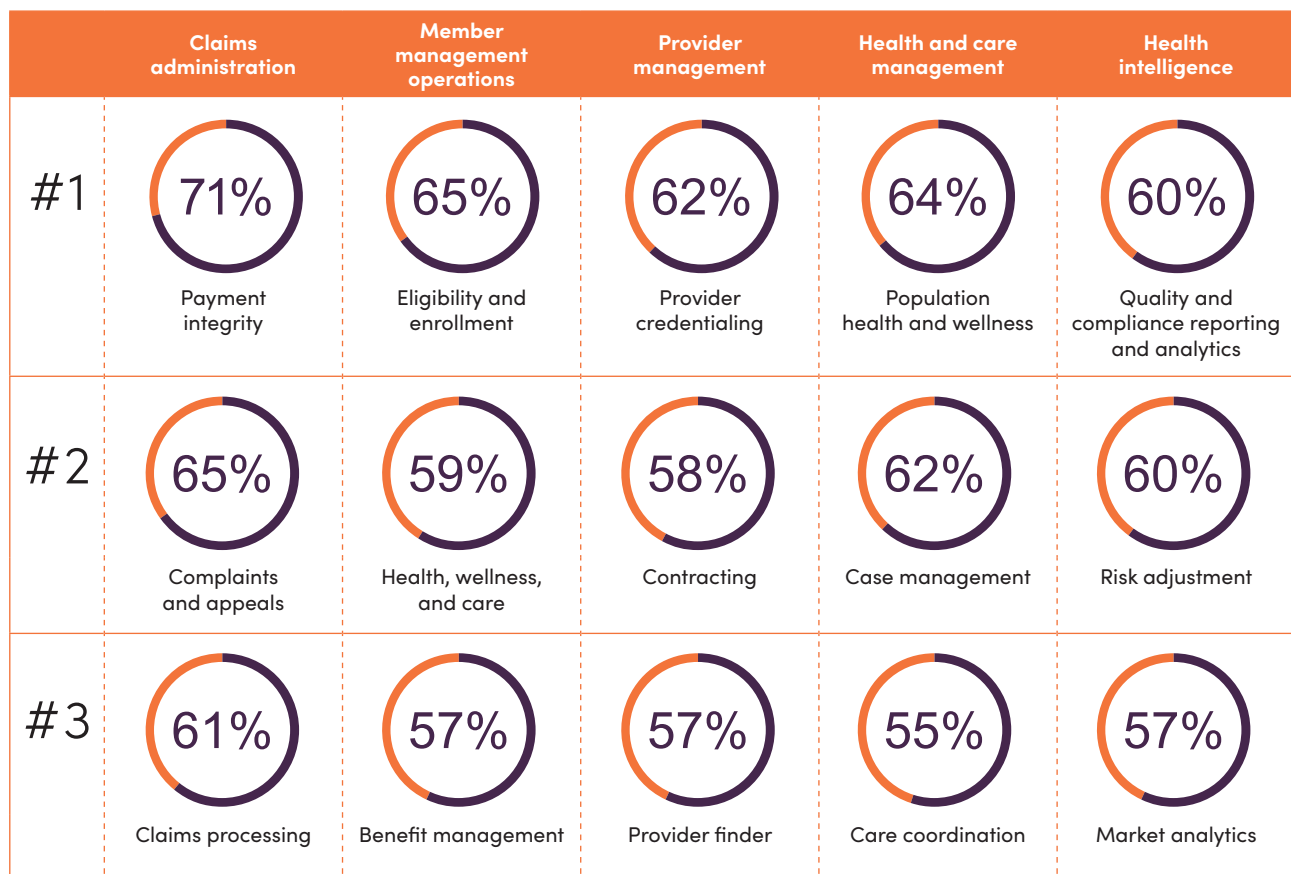
- In 2020, 16.5% of the growing US population was over the age of 65. This senior cohort, a significant driver of demand, will grow to 20% of the total population over the next decade, materially changing the demand profile.

In addition, over 60% of respondents indicated significant improvement opportunities across the healthcare payer value chain, including payment integrity, complaints, appeals, eligibility, and enrollment (see Exhibit 3). While transformation is challenging, health plans have ample low-hanging fruit for the right picker!

### Exhibit 3: There are significant improvement opportunities across the healthcare payer value chain

#### Which of the following processes in your organization need significant improvements?

Percentage of respondents



Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021



## Despite the promise, fewer than half of digital technology initiatives have scaled

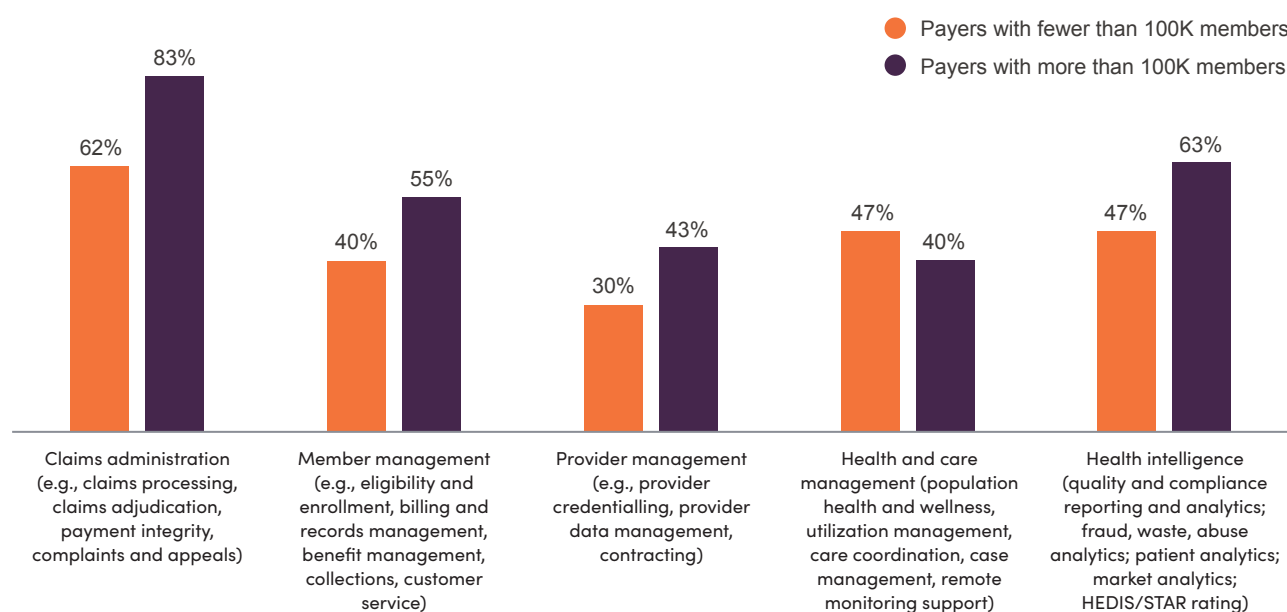
Health plans typically maintain multiple legacy CAPS as a consequence of consolidations and acquisitions, many of which are several decades old. These platforms are expensive to maintain and are perennially in catch-up mode to build the capabilities necessary to support the business, reflected in the perception of their current CAPS providers across the value chain. The satisfaction levels dip drastically with the size of the health plan (see Exhibit 4).

While the promise of digital platforms remains high, the execution suggests less than half of the initiatives have achieved scale. Respondents indicated that across claims, member and provider management, care management, and analytics, approximately 20% of initiatives were being piloted. Fifty percent (50%) of initiatives had progressed toward implementation for claims, care, and analytics, but only analytics initiatives appear to be heading toward enterprise-scale, as indicated by 46% of respondents.

### Exhibit 4: Relative satisfaction with current CAPS is significantly lower for small healthcare payers

#### How satisfied are you with your current core administrative processing system (CAPS)?

% respondents who indicated "very satisfied"



Sample set: 100 C-level healthcare payer executives in US

Source: HFS Research in partnership with Infosys, 2021

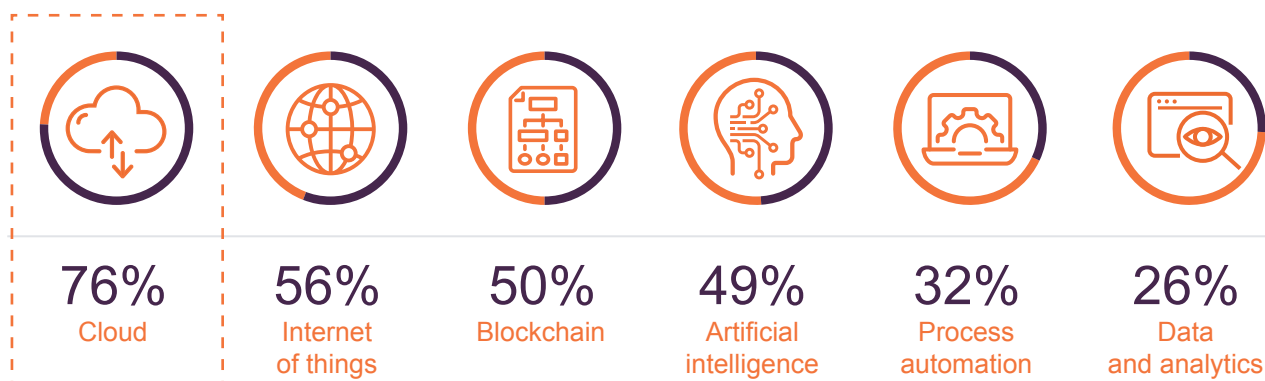
The top three challenges in adopting digital platforms include sunk investment costs in legacy capabilities, barriers to developing business cases to prove value, and changing the organizational culture to adopt new ways of addressing business imperatives, often biased toward traditional processes.

Still, cloud is emerging as the have-to-have technology (see Exhibit 5) for delivering desired business outcomes. A majority of CXO's believe that emerging technologies such as the internet of things (IoT), blockchain, and artificial intelligence (AI) that have delivered in other industries will play a significant role in driving the desired impact from digital platforms.

## Exhibit 5: Cloud is emerging as the “have-to-have” technology to deliver desired business outcomes

**In your experience, what are the “have-to-have” emerging technologies that must be incorporated on a digital platform to deliver desired business outcomes?**

Percentage of respondents



Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021

# This is an opportunity to disrupt the legacy payer economics, but it will require imagination and technology enablement

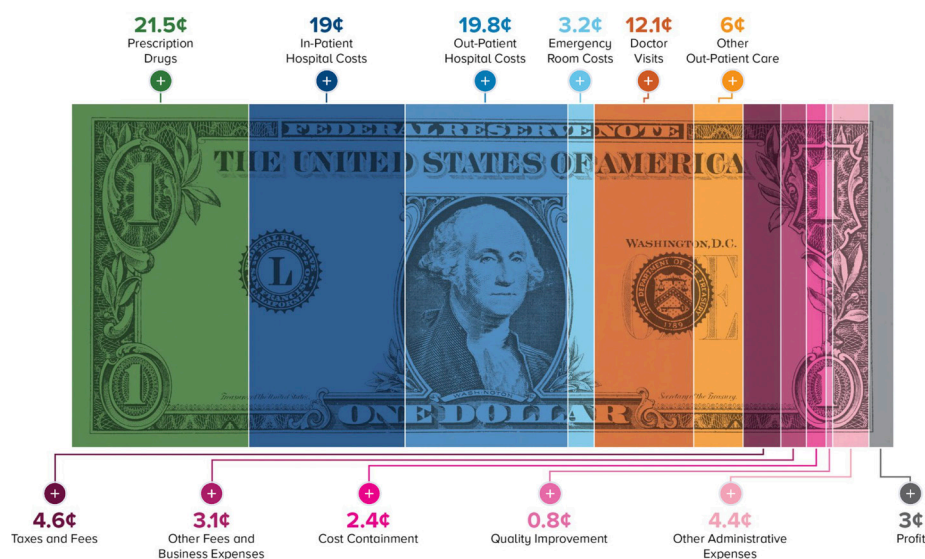
According to America's Health Insurance Plans (AHIP), approximately 85% of every \$1 in premium is typically consumed across member and consumer healthcare needs, while 15% is utilized for technology, operations, marketing, and profit (see Exhibit 6). This structure fundamentally inhibits capital-intense investments, irrespective of the value proposition.

Our analysis suggests that for a health plan that sells a fully underwritten benchmark plan for a single coverage of \$452/month, the plan has \$48 in non-clinical PMPM for technology, operations, marketing, and profits. While the \$48 PMPM may appear sufficient, the reality is that health plans remain budget pressured for their operating expenses,

always looking to reduce them. However, they have reached the limits of cost-cutting and now need to invest to optimize for opportunities.

The non-clinical PMPM is further broken up across the health plan value chain (see Exhibit 7) and shows a secular distribution of opportunities to optimize. These include new customer acquisition member leakage, new member enrollment cycle time and accuracy, claims denial rate and settlement cycle time, and more. These opportunities are all legacy in nature, suggesting that current CAPS capabilities are not able to address them in any meaningful way, making a case for the adoption of digital platform capabilities even stronger.

## Exhibit 6: The distribution of a premium dollar has to be reconsidered to delivered enhanced value



Source: America's Health Insurance Plans (AHIP), November 12, 2020



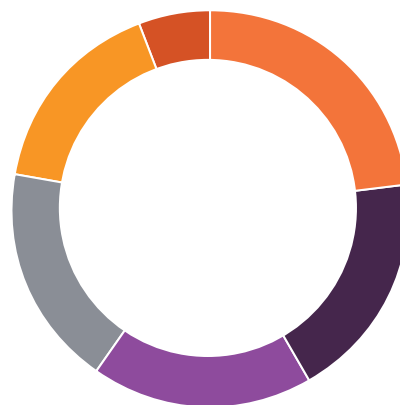
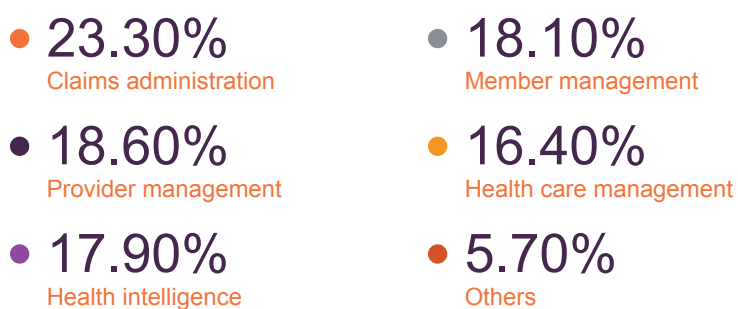
“In this age, the opportunity is to think of enabling technologies as part of healthcare delivery vs. the traditional paradigm that focuses on claims payments.”

Senior executive at a large health plan

### Exhibit 7: Current PMPM administrative costs by value chain may have opportunities to support new investments

#### What are your current PMPM administration costs by value chain?

Average across respondents

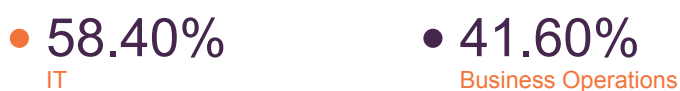


Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021

Close to 42% of the non-clinical PMPM is attributed to business operations (see Exhibit 8) while 58.4% to IT. This suggests that despite the higher IT costs, the

business outcomes are far from optimal, reenforcing digital transformation and up-tooling.

### Exhibit 8: ~60% of the non-clinical PMPM is attributed to IT



Sample set: 100 C-level healthcare payer executives in US  
Source: HFS Research in partnership with Infosys, 2021

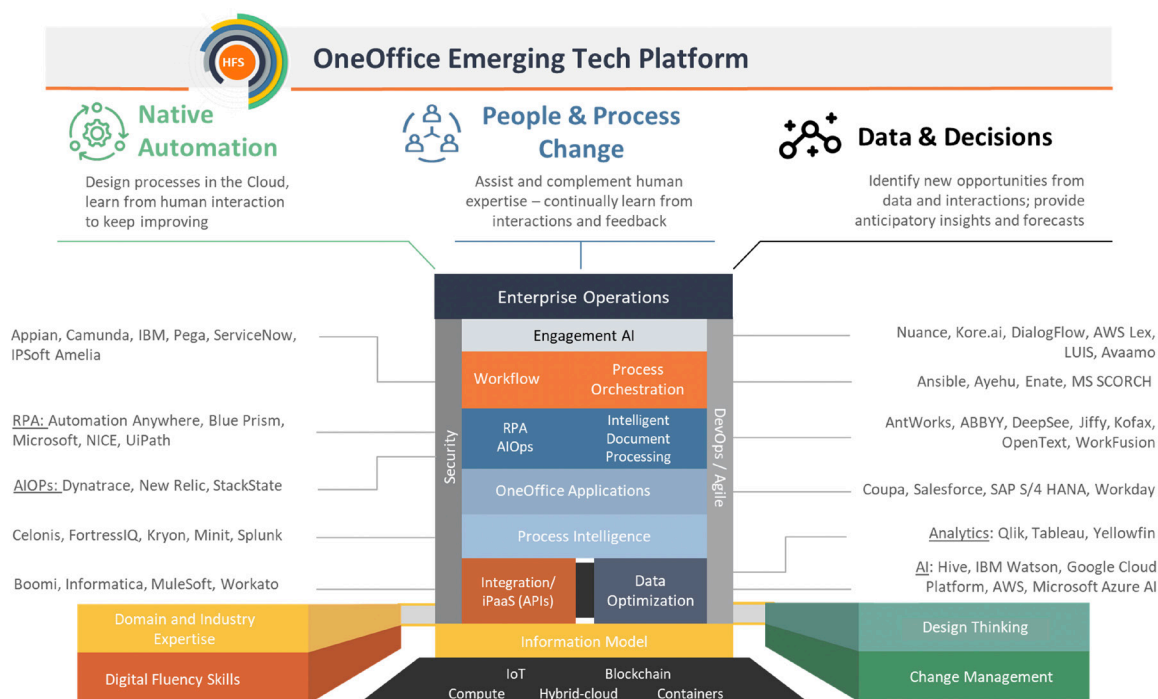
While traditionally CAPS has been supported through the non-clinical PMPM bucket, the digital platform capabilities will align with OneOffice, a seamless intersection of people processes and technologies.

This alignment will drive collaboration cross-functionally among enterprise operations, powered by an integrated stack of emerging tech that complements the core, natively automates processes, enables people, and powers the

decisions—breaking down the front-to-back legacy silos to create the only “office” that matters: OneOffice (see Exhibit 9).

This construct will allow health plans to leverage the digital platform to be part of the clinical PMPM distribution as well, freeing up dollars to be better utilized toward health plan objectives.

## Exhibit 9: HFS OneOffice emerging-tech platform to drive seamless interactions across an enterprise



Source: HFS Research, 2021, Examples are representative

## The pay-as-you-go model will support economic scaling over the need to make large capital investments

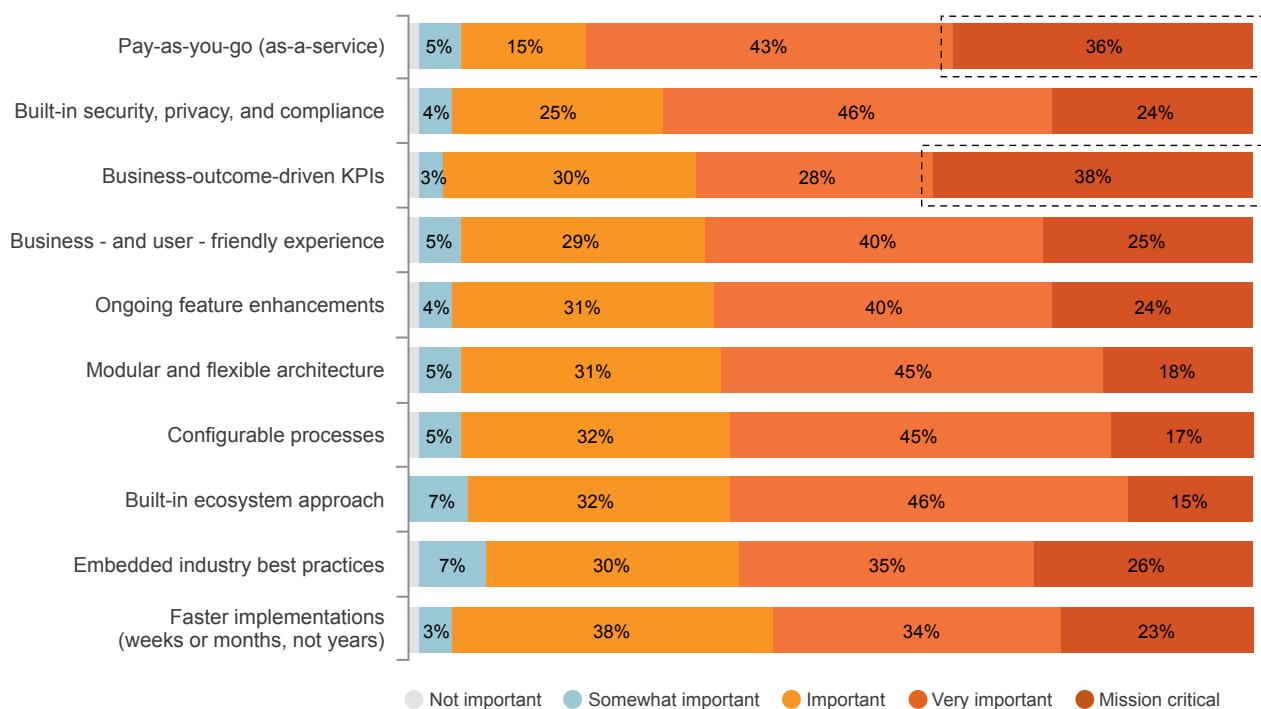
Despite the capabilities of the digital platform, it is likely health plans will still struggle to fund the modernization and transformation that will be enabled. To address that, a pay-as-you-go model appears to be the solution (see Exhibit 10). This economic model will not require intensive capital investments; rather, it will optimize existing PMPM spend to replace legacy CAPS for more capabilities and a lower total cost of ownership.

Creative procurement paradigms can include risk-reward to enable digital platforms to appropriately incentivize both the health plan and the digital platform service providers to drive toward critical success metrics.

### Exhibit 10: Pay-as-you-go and business-outcome-driven KPIs are the most important features for a digital platform

#### What is the importance of features in a best-in-class engagement model when implementing digital platforms or emerging technologies

Percentage of respondents



Sample set: 100 C-level healthcare payer executives in US

Source: HFS Research in partnership with Infosys, 2021

## **The Bottom Line:** Modern digital platforms support setup options that will intrinsically mitigate business risks while facilitating a faster and cost-optimal implementation that allows you to pay by the drink!

Health plans are primed for the adoption of an AI-powered, cloud-based “healthcare digital platform.” This healthcare digital platform will function as a core administration platform that is modular, independent, and interoperable with a pay-as-you-go economic model incorporating a risk-reward paradigm.

CAPS is the oldest form of technology enablement for health plans. Most health plans are proud owners of thirty- to forty-year-old mainframe-based CAPS in addition to other types of CAPS across the technology stack.

Given the maturity and proliferation of AI and the urgency in healthcare to upend outcomes, health plans are in an ideal place to re-platform. While re-platforming may elicit visions of multi-year multi-million investments and invasive migrations, modern digital platforms support non-data migration implementations to mitigate disruption and risk while supporting custom speed to market and economics benefiting from decades of implementation lessons.

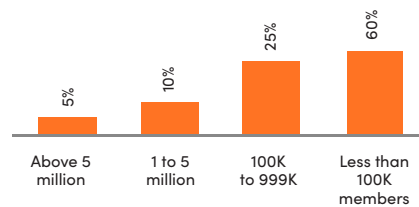
# Demographics: During Q1 2021, HFS conducted a survey among 100 CXOs at health plans across the US to learn about their key business objectives and the fit for a "healthcare digital platform.

Role of organization in the healthcare ecosystem

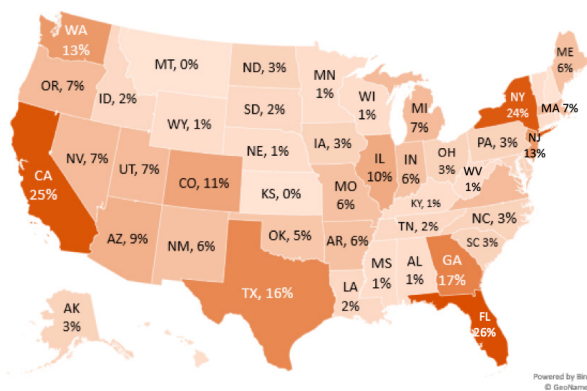


- **80.00%**  
Healthcare insurer/payer
- **20.00%**  
20% "Payvider" or health systems with their own health plan or partner closely with an existing payer

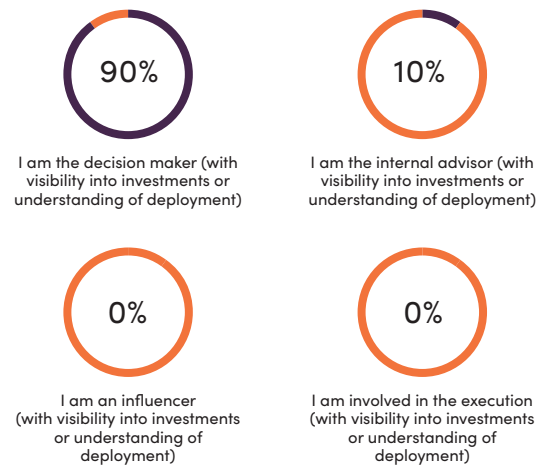
Member Base



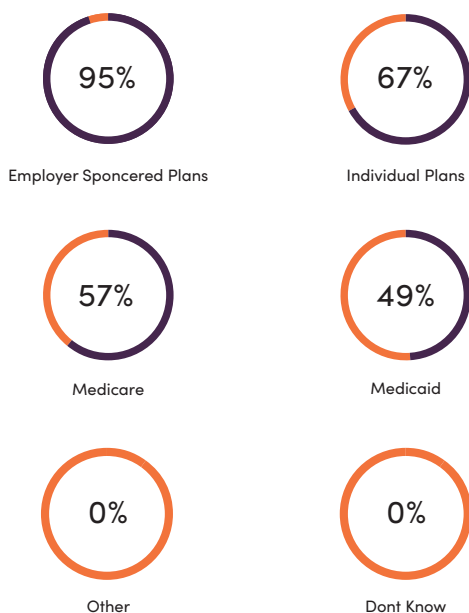
Respondents across US States



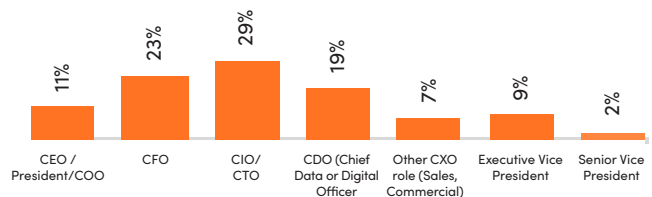
Roles played in terms of advanced technology-related investments



Types of insurance used for member portfolio



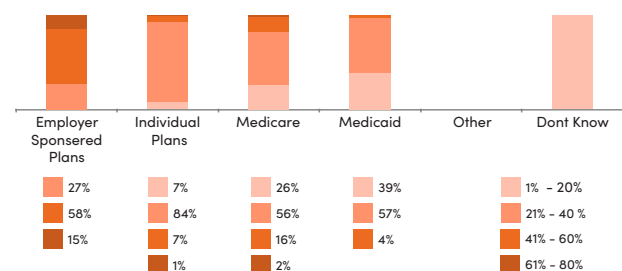
Executive Hierarchy



Focus of current roles



Types of insurance used by type of insurance





## HFS Research authors



### Saurabh Gupta

Saurabh Gupta is the President of Research and Business Operations at HFS. He oversees HFS' global research function managing the international team of analysts and operations across the US, Europe, and Asia-Pac. He works closely with the CEO to set the HFS vision and ensure we deliver unmatched insights, impact, and inspiration to our clients. He sets the strategic research focus and agenda for HFS Research, understanding and predicting the industry's needs and ensuring that HFS maintains its position as the strongest impact thought leader for business operations and services research. Saurabh is also HFS' lead analyst for business services such as F&A, procurement, supply chain, horizon three emerging technologies such as blockchain, and energy and utilities.



### Don Ryan

Don Ryan joined HFS Research in August 2020 as Senior Vice President of Research and Consulting. His recent role was as Director for global research and thought leadership for business and outsourcing services, digital technology, and AI deployment at KPMG LLC. Don brings a broad background in forecasting technology trends, quantifying the market impact of brand experience and customer loyalty, and analyzing the changing nature of business operating models. At HFS, Don leads large research-based advisory engagements and continues his long-standing coverage of the technology, media, and telecom vertical as well as enterprise application platforms and ecosystems.



### Rohan Kulkarni

Rohan Kulkarni leads the Healthcare and Life Sciences practice at HFS, bringing to bear his vast experience across the healthcare ecosystem. His experience includes being the Head of Healthcare Strategy at multiple Fortune 500 companies such as Xerox, Conduent, and Concentrix; Product Management executive at Highmark Health; and CIO at Versant Health. He is passionate about the Triple Aim (improving health outcomes, reducing the cost of care, and enhancing the care experience) and believes that health and healthcare is a polymathic opportunity that intersects with every industry and facet of our lives. His well-rounded experience and passion bring a practical approach to his analyst role at HFS.

# Acknowledgment

A special thanks to the Infosys team for their valuable inputs and feedback throughout the research and publication of this report.

## About Infosys

Infosys is a global leader in next-generation digital services and consulting. Infosys enables clients in 46 countries to navigate their digital transformation. With nearly four decades of experience in managing the systems and workings of global enterprises, Infosys expertly steers its clients through their digital journey. Infosys does it by enabling the enterprise with an AI-powered core that helps prioritize the execution of change. Infosys also empowers the business with agile digital at scale to deliver unprecedented levels of performance and customer delight. Infosys' always-on learning agenda drives its continuous improvement through building and transferring digital skills, expertise, and ideas from its innovation ecosystem.



**Ravi Kumar S.**

President  
Infosys

Ravi is President at Infosys. In this role, he leads the Infosys Global Services Organization across all global industry segments, driving digital transformation services, consulting services, traditional technology services, engineering services, data and analytics, cloud and infrastructure along with enterprise package applications service lines. In addition, he oversees Infosys Business Process Management (BPM) and is Chairman of the Board of Infosys BPM. He is the Chairman of the Board of Infosys Public Services and oversees the Consulting Services Subsidiary of Infosys. He regularly attends the annual meeting of the World Economic Forum Davos, actively writes about digital transformation, future of work, reskilling, talent transformation in the Harvard Business Review, Knowledge@Wharton, Forbes and other top tier publications. Ravi has a master's degree in business administration from Xavier Institute of Management, Bhubaneswar, India.



**Venky Ananth**

SVP & Head, Healthcare  
Infosys

Venky is a SVP and global head of Infosys' Healthcare Industry Vertical. In this role, he is responsible for profitable growth of Infosys' Healthcare business. His responsibility straddles Infosys Healthcare strategy, market innovation, building high performance teams and managing critical relationships with senior client executives in the Healthcare industry. He has deep understanding of Healthcare business and specializes in leveraging technology to solve business problems at scale. Venky has spent over two decades with Infosys and has broad experience spanning multiple industries and geographies. He has won a multitude of excellence awards and Gold standard awards for outstanding achievement ranging from thought leadership in the industry to client management. He holds a undergraduate degree in mechanical Engineering and a executive leadership program from Stanford graduate school of business.



**Vadiraj Guttal**

AVP & Head of  
Healthcare Platform, Infosys

Vadi is an IT Executive with 21+ years of IT experience and 14+ years of healthcare payer consulting experience, focusing on implementation and system integration of core administration platforms. In his current role as Head of Products, Platforms & Solutions, he is focusing on developing products and solutions leveraging digital, AI, and RPA to improve payer operations as well as optimizing medical costs through AI augmented care management.



# About HFS

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HFS Research introduced the world to terms such as “RPA” (Robotic Process Automation) in 2012 and more recently, the HFS OneOffice™. The HFS mission is to provide visionary insight into the major innovations impacting business operations such as Automation, Artificial Intelligence, Blockchain, Internet of Things, Digital Business Models and Smart Analytics.

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