



Seeking Competitive Advantage in Healthcare Digital Transformation

Digital transformation is a shift in how an organization's processes deliver value through technology investments. Within the healthcare industry it can take many forms, including a complete transition to paperless or all-digital formats, increased automation of processes, or the use of artificial intelligence (AI) and machine learning. Digital transformation can be used to address current problems, such as high cost of operations, as well as prepare the organization for the future by enabling increased flexibility and competitiveness. These areas of transformation are applicable to both internal operations and customer-facing functions and present an opportunity to take a customer-centric approach for certain processes. As internal staff and external customers become more technology-savvy, they begin to prefer digital applications with thoughtful user interfaces over manual processes. Ultimately, the organizations that invest in digital transformation with these users in mind will be more competitive than those that choose not to invest in digital transformation.

This paper will discuss the reasons why digital transformation is becoming increasingly more relevant and necessary in healthcare, how healthcare organizations have started leveraging innovative strategies and technologies to drive greater value, and key considerations for those beginning to plan for transformation.

Why focus on digital transformation now?

Now more than ever, healthcare organizations are paying attention to digital transformation for multiple reasons. First, there are untapped opportunities to lower cost and increase revenue. For example, the large payer organizations that have embraced digital transformation have experienced up to 40 percent savings in administrative and medical costs, and up to 30 percent increases in revenue.ⁱ

Second, there are industry disruptors using digital transformation to remake and restructure the industry and gain market share.ⁱ These disruptors, such as Haven, Oscar Health, and ZocDoc, are well-funded and often hail from the technology industry. Such organizations already have the technology, supply chain, customer base and accompanying data to change the basic delivery model for pharmaceuticals, home health, medical devices, and other aspects of the healthcare industry.ⁱⁱ These

disruptors create business pressures for industry incumbents to innovate in order to maintain the status quo at a minimum or, more ideally, be part of the movement reshaping the healthcare industry.

Finally, adding to the urgency around digital transformation is the continued presence and increasing stringency of regulatory pressures. Federal and state regulations are increasingly mandating interoperability and using outcomes- or quality-based requirements to encourage value-based care. However, legacy systems and manual processes often do not offer the level of interoperability or sophistication to readily meet these requirements. Since these regulations emphasize a shift from fee-for-service care to value-based care, healthcare organizations are experiencing pressure to change their models to maintain profitability levels. As such, industry leaders are turning to digital transformation to derive increased efficiency and value.

Trends in digital transformation

The healthcare industry has historically been slower to invest in digital transformation, in part because of the significant front-end expense of such investments and the differing viewpoints and needs of internal stakeholders. Other industries have moved further down the path of digital transformation, leveraging web technologies, cloud-based services, mobile internet technologies, big data, AI, and other innovations to realize value or keep up with competitors. JP Morgan Chase's deep commitment to digital transformation, for example, has resulted in a 19-point increase in net promoter score, a 10-point increase in customer retention, and recognition as "the number one global large bank" in Interbrand's Best Global Brands.ⁱⁱⁱ The healthcare industry, which includes diverse stakeholders with different business and operating models, is starting to catch up to other industries, but only beginning to realize the value of automated processing, better administrative efficiencies, using AI to predict outcomes, and other benefits of executing a robust digital transformation strategy.

These benefits are especially applicable to healthcare, where emerging technologies and practices could create up to \$410 billion in value annually by 2025.^{iv} As a large and complex industry that often depends on manual or other outdated processes, and with increasing pressure to become more efficient and cost effective, the healthcare industry contends with high stakes. Healthcare companies of all sizes and types may find opportunities for the application of digital transformation in the areas of administrative costs, value-based care, customer experience, and revenue increases.ⁱ Healthcare organizations have started to simplify their administrative workstreams from start to end, relying heavily on the use of automation to quicken workflows and conduct built-in quality and validity checks. These transformations have contributed to cost savings and increased customer-centrism.

Different stakeholders are realizing the potential in using new technologies to move the dial in the following ways:

Stakeholder type	Examples of emerging technology trends	Potential value generated
Payers	<ul style="list-style-type: none"> AI in billing and claims processes to reduce fraud, waste, and abuse Robotic process automation (RPA) in routine administrative tasks such as claims adjudication and provider network life-cycle management RPA in customer relationship management^v 	<ul style="list-style-type: none"> Up to 40 percent administrative cost savings Up to 30 percent revenue growth^l
Providers	<ul style="list-style-type: none"> Data, analytics, and AI to manage avoidable emergency department visits and empower customers to choose care outside a traditional hospital setting Robotics to increase precision of surgical procedures AI assistance in patient diagnosis and administrative activities to enhance productivity^v 	Up to 40 percent medical cost savings ⁱ
Life Sciences	<ul style="list-style-type: none"> RPA, AI, and drone delivery for a more efficient supply chain Data and analytics for faster therapy development^v 	Up to 75 percent cost savings on traditional labor ^v

In addition, customers for the above-listed stakeholder types can be attracted and retained by offering more user-friendly design through mobile apps and web portals, wearables, and even augmented or virtual reality tools. Overall, processes can be improved through automation and machine learning that result in cost savings through improved accuracy of administrative processes, payments, and member support.

The healthcare landscape is evolving rapidly due to regulatory change from federal and state agencies, as well as innovation and digital transformation initiated by payers, providers, and life science organizations. As a result, there are many opportunities for all healthcare organizations to support new business models, use existing innovative models, or innovate themselves in an evolving marketplace.

Key considerations for healthcare payer organizations exploring digital transformation

In order to effectively leverage digital opportunities in the evolving ecosystem, and to remain competitive with new entrants trying to disrupt the healthcare industry, payer organizations large and small need to develop enterprise-wide collaborations that optimize digitization in a way that aligns their strategic goals to the true needs of their consumers.

The most noteworthy and disruptive of new entrants have the advantage of being established in the technology industry, with internal stakeholders and functions already aligned and designed for efficient, high-quality, and customer-centric outputs. On the other hand, payer organizations often have siloed internal functions, with technology teams especially separated from others as a back-end function. To truly engage in digital transformation and be able to participate in reshaping the healthcare landscape,

healthcare organizations must commit to transforming their functions to align business and technology in a way that cohesively supports the organizations' strategic goals and customer base. Changes such as these, whether enterprise-wide or more targeted, require agreement and alignment among all internal stakeholders involved.^{vi}

Infrastructure investments are often needed to support digital transformation. Healthcare has historically been technologically behind other industries – and especially the technology industry many new entrants thrive in – and many payers may not have the technology foundation needed for transformation. Payers interested in digital transformation must address their technology debt and modernize the legacy systems that most still rely on. In many cases, organizations may do so through adoption of more modern, modular technologies that are flexible and can support broader integrations.

Since it is important that staff – and especially leadership – be capable of implementing the needed changes, this kind of transformation requires not just infrastructure investments, but investments in human capital. Payers without existing in-house digital talent must attract this talent to manage digital transformation. This could require redesigning talent acquisition and retention models, especially as technology giants offer unique or untraditional benefits to attract top tech talent.ⁱ

Conclusion

In the changing healthcare landscape, healthcare organizations are faced with two choices that both carry risk. The first option is to not invest in digital transformation and continue with existing processes. While this option precludes organizations from risking large investments, choosing not to invest in digital transformation leaves an organization vulnerable to reduced competitiveness as other organizations transform to operate more efficiently and offer more in-demand solutions. The second option is to examine internal organization processes, determine what transformations would offer the most value, and invest in those transformations. This option is risky in that not effectively implementing the transformation might result in lackluster results and a lost investment. However, this option allows a healthcare organization the chance to shape the healthcare landscape rather than catch up later, and at a greater cost, to stay competitive. To digitally transform and avoid pitfalls, organizations interested in digital transformation but new to the field can benefit from developing partnerships with subject matter experts in technology and change management that will help them connect the dots between their existing model and their future state.

Strategic partners such as crankfrog can help establish internal collaboration and support an enterprise-wide or strategically targeted plan by engaging key constituents effectively, driving the partnership between technology and other functions of the organization, and accelerating innovations that will lead to greater organizational momentum. crankfrog has experience advising organizations on digital innovation to help transform their business in this new healthcare paradigm. Together, we are creating a future where technology serves a leading role in healthcare delivery efficiencies, patient outcomes, effective administrative processes, and ultimately increased revenue. For more information, reach out to us at info@crankfrog.com.

ⁱ Gilbert, Greg, Luís Almeida Fernandes, and Ajit Sawant. "Digital Is Reshaping US Health Insurance--winners Are Moving Fast." McKinsey on Healthcare. January 07, 2019. Accessed May 10, 2019. <https://healthcare.mckinsey.com/digital-reshaping-us-health-insurance—winners-are-moving-fast>.

ⁱⁱ "How Amazon Could Revolutionize Healthcare." Huron Consulting Group. Accessed May 10, 2019. <https://www.huronconsultinggroup.com/resources/healthcare/amazon-revolutionize-healthcare>.

ⁱⁱⁱ Biewener, Dan. "Banking on Digital Transformation: How JPMorgan Chase & Co. Is Winning by Committing to Digital." Simplilearn.com. October 11, 2018. Accessed May 17, 2019. <https://www.simplilearn.com/digital-transformation-in-banking-article>.

^{iv} Singhal, Shubhma, and Stephanie Carlton. "The Era of Exponential Improvement in Healthcare?" McKinsey & Company. Accessed May 24, 2019. <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/the-era-of-exponential-improvement-in-healthcare?cid=other-eml-alt-mip-mck&hlkid=dd9b0b9946684508a2fdb3c3b94ac3e1&hctky=2294199&hdpid=fd1c10e3-a6ea-4c15-8b00-798c71ad02c4>.

^v Shehata, Ashraf W. "Intelligent Augmentation." KPMG. Accessed May 28, 2019. <https://home.kpmg/content/dam/kpmg/pl/pdf/2018/07/pl-Intelligent-Augmentation-Life-sciences-companies-are-natural-fit-for-digital-labor.pdf>.

^{vi} Roe, David. "6 Digital Transformation Challenges Enterprises Need to Overcome." CMSWire.com. March 28, 2019. Accessed May 10, 2019. <https://www.cmswire.com/digital-workplace/6-digital-transformation-challenges-enterprises-need-to-overcome/>.