

The CIO's role in digital transformation

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John leads Optum Technology, which serves the broad customer base of Optum and UnitedHealthcare. John also serves as UnitedHealth Group's chief information officer where he is responsible for technology strategy and delivery across the enterprise.

John joined UnitedHealth Group in 1986 and has extensive experience in software engineering and application development. He has served as CIO since 2007 and is credited for leading enterprise architecture and foundational technology capabilities within UnitedHealth Group.

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— John Santelli

Modernization strategies for the CIO

Consumer demand for retail-like convenience and choice, together with the drive toward value-based care, makes payer modernization urgent. The CIO's role is to architect a digital transformation that frees the data, supports payer/provider collaboration and interoperability — and delivers the digital experience consumers want. In this article, Optum CIO John Santelli and Optum Advisory Services Senior Vice President David Chennisi offer perspectives on payer readiness and approaches to digital transformation.

Q1 **Are health plan CIOs ready to compete in a consumer-focused marketplace?**

JOHN SANTELLI: The chasm between insurance companies and consumers is greater than many payers realize. And there's not a lot of time to close the gap.

To be truly consumer-centric, payers who are going to cross the chasm will need to:

- Design for consumers rather than plan sponsors
- Proactively use and connect data to give consumers a holistic view
- Improve consumer engagement with digital technology

DAVID CHENNISI: They're on the cusp of readiness, but especially in mid-sized payer organizations, the CIO's focus is split. The question of how to divide your time between operations and transformation is a difficult one because engineering the technological evolution falls largely to the CIO — who is swinging back and forth from supporting legacy IT to planning for big data and analytics.

CIOs have to understand how to get information flowing among themselves, their provider networks and their members while keeping core claims and surrounding applications running.

But if you take the digital transformation a step at a time, I think the first and most strategic step for health plan CIOs is to work with leadership to develop the use case, down to the possible sequence of interactions between systems and users in their particular environment and related to a particular goal. I know that sounds mundane, but it's a necessary step for envisioning the end state as well as identifying the barriers to reaching it, such as gaps in talent, processes and technology. Once the use case is defined, areas for build, buy or subscribe will be more clearly defined, along with guard rails for costs, timing and roles.



DAVID CHENNISI

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David is a key leader in Advisory Services, with more than 30 years of experience in the health care industry. His teams are responsible for successful systems implementation and integration projects spanning core administrative claims adjudication, medical management, business intelligence/data warehouse and customer relationship management applications. Prior to Optum, David served as CIO at Texas Children's Health Plan.

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Q2 Is the CIO's role to enable business strategy or drive it?

JOHN SANTELLI: I think CIOs are playing a new converged leadership role in the payer organization. Payers are waking up to the value of their data and looking for solutions to help them mine it. It's up to the CIO to bridge the knowledge gaps and educate the leadership team on what's possible, particularly with cloud technology. The shift from legacy systems, where data is held captive, to the modern compute of big data platforms is dramatic. The CIO has to build the confidence of stakeholders in both the benefits of a scalable, single platform and its ability to meet strategic goals.

DAVID CHENNISI: In some ways, the technology transformation is the easier problem to solve. The more difficult problem is how to help the leadership team shape a vision of the end state as the business model shifts from volume to value and from a B-to-B sales model to a digital, consumer-focused model.

Once the business case has been established, the CIO is responsible for defining and enabling the technology to deliver what each stakeholder needs for financial predictability, clinical quality, population health management, and growth without slowing down core operations. The CIO needs to understand where stakeholder needs intersect, how to synchronize series of actions with technology, and how to manage pace and prioritization during modernization.

Q3 What is the modern CIO's biggest opportunity?

JOHN SANTELLI: Forward-thinking CIOs are freeing their data from isolated back-end systems to next-generation platforms, much like successful retail organizations. They're taking a page out of the “search engine” mentality where billions and billions of rows of data can be searched in milliseconds. Open source systems have broken the barrier on being horizontally scalable — meaning they span compute to many, many blades, reduce the result set and return it in a ridiculously short time frame.

These big data platforms can process unstructured data like open text, voice recordings, images, information streaming from consumer devices — even faxes. Application programming interfaces (APIs) enable many applications to consume data. It's a very modern, very powerful and ultimately a cost-savings approach to reuse data and create consistency of data across all apps as data is externalized.

Q4 How can the CIO use technology to connect to consumers?

JOHN SANTELLI: In the current payer-to-employer world, so much of the experience of health insurance products is controlled by plan sponsors, rather than consumers. The employer selects plans for its employees based on cost management, plan quality and effectiveness, which makes them another gatekeeper of plan benefits, despite the fact that the product is consumed (and largely paid for) by employees. The logistics the member must navigate between employer, plan and network providers are complicated, confusing and often disconnected.



“Organizations are seeing the role of the [health care] CIO change from the purveyor of technology to the **agent of change for the enterprise.**¹”



CIOs say the **top three growth areas in health care IT** are DX, analytics and cloud.²

Meanwhile, in the real world, which grows more digital by the minute, consumers define quality in terms of convenience. Yet, even the simplest things, like access to their own health records (regardless of employer or payer) and certainty of their financial obligation are extremely limited with legacy payer systems. This does not demonstrate that payers have prioritized consumers or completed a true integration with providers. The key is to take a page from retailers’ approach to consumers by using data more effectively and making digital interaction with consumers useful and convenient from their perspective.

DAVID CHENNISI: Connecting to consumers is about freeing the data and crafting programs that engage with consumers in a way they want on a sustained basis. You want to develop the ability to present the whole of the organization to them. For example, this week you may have a population health issue and next week an unresolved claim coming back. How can the provider relationship be managed more holistically? Modernizing the enterprise data platform is definitely not an easy problem to solve, but it can be done. Harder still is developing the right kind of programs to support consumer needs and preferences once the data is freed.

Q5 Who can support the CIO in the transformation?

DAVID CHENNISI: It’s a challenging reality, but payer organizations need to be able to respond and adapt — to become unstuck — or resign themselves to obsolescence.

Because, like all CIOs, I was always very busy, I tapped my own network for answers, and often avoided new vendors and partners. If I could go back, I think I would do it differently. Instead of keeping such a high filter, I would advise CIOs to spend more time in periodic sustained conversation with health care technology consultants who have a depth of experience. It’s a lot less complicated when people who have done this before help you identify which infrastructure can be offloaded, where economies of scale can be achieved, and what is realistically do-able, rather than visionary — with existing resources and proven technology.

Conclusion

To respond to a marketplace that demands cooperation, collaboration, transparency and consumer convenience, CIOs predict that in five years, they will spend 42% of their time on digital activities, up from 13% in 2016.³ The digital transformation in health care is moving the CIO from the back office to the front lines to serve as innovator and advisor.

The time is now. Payers who want to stay competitive in the consumer-driven era of health care need a modernization strategy.

Learn more about the CIO’s role in modernization, visit: optum.com/CIO

¹Bresnick J. Big data, AI rapidly transforming the CIO role in healthcare. Health IT analytics. October 06, 2017. healthitanalytics.com/news/big-data-ai-rapidly-transforming-the-cio-role-in-healthcare.

²Padmanabhan P. Healthcare IT services market: The outlook for 2017. Damo Consulting. December 14, 2016. damoconsulting.net/wp-content/uploads/2017/01/Healthcare-IT-Services-2017-outlook-Damo-Consulting.pdf.

³Forbes CIO Summit 2016: CIO Transformation Survey. forbes.com/forbesinsights/cio_transformation/