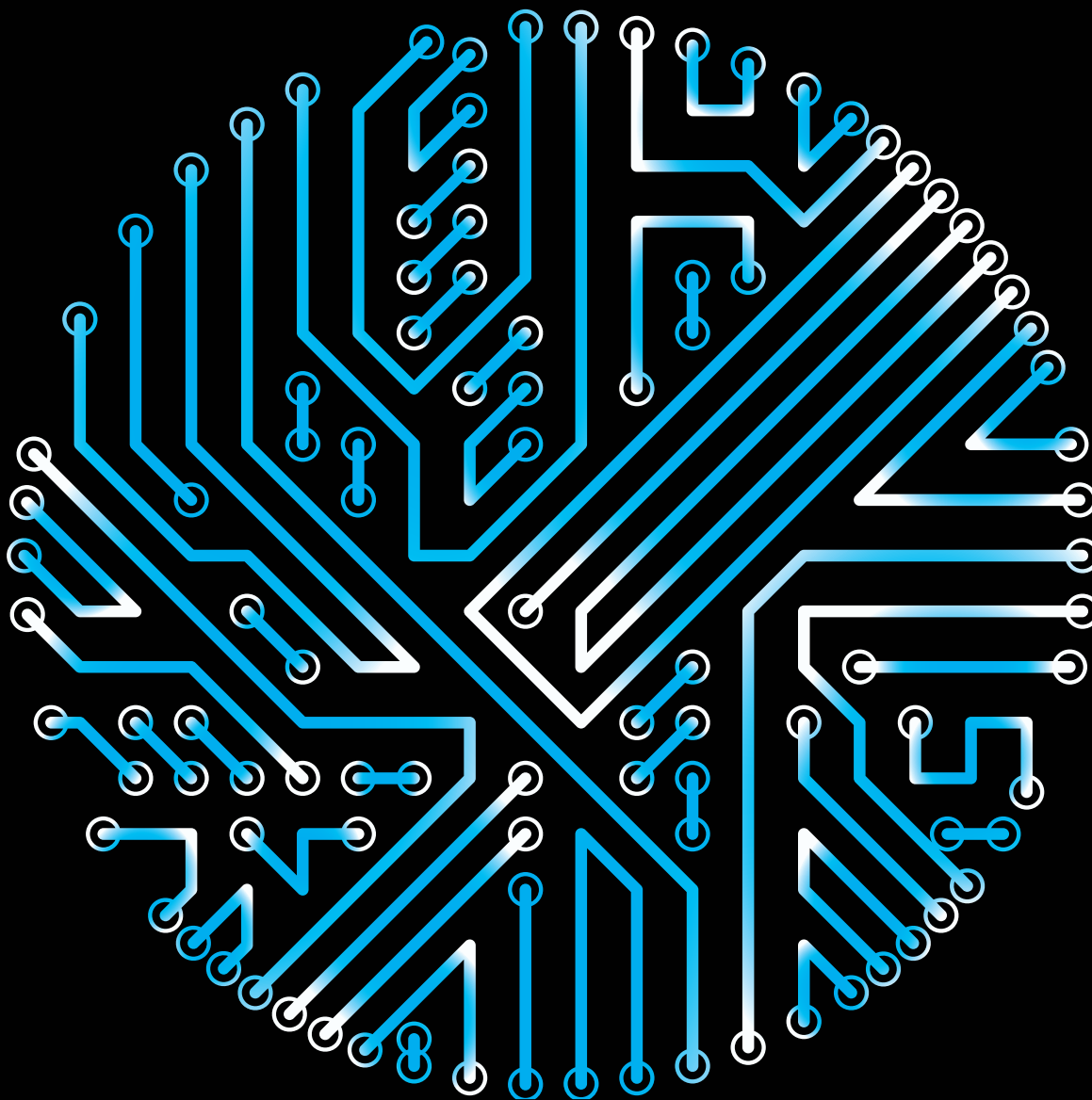


**Deloitte.**



## **Health plans core systems modernization**

Is it time to fix the back office?

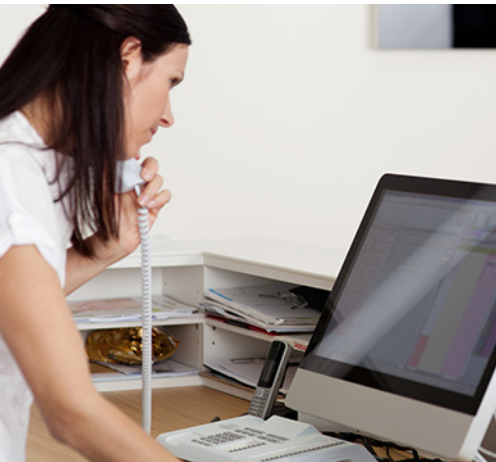
# Core Modernization

## Health plans: is it time to fix the back office?

Health care continues to change. The Affordable Care Act may be repealed, or at least certainly changed, and its replacement is uncertain. Additionally, consumerism, accountable care, and other forces will drive millions more dollars to create solutions. Health plans should remain flexible to respond to the volatile market and an ever-changing world, but outdated legacy systems often are a roadblock to flexibility.

Now more than ever, our health plan clients struggle to provide the technology to meet market demands. They face significant disruption due to the advent of new payment models, greater competition to innovate, and an increased focus on consumers. In response, plans are looking at reducing costs, shortening time to market, and improving operational efficiencies.

In addition to industry-related challenges, many health plans are utilizing dated, homegrown, legacy core administration systems that limit their agility and their ability to efficiently scale. Core modernization can help health plans address these challenges and work to create greater alignment of enterprise strategy with technology.



**Core modernization** is a strategic program to reimagine core systems and business logic to promote flexibility, agility, and speed to market and support innovation and enterprise growth. Modernization addresses business needs and positions health plans to win in future marketplaces through business and technology improvements and operational alignment.

*“Implementing an entirely new system isn’t necessarily the answer.”*

## A new take on core modernization

With the advancement of technology (such as cloud platforms, advanced analytics capabilities, etc.), core modernization is no longer restricted to replacing the existing legacy systems. Health plans can leverage less risky core modernization approaches like remediating existing mainframe/legacy platforms or redesigning the transactional layer with digital extensions and user-centric process redesign. These options allow health plans to react to industry changes and inorganic growth. For our clients, results from implementing core modernization have included:

- Significantly increased operational efficiency through lower cost delivery/service channels
- Reduced technical debt by reducing (or eliminating) the amount of spending to maintain legacy modernization system(s)
- IT agility gains via an improved system architecture that produces a flexible and configurable infrastructure, enterprise integration, and accelerated technology delivery
- Increased customer growth and retention through capturing deeper relationships and better insights with a lower cost to acquire and serve, wider brand awareness, and deeper loyalty

**Checklist: Do You Need Core Modernization?**

If you check any of the following boxes, core modernization should be considered:

- ✔ Your technology ecosystem is unable to meet all business needs.
- ✔ Lengthy project approval processes result in capability delays and loss of market timeliness.
- ✔ Competitors are first to market with new innovations.
- ✔ There is an extensive lead time from request to delivery of a new product to market.
- ✔ System maintenance costs are too high to sustain legacy claims platforms.

- **Advanced analytics.** Data can be leveraged to power analytics and digital technologies.

Core modernization requires a pragmatic approach that incrementally establishes the governance, modernization enablement, and delivery execution needed to drive the modernization over a multiyear time period:

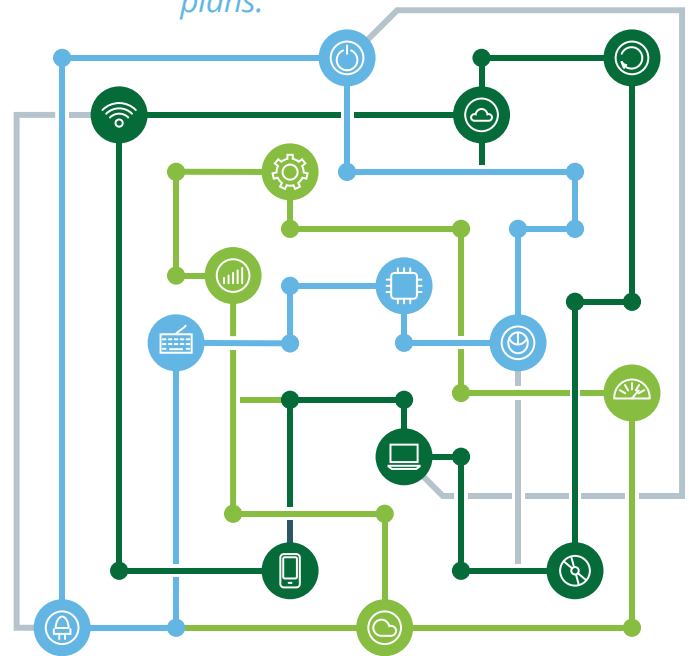
- **Governance.** A successful governance approach sets the foundation for a successful modernization journey. Governance includes guidelines, standards, procedures, communication mechanisms, and management services needed to enable the successful and timely achievement of modernization objectives.

**Turning Core Systems into Business Drivers**

The only certainty in today’s health care industry is change—just blink your eyes and you can fall behind. Keeping up with change is the first goal, but it isn’t enough. In the future, leading health plans could offer information, insight and transactional capabilities through a variety of user experiences, not limited to portals and prescribed mobile applications. You may not be able to control the forces that will shape user preferences over the years to come, but you can control how your core competitive capabilities, such as analytics and transactions, will position you to meet evolving consumer expectations in an ever-changing marketplace. Turning your systems into business drivers won’t be possible without undertaking core modernization initiatives.

In looking at your own systems and processes, the core administrative functions that are under stress start with provider networks, where payments are often a roadblock to efficiency. Modernization efforts can result in significantly reduced cost of product bundling and product changes through such initiatives as:

*“Look again at core modernization to unlock significant benefits for health plans.”*



- **Enrollment and billing components modernization.** This can be achieved through increased electronic enrollment and improved billing timeliness and accuracy.
- **Product development.** Product modularization increases flexibility to customize offerings.
- **Claims management.** Claims data can be utilized to help improve the consumer experience.

- **Modernization enablement.** The modernization enablement function establishes three discrete capabilities that are essential to standing up the modernization operating model. These include the Modernization Blueprint and Roadmap, an upfront effort executed in parallel to the transition that establishes a detailed functional and technical blueprint of the end-state vision. The second is a DevOps Center of Excellence where subject matter specialists help the team through the technology adoption journey. And finally, establishing a Modernization Studio—a technology-centric multidisciplinary resource center—can support the legacy technology transformation through R&D, design, prototyping, and implementation of patterns and design reviews/workshops.
- **Delivery execution.** This phase enables the transformation of the IT organization’s delivery capabilities with a strategy that balances speed of adoption and risk mitigation. This requires a structured approach to successfully shift organizational culture. As such, a successful approach focuses on people over process, and organizations with a strong, people-oriented, empowering culture will enjoy a higher rate of success and adoption.

## A winning approach to system modernization

Technology advancements have made core system improvements an imperative for health plans. Exponentially, smaller investments and shorter timeframes are now needed, but there is no one silver bullet solution. Many health plans have embarked on modernization of their core transactional platforms with a mixed degree of success. Out of all these efforts, four specific approaches have emerged—we call them the four Rs<sup>1</sup>:

1. **Replatform.** Move off the existing mainframe/ legacy technology platform; implement largely greenfield, custom-developed, future-state solution (versus buying off-the-shelf solutions); and redefine business processes and “core” in the solution footprint, removing unnecessary dependencies.
2. **Remediate.** Repair the existing mainframe/legacy technology platform; encapsulate data, interfaces, and business logic into reusable, extendable services; and cleanse data quality issues, security, and compliance risks.
3. **Revitalize.** Redesign the transactional layer with digital extensions and user-centric process redesign; implement visualization and discovery tools to improve reporting and analytics on top of underlying systems, and innovate new ideas, products, and offerings using core foundation.
4. **Replace.** Select best-of-breed n-tier or PaaS solution packages and migrate fulfillment of some functional areas to these best-of-breed solutions.

Core modernization usually leverages a combination of these four approaches. Ultimately, the vision is to change a system where many aspects of the code base and the hardware are under tight control to a system comprising a set of cloud applications, where each traditional layer is abstracted to a resource that can be consumed only when it is needed. This vision is no longer a hypothetical—it’s an achievable reality.

## Cross-industry modernization insights

Core modernization applies to any industry, and Deloitte incorporates insights from across the board in continuing to evolve and improve our modernization initiatives. Health plans are unique in many ways, but their systems have many similarities to other types of organization. The case to the right shows how core modernization worked for the State of Texas Department of Motor Vehicles.

<sup>1</sup> Reimagining core systems - <https://dupress.deloitte.com/dup-us-en/focus/tech-trends/2016/reimagining-core-systems-strategy.html>

## Case study: modernizing core systems for the state of Texas DMV



### Background.

As the second-largest state, with close to 27 million citizens, Texas' systems and infrastructure represent a significant challenge in terms of size, complexity, and criticality. The Department of Motor Vehicles (TxDMV) system handles more than 150 million transactions annually, is accessed by more than 100,000 end users, performs more than 4,000 batch jobs, provides mission-critical application support for law enforcement and car dealerships throughout the state, and serves as point of sale for registration and title transactions.



### The challenge.

TxDMV requested our support in modernizing its core registration and titling systems, including its aging mainframe database and application code, by porting the systems onto a modern data and application architecture. Additional complicating factors included TxDMV's desire to identify a contractor that could perform a fully automated transfer of the application code and data to the target environment without the need for code freezes or incremental releases as the legacy applications were maintained in parallel throughout the duration of the project. TxDMV knew this would increase risk, had the potential to extend the project's duration, and could impact user and customer experience, including more than 1.2 million annual in-person transactions supported by its statewide service centers.



### The solution.

The project scope included refactoring of the core registration and titling system mainframe as well as the client server-based point of sale systems. Additionally, further system modernization to introduce new capabilities and functional enhancements was included in the scope, moving TxDMV closer to its final business objectives than refactoring alone. In addition to system refactoring and modernization, the scope included taking ownership of legacy system maintenance support and operations, including implementation of new application lifecycle management tools and processes and transitioning and training the legacy developers and operations staff.



### Results.

The final result of the refactored system was a successful deployment and transition of the core system and a rollout of functionality to each of Texas' 254 counties one year ahead of TxDMV's originally planned schedule and an annual savings of approximately 20% on hardware, software, and facilities.

## Conclusion

Health plans that meet and outpace technology advancements have the greatest potential to win in the marketplace. Customers are demanding innovation and ease of use, and modern technology and advanced data drive the solution. New apps, customer segmentation, fast claims resolution, and much more are not only possible, they are imperative. Core modernization is the solution, and those health plans that are letting their technology fall behind are in real danger of compromising their business futures.

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