

BACKGROUND

Banner Health is one of the largest non-profit healthcare systems in the United States and provides a wide variety of services with clinical settings in six states. Headquartered in Phoenix, Arizona, Banner Health owns and operates 30 acute-care hospitals, including three academic medical centers and other related health entities.

CHALLENGE

Health care systems, most notably Electronic Health Record systems, target internal staff and clinicians but do not typically serve consumers directly. The modern consumer has evolved rapidly and demands product designs and capabilities that put their healthcare experience on par with the Amazon experience. New levels of integration (and thus collaboration across teams and organizations) are required to meet these demands.

The demand for a patient-focused experience is driving the healthcare industry to transform its technology ecosystems. This transformation, however, has not been easy and faces broad, systemic challenges. Regulations, security compliance, technology, and culture all play a role in complexity, adding to the IT mix.

I SOLUTION

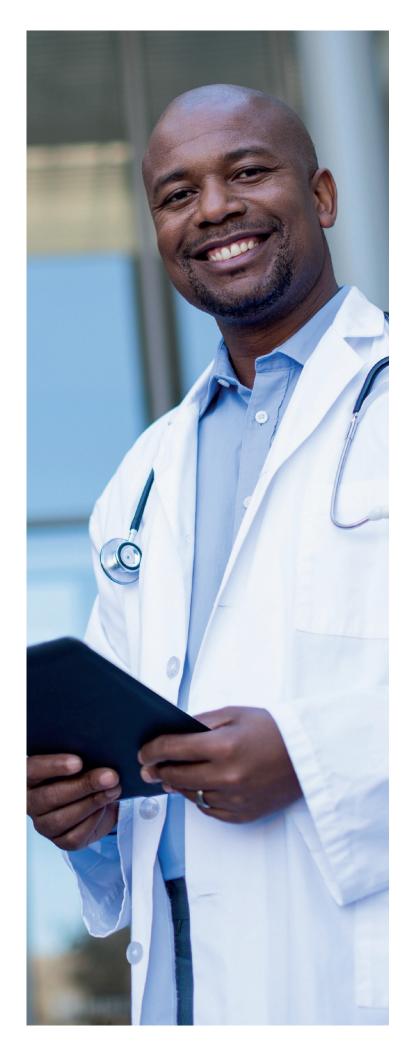
Facing these challenges, Banner Health partnered with Mastek to implement new processes, upskill teams, and employ techniques to give Banner Health a jump-start on cross-organization-minded architectural solutions.

Solution Architecture Provides Critical Insights Across the Organization

Health care systems have typically been designed over several decades from the ground up. This can create complex silos within disparate systems if there isn't an integrated approach in place.

As part of Banner Health's digital transformation journey, Mastek began with a two-pronged approach. One, to modernize and mature the practice of solution architecture, and two, to create architecture as a capability—to grow the practice by developing best practices, establishing roles and responsibilities, creating processes around injecting architecture gates, and ensuring development teams and vendors are engaged at the appropriate times.





To accomplish this, Mastek and Banner Health collaborated to create the Solution Architecture Council (SAC), a team process designed to bring cross-functional insights to the organization. With a developed architecture practice solution in place, Banner Health would be able to marry their organizational vision with that of the development, DevOps, and the creation of software.

According to Patricia Biczo, IT Director, Solution Architecture, "Mastek was instrumental in forming the identity of a new Solution Architecture practice. Their ability to supply skilled resources and provide needed frameworks, guidance, and templates ensured the team was immediately creditable and competent to supply the value around this growing area. With their assistance, we were able to solidify architecture as a necessary component of advanced IT workflows."

Meeting New Standards of Patient Expectations Yields Tangible Growth

Mastek proposed new processes that would enable governance and create insight across the organization. Over an in-depth year-long engagement, Mastek worked rapidly to identify solutions to meet new standards of patient expectations and yield tangible organizational growth for Banner Health.

The new processes helped to align varying disciplines to a broader organization vision. Additionally, this led to:

- Increased trust, better designs, and higher reuse of existing systems.
- > Established a process for solutions governance
- Formalized architectural communication and collaboration across organizational boundaries
- > Standardized architectural artifacts



"Mastek has helped foster an environment that creates cross functional dialogue and feedback on IT solutions well in advance of their implementation. This has proven to be highly valuable in ensuring we land on the right designs for our digital transformation. In turn, we have avoided tremendous amounts of re-work, all while ensuring we meet the high bar required by today's Information Security standards",



Bryce Carder Vice President IT Business Services.

Guiding Principles Ensure Highest Outcomes

As hospital systems grow and evolve, the implications on their technology stacks become greater. Best practices and standards must be set at every level—from patient care and organizational standards to third-party vendors and the use of APIs.

Banner Health's commitment to its guiding principles has set the template for deploying a mature enterprise architecture solution across the organization. This has profoundly impacted organizational awareness, resource planning, critical insights, visibility, transparency, and planning of future technologies. With a formal process in place, risk is reduced, engagement is increased, and light is shed on potential gaps in the process.

A hidden benefit of solution architecture is the breaking down of artificial barriers and a deeper appreciation of the interrelatedness of each business unit, such as cyber security, clinical apps, and digital business groups.

By creating a formalized approach, Banner Health improved its capability around architecture as a discipline, affected security controls within its software, adhered to organizational standards and policies, and ensured these made their way into any design or software. The result will pay considerable dividends in streamlining future projects, reducing expenses, and meeting patient expectations.

CHALLENGES

- Meeting new demands for a more patient-focused experience
- Ensuring mature software delivery that is aligned with business objectives
- Developing architecture as a practice and capability
- > Engaging vendors at appropriate times

VALUE CREATED

- ➤ Instantiation of Solution Architecture Council (SAC) for governance and collaboration
- New templates and standards for architectural artifacts
- Upskilled solution architects anchoring new standards, practices, and processes
- Growing a culture of collaboration and busting silos

| SOLUTIONS

Solution Architecture

I ABOUT

Mastek is a turnkey & trusted Digital Engineering & Cloud Transformation partner that delivers Innovative Solutions and Business Outcomes for clients in Healthcare & Life Sciences, Retail, Manufacturing, Financial Services, Government/Public Sector, etc. We enable customer success and business change programs by partnering with enterprises to unlock the power of data, modernize applications to the cloud, and accelerate digital advantage for all stakeholders. Customers Trust Mastek to deliver Business Value with Velocity and we operate in 40+ countries including the UK, Americas, Europe, Middle East, APAC with ~5000 employees. We are in the business of de-complexing Digital and making our clients future-ready with an industry-first approach. For more details, please visit our website www.mastek.com.

