T2 Tech

Sharp HealthCare Case Study

Phase 2: Migrating 292 applications to a new fully redundant data center

"OUR MULTI-YEAR CONSULTING PARTNERSHIP WITH T2 TECH GROUP HAS MOVED SHARP HEALTHCARE ONTO THE NEXT GENERATION OF TECHNOLOGY, IN A HIGHLY SECURE AND RELIABLE ENVIRONMENT. BY PHASING OUT LEGACY TECHNOLOGIES, AND STANDARDIZING POLICIES AND PROCEDURES, WE WERE ABLE TO SIGNIFICANTLY REDUCE OPERATING COSTS, AND SHOWCASE BENEFITS TO KEY STAKEHOLDERS, EARNING TRUST."

- Tom Gorrie, Director Core Technologies, Sharp HealthCare

Sharp HealthCare (Sharp) is known as San Diego's healthcare leader. With over 18,000 employees, Sharp is frequently recognized for its commitment to clinical excellence and high-quality patient care by local and national organizations, including being recognized as 2020's 100 Best Places to Work in IT by Computerworld. With four acute care and three specialty hospitals, three affiliated medical groups, urgent care centers and a health plan located throughout San Diego County, Sharp needed the right partner to implement key changes to reduce IT spend and elevate productivity.

T2 Tech previously partnered with Sharp to successfully complete the design and implementation of a redundant architecture and disaster recovery site at Sharp's Rees-Steely Medical Group facility in San Diego, California. Aligning with the overall goals of the two organizations, the data center transformation project has contributed to improved IT services and healthcare for patients throughout San Diego County.

For the next phase of this large data center transformation, Sharp's objective was to migrate all applications out of Sharp's old data center by using T2 Tech's proven 5-step application migration methodology. To efficiently implement this phase, Sharp leveraged the application environment knowledge and process improvements gained in phase one and the guidance of a trusted partner, T2 Tech.
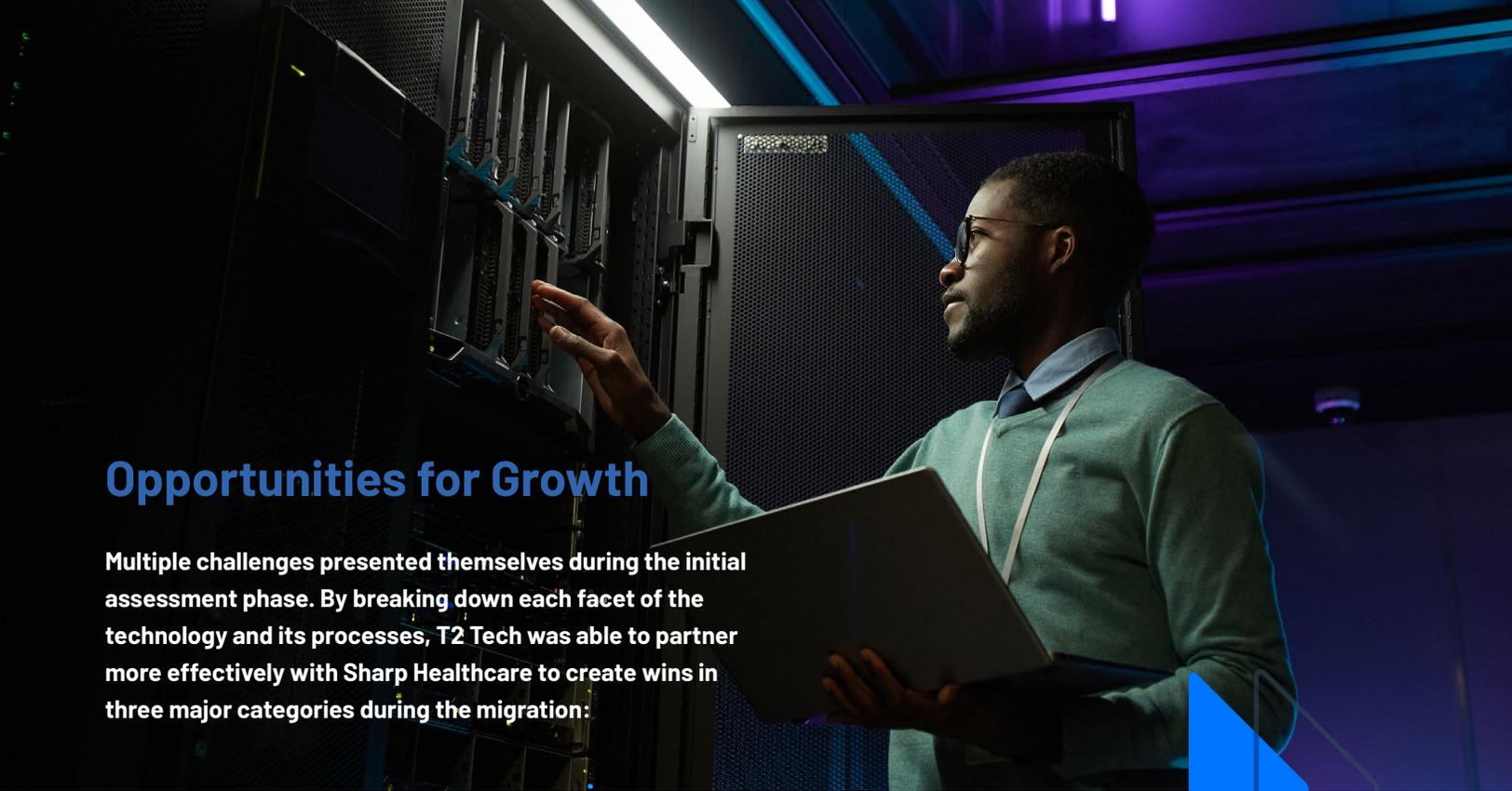
Opportunities for Growth

Multiple challenges presented themselves during the initial assessment phase. By breaking down each facet of the technology and its processes, T2 Tech was able to partner more effectively with Sharp Healthcare to create wins in three major categories during the migration:

Key Learning #1
Better communication drives better results

Culture differences between application and infrastructure teams are quite common in large enterprises which may result in teams that are siloed, hindering communication. T2 Tech worked with 37 different teams and 400 Sharp staff members. Each of these team members were heavily invested from beginning to end, including the infrastructure implementation to the frontline analysts supporting the application users. Throughout this multi-year project some key concepts were institutionalized, each significantly contributing to the success of this large-scale initiative. These included key processes being defined and put in place, strategic communication meetings and follow up feedback initiatives.

IMPLEMENTATION INCLUDED:

- T2 Tech partnered to help Sharp's IT teams navigate the "who", "what" and "why" of Agile principles

- With a focus on application migration, T2 Tech worked with Sharp to leverage a hybrid-Agile project management methodology. This included a scrum framework and bi-weekly sprint planning, which re-prioritized items and re-planned execution to keep teams hyper-focused on the task at hand.

- Strategically splitting the application migration into an Agile focused, five-step repeatable process helped minimized operational disruption for end users. Additionally, by working with one application group from start to finish, the team completed a deliverable that was up and running and ready to utilize on-time and within budget.

- Strategic planning also empowered Sharp's teams to be more collaborative and self-sufficient to be successful in this and future projects. This flexible approach allowed the teams to streamline project execution before closeout and better adapt to unexpected roadblocks.

Key Learning #2
Standards and processes create best practices to guide organizations forward

Sharp and T2 Tech set out to identify and document set standards for several areas that were not in place prior. Deciding what to document was dictated by, and was responsive to, the requirements of the project and the capacity of team members to update and maintain records. From auditing current practices to prioritizing and activating new best practices, Sharp was able to migrate over 290 applications with minimal risk and downtime.

IMPLEMENTATION INCLUDED:

> With new technology, workflows and the opportunity to start on a clean slate, an 'Architecture Review Board' was created to agree upon and uphold the new set standards and processes for each migrated application. Joining team members across silos, the new review board helped communication and culture from day one.

> From creating standardized discovery documents for each application that outlined key features, strategy and an architecture diagram for each application, T2 Tech worked to map each feature of the IT infrastructure to ensure future planning would be more efficient.

> Appropriate migration teams were secured in advance, including any needed vendor assistance while prioritizing projects across departments and platforms.

Key Learning #3
Eliminating physical servers and migrating to a virtual environment reduced technology debt and risk

Sharp had always been in the data center business with precious patient data needing protection. With 600 physical servers taking up space in a 25-year-old environment, in proximity to a pressurized gas line and an executive airport, they needed a data center transformation and migration plan that was as well-thought-out as it was efficient. Starting with 129 cabinets, Sharp was able to reduce physical space requirements by 75%. Not only was T2 Tech able to reduce risk of hardware failures, but the migration also alleviated structural risks due to the environment as well. By moving to a virtual platform, T2 Tech was able to lower the physical footprint, increase security and decrease costs.

IMPLEMENTATION INCLUDED:

> Standardized all operating systems and removed 97% of outdated systems.

> Reduced physical servers by 83%, starting at 600 and ending with less than 100.

> Selected a colocation facility located in Phoenix, AZ because of their next-generation power distribution system, better climate control, tax breaks and a smaller storage footprint. This colocation removed the responsibility for power and cooling – the costliest of factors to remediate if issues arise.

> Implemented segmented security zones allowing 90% of servers to be better protected from unauthorized access.

> Using Citrix for application delivery which helped reduce the need to install software on Sharp's 10,000+ desktops and creating cost savings.

> Creating updated plans and solution to limit the impact to end users and patients if the data center experiences issues.

"THROUGH OUR STRATEGIC LEADERSHIP AROUND THE AGILE PROJECT MANAGEMENT PROCESS, WE WERE ABLE TO ELEVATE COMMUNICATION WHICH BROUGHT TEAM EMPOWERMENT, TRANSPARENCY AND A DOCUMENTED PROCESS. IN THE END, SHARP'S NEW DATA CENTER PROVIDES A HIGHLY-SCALABLE ENVIRONMENT, INCREASES SYSTEM AVAILABILITY, AND IMPROVED SECURITY."

– Leigh Sleeman, Partner, T2 Tech

Bottom-line results

T2 Tech's use of a proven 5-step application migration methodology empowered Sharp's team to efficiently build and finalize their data center strategy; validate the strategy through testing; go-live with minimal business interruption; and lower project cost to obtain optimal results.

Resulting in multi-million-dollar savings in both capital and operating expenses, this project allowed Sharp to confidently execute their strategy to decrease both financial costs and risk to the organization's IT environment.

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About T2 Tech

T2 Tech is a leader in the practical application of technology for healthcare and a range of other industries. Since 2006, T2 Tech has consistently delivered quality consulting and management advisory services to business executives and IT leaders. The T2 Tech team balances business and IT needs, uses a proven agile methodology, oversees projects from assessment to post-implementation and practices transparency in everything they do.