



## DIGITAL HEALTHCARE IS HERE: ARE YOU READY?

### Abstract

The COVID-19 pandemic has significantly impacted the global healthcare industry. Healthcare providers are under tremendous pressure owing to a precarious financial position forcing them to launch cost-cutting programs. However, providers must ensure they continue to finance digital transformation and IT modernization programs as they are imperative for survival.

## An industry on the threshold of change

The ongoing COVID-19 pandemic is poised to be a defining moment for the global healthcare industry. It has had a staggering impact not only on people's lives but also on healthcare systems and the healthcare business itself. Frost & Sullivan expects a dip in industry growth from 5.3% to 0.6% in 2020<sup>1</sup>. Furthermore, health systems and hospitals lost a significant \$202.6 billion between March and June 2020, according to American Hospital Association estimates, and approximately 1.5 million healthcare workers lost their jobs, according to the Kaiser Family Foundation<sup>2</sup>. Strategic moves such as mergers and acquisitions have been delayed – a case in point is the postponement of the Beaumont Health and Summa Health merger until after the COVID-19 situation<sup>3</sup>. And this is just in the United States.

Direct treatment expenses have increased, and medical supply chains strained, causing a direct hit on revenues and cash reserves. Patients have chosen to postpone elective procedures, which in turn delay the procurement of capital equipment. Healthcare providers in the private sector experienced a diminished mix of cases and billable services, while activity-based payment has dropped in public health systems. Cleveland Clinic's shortfall from patient services is more than \$500 million below projected numbers<sup>4</sup>. Patients are even wary about visiting the hospital for emergencies owing to COVID-19 concerns. Yale New Haven Health reported lesser visits for heart attacks, acute strokes, and other medical emergencies<sup>5</sup>.

Whatever the payment arrangement, such as fee-for-service or value-based, there is no denying that the financial ramifications on healthcare providers worldwide have been devastating. It leaves leaders in these organizations little choice but to seek ways to curtail expenses in every way possible. For instance, Mayo Clinic cut the pay for 20,000 employees, while others have

enforced furloughs or reduced working hours or restricted travel to conserve cash<sup>6</sup>.

IT budgets in hospitals are around 5% of revenues and were slated to increase in 2020. However, today it is a ripe target for budget cuts. Healthcare business leaders are aggressively looking at ways to decrease expenses by reducing trivial expenditures such as office supplies to more heavy-weight investments like stalling strategic investments in programs such as electronic health record (HER) interoperability.

With IT budgets under the scanner, CIOs have taken a holistic approach by evaluating the ecosystem to identify opportunities to reduce costs. It includes collaboration with advisors, practitioners, industry leaders and partners to tap into a collective pool of ideas to further this objective. But it is erroneous and short-sighted to assume that the focus is only on eliminating expenses or postponing investments.

No doubt, the pandemic will trigger transformational changes across the healthcare industry. The demand for high-quality care at lowered costs will compel providers to shift to value-based care delivery in an accelerated manner. Digital transformation and IT modernization will be essential tools to enable this goal. Healthcare leaders will be remiss not to recognize the upcoming changes and prepare for it appropriately.

## IT helps restructure the healthcare business with digital technologies

Healthcare CIOs are considering or already executing programs to cope with the current situation and prepare for the post-COVID era. These initiatives mostly revolve around three areas -

- **Stabilize clinical operations and prioritize IT budget cuts.** Many business experts advise that now is the time

for businesses to revisit their strategy, prepare for future growth and build resilience. In this context, CIOs must look beyond the pandemic and retain funding for technology projects that enable growth over the mid-term and long-term and ensure lowered costs for the patient. A recent survey showed that more than 60% of healthcare CIOs are looking to invest in platforms that address telehealth, patient experience and operational efficiency<sup>7</sup> - areas that will be significant in the post-COVID future.

- **Plan and execute high-value robotic process automation (RPA) and artificial intelligence (AI) projects** to streamline workflows and processes that enable efficiency gains over the next six months. RPA can considerably reduce the time taken to perform repetitive and routine tasks allowing healthcare workers to redirect their bandwidth to more value-adding activities. Simultaneously, it gathers a significant amount of data, the starting point for intelligent solutions to enable better decision-making. The National Health Services (NHS) in the UK uses Automation Anywhere's IQ Bot to help process more than 100,000 COVID-19 test forms it receives every day<sup>8</sup>. In another advance, machine learning techniques enable Penn Medicine to detect patients at risk for sepsis<sup>9</sup>.
- **Advance long-term cost savings plan by implementing cost analytics and integrated cost decision support technologies** – when the focus on lowering costs is at an all-time high, CIOs must consider using cost analytics to help them reach this goal. It gives a correct picture of the costs involved and generates sufficient data to make informed decisions. Northwell Health, a large US-based provider, despite the turbulent times, is augmenting its analytics capabilities to boost precision medicine efforts and lower spending on extraneous tests and procedures<sup>10</sup>.

## Start with the database first

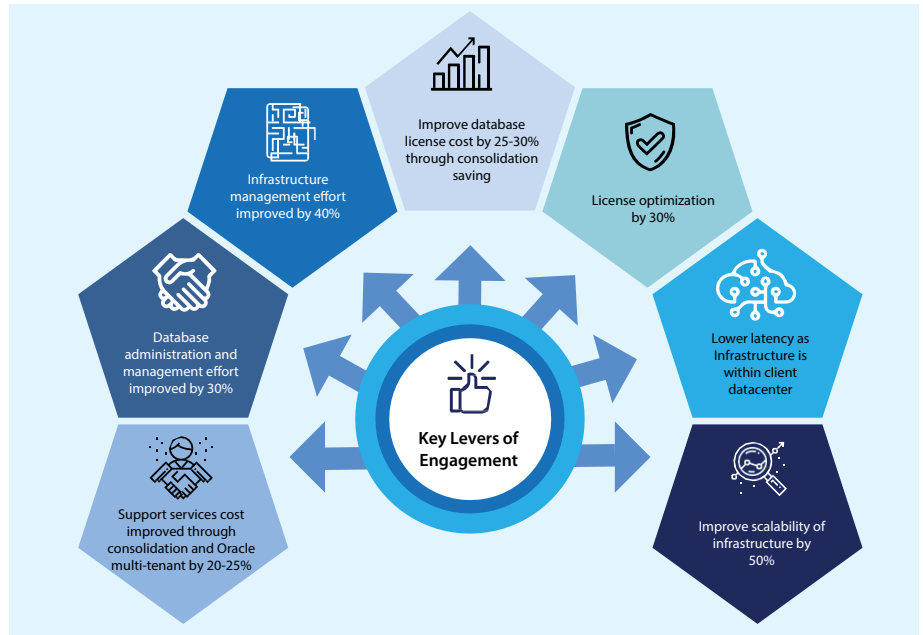
As CIOs swing into action to ready their provider organization for the return of employees, patients and the usual care level, they recognize that digital health is essential to survive and thrive. They need to be more agile and enhance performance as a business to keep up with the changes. Yet, the path to digital health is fraught with challenges.

Healthcare organizations deal with massive volumes of data, mostly residing on legacy systems. Embarking on a digital program involves significant standardization, consolidation, and integration of data while implementing requisite security controls. A misstep can impact application and business performance and lead to delayed time to market, inability to scale, exposure to security risks, mediocre performance, high costs and unreliable operations.

Infosys solution for Oracle Database as a Service, part of Infosys Cobalt, is a set of services for enterprises to accelerate their cloud journey. It optimizes and reduces infrastructure footprint, software licenses and support services. It begins with a thorough

evaluation of your ecosystem. It employs modernization to shrink numerous physical database servers into smaller, more tightly-managed groups of databases that can provide predefined services. In a well-implemented database-as-a-service offering, deployments of new databases or services are fully automated to meet changing demand.

The results are impressive. It implies lesser expenses for a CIO thanks to the reduced number of licenses, administration, power, and decreased failures and outages. These outcomes have a larger effect on the business. Now, the organization can capitalize on and monetize new opportunities faster while at the same time boosting profits by slashing expenses.



## How it played out in real life

A large and esteemed North American financial organization experienced stunted growth owing to its legacy systems. Not only were the systems expensive to maintain, but its processes were also rigid and cumbersome to use. A flexible, low-cost, yet secure database infrastructure was required.

Infosys' solution encompassed database consolidation, Oracle Database migration to multi-tenant architecture and security solution and implementation on Oracle Exadata Cloud Service. The client experienced tangible benefits quickly, including a 30% improvement in the quality of service, a 50% increase in agility, a 40% drop in costs and a 30% enhancement in performance.



## Conclusion

Healthcare provider CIOs must strategically approach digital transformation as that is to be the only possible future. Working with an experienced and expert partner such as Infosys can smoothen the digital transformation journey without ratcheting up costs while ensuring the gains are aligned with business objectives.

## About the Author



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Srikanth Kollana has 20+ years of experience in Strategic Client partnership, Program Governance, Solution Architecture and Service Transition & Delivery. Srikanth has worked with customers like Google, Gilead Sciences, Tyco, Meritor, Zimmer-Biomed, Flowserve, Southwest Airlines providing Oracle solutions & Service Delivery. He has also received numerous accolades from various senior client executives for his work.

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## References

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2. [COVID-19 'HAS TURNED THE HEALTHCARE INDUSTRY UPSIDE DOWN,' SURVEY FINDS](#)
3. [Beaumont, Summa Health Delay Hospital Merger Until After COVID-19](#)
4. [Cleveland Clinic cutting costs in face of \\$500 million in lost revenue due to COVID-19](#)
5. [Hospitals Report Fewer Heart Attacks and Strokes Amid COVID-19](#)
6. [Mayo Clinic cutting pay for more than 20,000 workers](#)
7. [Health systems are currently eyeing health tech partners for the long haul](#)
8. [An introduction to intelligent document processing for CIOs](#)
9. [Ten steps to ethics-based governance of AI in health care](#)
10. [Health systems are currently eyeing health tech partners for the long haul](#)

Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 14,000 cloud assets, over 200 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance comes baked into every solution delivered.

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