



Microsoft Azure and the Changing Landscape of Healthcare

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April 15, 2018



Introduction

Secure or accessible? Cost-saving or connected? Innovative or intuitive?

As consumers continue to intertwine their lives ever closer with technology - cars with autonomous driving, phones with facial recognition, even refrigerators with inventory and time management features or lightbulbs that remember your daily routines - the healthcare industry is just now beginning to rapidly acclimate to the idea consumers want intelligent tech working to improve their lives. Still, many within the field remain reluctant to fully embrace the move. The reasons behind the continued resistance when it comes to adoption of intelligent cloud-based health solutions are multi-faceted: healthcare IT professionals are hamstrung by limited budgets and security concerns; administrators are worried about costs of implementation and training; providers and patients are resistant to solutions with poor integration or lack of multi-platform compatibility. **Microsoft Azure, with cloud space specifically designed for healthcare, was built with these concerns in mind.** Azure is Infrastructure as a Service (IaaS), providing users and clients with cloud-based server space and capabilities and offers significant cost savings over traditional on-site infrastructure, as well as instant scalability and access to a full suite of intuitive applications and resources designed to run seamlessly on the cloud.



Machine Learning-Powered Healthcare Solutions

With the increased adoption of electronic medical records health care organizations for the first time have, at their fingertips, the raw data required to anticipate the need for future care interventions. **Predictive analytics systems** such as those supported by Microsoft Azure are being deployed across the nation: they are the backbone upon which cutting-edge personalized treatment plans to fight cancer are created, used to power public health initiatives and outreach, and are used to better understand which patients are at higher risk for hospital readmission or surgical recovery complications, among a host of other functions. One such deployment, at the Louisiana-based Ochsner Health System, utilized an Epic predictive program supported by the Microsoft Azure cloud to detect the early signs of adverse events and provide prompt interventions. It was also used to anticipate hospital staffing needs while reducing overtime, analyzing data patterns and determining which algorithms can best anticipate future trends in patient admission rates. [1] At a time when healthcare costs are ballooning, predictive analytics and machine learning powered by the cloud will play a key role in providing cost-effective, data-driven healthcare that is uniquely tailored to the needs of each patient.



Cost-Effective Data Management

IaaS is becoming the new industry standard for data management in healthcare. With **scalable deployment options** and resources to meet the needs of providers large and small, there is no longer a need to ‘over-invest’ in anticipation of future roll-outs - simply pay for the storage space or computing power you need now. Downward shifting cost curves for IaaS systems and the taxing nature of rapid digitization of consumer data on traditional private data systems means more healthcare IT managers are turning to the cloud for reliable, cost-effective computing solutions. Tangent Solutions can provide the guidance necessary to ensure your organization’s Azure migrations and deployments are done as efficiently possible.



Help in Preparing for the Worst

Azure streamlines the disaster recovery process by allowing health organizations to **store patient data remotely** in Microsoft's state-of-the-art secure server facilities. Automatic recovery functionality coupled with Microsoft 24x7 support means that should the worst occur, organizations can minimize downtime and be reassured that patient information is always accessible. Remote data backup also allows for IT professionals to test their health organization's disaster recovery plans without negatively impacting patient care. [3] Be sure to ask about our disaster recovery assessment to ensure your organization's readiness.



Regulatory Compliance Made Simple

With Tangent and Azure, healthcare IT departments will no longer have to devote manpower to managing the minefield of compliance controls as they apply to various services or components. IT can instead use the **native audit capabilities** of Azure along with other Tangent Solutions services to survey regulatory compliance across all supported applications. Azure conforms to most global standards for security and transparency of data use - including HIPAA Privacy and Security Rules and HITECH - and undergoes rigorous third-party audits. Azure also provides a **comprehensive online library of Security and Compliance blueprints** for the migration of protected patient information into the cloud.[3]



Easy Integration Equals Seamless Adoption

Azure offers the **professional application synergy** that end-users demand. Tangent can rapidly and safely integrate your company's data architecture seamlessly with an ever-expanding suite of Azure-supported apps for business management, collaboration, data services, health management, human resources, marketing, media, security and communications, [3] among others, encouraging enthusiastic adoption of your organization's cloud- based technologies across diverse platforms.

Secure or accessible? Cost-saving or connected?
Innovative or intuitive? You no longer have to choose.
Put the computing power of the cloud and the renowned security and experience of Microsoft to work for your organization with the help of Tangent Solutions' team of Azure product experts.

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