# TECHNOLOGY

#### TECHNOLOGY CASE STUDY | marcumtechnology.com

#### TECHNOLOGY INDUSTRY

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On behalf of our Chief Research Information Officer and myself, I am writing this to thank you for providing our academic institution's research team with outstanding and timely support recently. On May 8th the Research Services team ran into a minor emergency as an older storage cluster was very close to crashing with a risk of data loss. Without hesitation, you responded to our needs to help prevent disaster. Not surprisingly, this is exactly what we have come to expect from you and your team. Tariq Ejaz in particular, your Senior Storage Architect and Engineer is an outstanding asset who knows our systems well and always impresses. His immediate diagnosis of the problem combined with expedited delivery of parts saved valuable data. As someone who has worked in IT for over 30 years, I can confidently say nobody has given honest service quite like Tariq. I will add that the whole Marcum team has always been reliable. Please pass this on to whomever would be interested in our opinions at our university. There are times when people should be applauded.

#### **ABOUT THE CLIENT**

**CASE STUDY:** 

The client, is a nationally recognized health, science and technology university. This university has a research organization that integrates and elevates all of its health-related initiatives: education, research and patient care. It includes five Health Sciences schools — Dental Medicine, Health Technology and Management, Medicine, Nursing, and Social Welfare — as well as 4 specialty hospitals, and more than 200 community-based healthcare settings throughout its geographic market.

#### THE CHALLENGE

To accelerate business innovation, the client's Information Technology department requested that Marcum produce a technology "roadmap" for one of the healthcare system's hospitals, focusing on automation, availability, and elasticity. The proposed future state needed to be able to support agile new application deployment that would deliver exceptional IT experiences for doctors and patients. Modernizing the IT system infrastructure was foundational to these initiatives.

### THE GOAL

Create an infrastructure roadmap that focuses on automation, availability and elasticity.

### THE PROCESS

To develop this design, Marcum Technology collected and analyzed the hospital's existing VMware environment and documented the [then] current state of its VMs, CPU, memory, disks, network, ESX hosts, NICs, switches, and data stores. Marcum analyzed the VMware environment, determined if applications were running on dedicated servers, and studied the network to determine if there were sufficient resources available to support the proposed new systems. Marcum then documented the requirements for the planned future applications, including the backup and disaster recovery requirements for the new architecture.

Once the analysis was completed, Marcum Technology used the information to model the performance of potential new architectures. Specifically, Marcum utilized RVTools to capture and analyze all VMware-related data and then utilized software-modeling tools and incorporated our other findings to provide a comprehensive design of Hyper-Converged Infrastructure (HCI) hardware platforms and software.



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## **CASE STUDY:**

Marcum Technology Helps Client Avert Crisis and Creates Road Map for a Hospital Focusing on Automation, Availability and Elasticity

## THE SOLUTION

The project was completed with the delivery of documented findings, analysis, and proposed IT strategy designed to lead the client into the future it envisioned.

Marcum Technology clients frequently engage us for additional projects once they have experienced our work. This is certainly true for this client. After delivery of the technology roadmap, this client re-engaged Marcum Technology for the installation and implementation of the recommended Hyper-Converged Infrastructure.

