

*A Customer Story*



# St. Teresa's Hospital (Hong Kong)

Driving Enterprise Imaging Across the Health System



# St. Teresa's and Mach7 Partner to Provide Competent and Quality Healthcare

## About St. Teresa's

- St. Teresa's Hospital was founded in 1940 by the Congregation of the Sisters of St. Paul de Chartres.
- Their mission is to provide a competent and quality healthcare service for the sick and needy through the Christian Spirit of Faith, Hope, and Love.
- Over eight decades of development, the Hospital has become a well-established private general hospital in Hong Kong.
- Approximately 1000 beds with the best trained personnel and the latest medical facilities.
- The Hospital persists in improving itself, aiming at providing quality service to the public.

## Transforming Imaging Technology to Improve Patient Outcomes

St. Teresa's Hospital has been providing competent and quality healthcare services to the general public for over 80 years. Its vision is to provide safe, high quality and cost-effective health care services that offer holistic care and promote wellness in partnership with patient groups and healthcare agencies. The medical staff of St. Teresa's are a team of dedicated, caring and dynamic professionals that work tirelessly to meet the health needs and expectations of their community while committing themselves to the continuous improvement that drives patient health and enhances delivery of care.

In this effort, St. Teresa's has partnered with Mach7 Technologies to deliver enterprise imaging solutions that increase patient and staff satisfaction, improve patient outcomes and reduce costs across the multi-specialty hospital system. With Mach7's Enterprise Imaging Solution, St. Teresa's has a comprehensive end-to-end imaging platform that spans across the healthcare organization and can adapt to their changing needs, removing the burden of obsolescence and dependence on antiquated proprietary technologies to remain future-focused.



“As a trusted partner with Mach7, we share the same vision and commitment to offering the best quality care for our patients while improving staff satisfaction and managing costs. Mach7’s Enterprise Imaging Solution offers real differentiated value for St. Teresa’s Hospital and our affiliated providers. The zero-footprint diagnostic viewing platform combined with the advanced workflow management and vendor neutral archiving and data management capabilities has allowed our organization to build a strong foundation for the future.”

Mr. Pascal Tse, Chief Information Technology Officer, St. Teresa’s Hospital

## Replacing a Legacy PACS

St. Teresa’s Hospital embarked on a challenging journey in November 2019 to replace its aging legacy PACS. This decision was derived from the realization that their current imaging technologies simply could not deliver the functionality, performance, interoperability, and breadth needed to carry their healthcare system into the future. The old PACS system had limited migration paths which often involved forklift upgrades and replacements that disrupted clinical workflow, and only scaled with costly additional hardware. The system also did not offer a true universal viewing platform with the robust clinical workflow and advanced data management capabilities needed for a 21st century imaging platform designed for the future.

As the hospital reviewed the industry landscape of enterprise imaging providers, Mach7 stood out from the pack in that it offered enterprise imaging transformation with a comprehensive vendor neutral platform designed not only to plug the gaps of existing legacy systems but also offer a flexible

strategy for the future. Mach7’s Enterprise Imaging Solution met all of the hospital’s core requirements:

- Robust interoperability with other hospital systems including the ability to image enable the EMR and integrate with 3rd party systems (e.g., dictation, AI, workflow applications).
- Fast image storage and retrieval in a vendor neutral environment with the capability to archive images from multiple service lines in various image formats
- True zero-footprint viewing platform with no dependency on workstation hardware that can span across the provider organization as both an enterprise clinical viewer and diagnostic viewer to support interpretive workflow.
- Image rendering, navigation and manipulation tools designed for optimized performance regardless of image format, size, or study type.
- Support for teleradiology services with inherent cybersecurity protections

## The Benefits of Mach7’s Enterprise Imaging Solution



Enterprise-wide universal viewing



Next-generation PACS modernization



Robust system interoperability



Clinical collaboration through advanced workflow orchestration



Vendor neutral archiving and data management



to ensure patient data confidentiality and integrity.

- Sophisticated workflow management applications with a universal worklist that supports advanced clinical intelligence and collaboration.

**“When we first looked at Mach7, we initially only considered their VNA, but after further analysis and conversations, we quickly learned that their solutions offered innovative technologies and approaches that quickly differentiated them from the competition,” Tse says. “We had many challenges with our legacy PACS that just did not meet our future needs. The existing hardware was old and reaching its end of life. The system’s hanging protocols were not working properly and we were experiencing radiology productivity and workflow inefficiencies.”**

“Our Radiologists were also having difficulty determining which prior studies were truly relevant to the case being reviewed— as a result, we were wasting time clicking through every study in the system thereby, causing delays and reducing diagnostic confidence. Access to the full patient imaging record was becoming more and more problematic. In addition, technologists and radiographers were restricted on where they could work because Quality Control (QC) tasks were tied to specific workstations by the PACS system.”

**“As we discussed these challenges with Mach7 and reviewed their Enterprise Imaging Solution’s strengths, considered their customer-first approach, and saw their overall vision, we knew they stood out above the competition.”**

In 2019, Mach7 beat out the competition and was awarded the St. Teresa’s PACS contract against industry giants like Agfa, Philips/ Carestream and GE. This agreement included Mach7’s comprehensive image data management and VNA components, migration services, as well as the full suite of clinical workflow management applications and zero-footprint eUnity enterprise diagnostic viewing platform.

### Transformation Results

Since going live (primary reading in Radiology in May 2020 and hospital-wide in September 2020), St. Teresa’s has been extremely satisfied with the results of their enterprise imaging modernization and transformation in partnership with Mach7. Using Mach7’s migration services, St. Teresa’s was able to migrate legacy PACS studies to the Mach7 VNA and completed key patient data and image enablement integration with their home-grown Electronic Health Record system. Core analytics and statistics are currently being gathered to show specific ROI metrics and results. **Immediate benchmark results were seen in the areas of clinical workflow efficiencies, diagnostic confidence,**

**image storage, retrieval, diagnostic viewing speeds, as well as overall system performance.**

In addition, Mach7’s interoperability and image data management tools have provided St. Teresa’s system administrators with more flexibility and independence across the enterprise, including the utilization of tools to better manage the coordination of study destinations and timing with broader customization and control.

### St. Teresa’s Hospital in partnership with Mach7

- Mach7 is a long-term partner, not just a vendor
- With Mach7’s Enterprise Imaging Solution, St. Teresa’s clinicians and interpreting providers can see all the patient’s imaging history across the healthcare enterprise for fast, confident diagnosis and treatment planning. Referring physicians and specialists can also view their patients’ images and reports in real time, contributing to healthier outcomes.
- In healthcare, change is constant. With Mach7, St. Teresa’s imaging strategy can adapt, scale, and evolve to continuously enable exceptional patient care.



## Looking to the Future

Mr. Tse and his team are committed to continuous focus on quality improvement and improved patient outcomes. "Together, St. Teresa's and Mach7 are at the forefront of bringing new innovative solutions to our clinicians to support a culture of technology advancement, now and in the future. Looking ahead, I'm optimistic our partnership with Mach7 will help us empower our providers toward better diagnostic confidence, faster time to treatment and targeted therapies with predictable outcomes and, ultimately, to transform care for our patients."

**Mach7 is focused on the future of healthcare. We give organizations unprecedented technology independence, flexibility, and interoperability so that nothing inhibits the flow of image data.**

**From the first line of code, Mach7 was designed to provide an affordable bridge from legacy systems to a future-ready infrastructure that brings imaging to the enterprise, now and into the future.**



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