



CASE STUDY

Supporting Building Growth

WITH EXPANDED NETWORK
COVERAGE AREA



Client Profile

A hospital expands another 500,000 square feet. **As the building nearly doubles in size,** it's determined that mobile devices have limited functionality, due to newer Leed Certification requirements that measure green building standards. The new growth will limit LTE and 4G capabilities, which the medical staff and administrators use to perform their routine duties each day.

QUICK SPECS



INDUSTRY
HEALTHCARE



VENUE SIZE
1,000,000 SQ FT



CAPABILITIES
LTE AND 4G



CARRIERS SUPPORTED
AT&T, VERIZON, SPRINT, AND
T-MOBILE



SOLUTION
VERTEX DAS
IMPLIMENTATION

The Hospital's Problem

The hospital's pre-expansion Distributed Antenna System (DAS) supported all carriers. As the needs of patients grew, the hospital decided to expand its building. In doing so, the all-inclusive network would cease to function totally.

If this network barrier occurred, it would break down important wireless communication between doctors, staff, administrators and patients' families.

WHAT THEY NEEDED

The network coverage area needed to be expanded before the communication barriers happened. Especially now that LTE and 4G technologies are standard for wireless communication, the expansion of the hospital became moot.

Without ubiquitous communication across the campus, the expansion would not deliver any benefits to the staff or patients.





Creating a Proactive Solution

Vertex was met with a list of challenges to best support the hospital's expansion and its mission for quality patient care. To begin, we needed to design and install a working DAS that supported four major carriers within the new and existing building space.

Since the large complex already used AT&T, Verizon, Sprint, and T-Mobile, we needed to be proactive. **To ensure that operations continued to run smoothly during and after the expansion,** we took action to create a newly updated and expanded network coverage area.

THE FIRST CHALLENGE

For this client, we needed to implement a solution that worked in two different ways. As the endgame was to continue seamless communication, we overcame this challenge by making sure the existing DAS remained functional during the expansion.

While the older system stayed in place during construction, we maintained its functionality to support the expansion. Once the construction was completed, we replaced the system with a DAS network that covered twice the original area.

THE SECOND CHALLENGE

Then we were met with another challenge. Our client had already made a significant investment in their physical growth, so we needed to make sure that their expenses did not surpass their budget. **We maximized their investment to include a digital expansion that would ensure the continuation of top-notch patient care, today and in the future.**

With the hospital's expansion, there was an increase in patients as well as administrative work. Before the plans were drawn, the staff had used their mobile devices to communicate on prescriptions, for doctor-to-doctor consultations, cost calculations and a variety of administrative functions.

THE COMPREHENSIVE SOLUTION

It was crucial that we not only implemented a technological solution but also worked with the carriers and hospital legal staff within the contract agreements with the current service providers. **We ensured that the hospital continued to function at its optimal level in medical and administrative capacities.**

Before and during the hospital's transition to a larger building, we handled the entire project from start to finish, including equipment details and labor. Because we took this comprehensive approach, communication went uninterrupted during and after the expansion was completed.

Vertex assisted greatly with project coordination, submittals and design review. It improved communication and provided a one-stop-shop for document management and retrieval. The Vertex team was tremendous. They stand up for us and they hold all parties accountable.

*Senior Construction Engineer,
Vertex Innovations*

The Results

The hospital kept up with its mission of top patient care during the transition. **Because we implemented a proactive solution, communication breakdowns never occurred.**

THE SOLUTION

After we conducted a holistic review of functionality, the expansion allowed the **hospital to improve its daily operations and care for more patients.**

Vertex also provided ongoing routine checkups to ensure that all devices functioned at their optimal level. This work guaranteed that the medical and administrative staff could utilize effective wireless communication every day without any interruptions.

IN THE NEAR FUTURE

The hospital will add a Main Operating Base for administrative work only. We will oversee their system update next year, so this medical office will be able to communicate with the main campus without any interruption.





From healthcare to education, we meet institutional needs through network implementation, wifi enablement and more. Whatever it takes to keep your institution running efficiently, We are there. Interested in seeing how Vertex can help your company's connectivity needs? **Get in touch today.**

GET IN TOUCH

