



FiberLANTM GPON Solution

Streamlining Operations at its Headquarters



About Marzetti

The T. Marzetti Company, renowned maker of salad dressings, dips and other food items, brings delicious food to the table for customers all over the United States. The company's headquarters is located in the Columbus suburb of Westerville, Ohio, and is home base for nearly 240 employees. After more than 25 years of operations at its previous location in the Columbus area, the headquarters campus grew, and over time, buildings and departments became fragmented across three separate buildings.

In 2017, T. Marzetti Company decided to implement a new campus facility to house all employees and operations in one national headquarters building. Among many of the design considerations, a major one was to find a local area network (LAN) to implement across an entire four-story building in the most economical way possible. Ideally, T. Marzetti Company wanted that solution to enhance performance and security, reduce capital costs and supply reliable, high-speed Internet access for all its departments.

The Challenge / Opportunity

The business consolidation created an opportunity to find a solution that could genuinely grow with the business. Selecting T. Marzetti called on UberData Networks, a full-service system integrator based in Columbus, Ohio, to help them select a solution that was best for the company. UberData Networks provided a proposal for both Copper LAN and Passive Optical LAN (POL) deployments.

The POL network design demonstrated a 40 percent cost savings versus Copper LAN.

Another key consideration in the process was the longevity of the network. The average lifespan of a Copper LAN deployment is five to seven years. T. Marzetti Company is no stranger to infrastructure updates; over the years, the company has undergone re-cabling processes multiple times. This time around, IT leadership wanted to find a solution that was future-proofed.

Since I joined T. Marzetti in 2009, we've re-cabled buildings several times. The more we discussed GPON and talked with UberData Networks about space savings and future bandwidth requirements, the more GPON made sense for our new headquarters.

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Kyle Van Buskirk, IT Operations Manager T. Marzetti Company

GPON, or Gigabit Passive Optical Network, is a compact, high-performance fiber-based solution that requires less space while providing greater growth opportunities, decreased power consumption and less time to implement than traditional copper-based solutions.



What They Said

"When we began designing the company's network, we recommended FiberLAN from DZS because it's a cost-effective and flexible solution. With DZS products, we streamlined a once fragmented infrastructure for the entire company's operations, quickly and efficiently while providing more space for employee work areas and storage."

Jeff Van Horne, Founder & President. UberData Networks

"With a POL network in place, our employees and visitors have 24/7 access to reliable, fast Internet services from anywhere in the building. The reliable, future-proof network combined with our employees under one roof, make our business more efficient."

Kyle Van Buskirk, IT Operations Manager, T. Marzetti Company

The Solution: FiberLANTM GPON from DZS

UberData Networks suggested using DZS FiberLAN as the backbone for the corporate headquarters. With FiberLAN, T. Marzetti Company has assurance that they won't face downtime due to recabling again. They also have a solution that costs 40 percent less than a Copper LAN deployment. An important factor is space – since the company consolidated its headquarters into one building instead of three, finding creative ways to save space was paramount.

FiberLAN, the flagship POL solution from DZS, is a high-density, high-performance GPON-based POL alternative to copper wiring. With FiberLAN, T. Marzetti Company has a flexible solution to meet the high bandwidth demands of a corporate headquarters and improve its infrastructure lifespan.

Working with UberData Networks, the T. Marzetti Company IT team designed a solution based on DZS' 10 Gigabit MXK-198 Optical Line Terminal (OLT). The aggregation platform supports several Optical Network Terminals (ONT) from DZS including (62) 2608T ONTs; (41) 2804D ONTs and (8) 2804P ONTs. Each ONT model has its specific application:

- A majority of T. Marzetti employees work in cubicles. Every cubicle technology panel houses DZS 2608T ONT modems. Each ONT supports four desks and provides a voice and data port for each employee.
- In large enterprise environments like the T. Marzetti Company headquarters, several Wi-Fi access points are necessary. The plenum-rated DZS 2804D ONTs are mounted in the ceiling with beam clamps and provide more than 40 access points throughout the building.
- T. Marzetti executives have their own open office spaces, which are each
 equipped with a DZS 2804P ONT. These house four Gigabit Ethernet ports to
 connect to printers and deliver voice and data services to each desk.

POL Benefits: Space Savings, Flexibility and Reliability

Traditional copper solutions require multiple telecommunications closets which house tiers of heat-generating equipment and subsequent air conditioning units to keep them cool. With the FiberLAN network, T. Marzetti Company was able to eliminate two intermediate distribution frame (IDF) closets on the second and fourth floors. Now, employees can use these areas for printing and workspaces, as well as additional storage. In addition to cabling consolidation benefits, the FiberLAN solution offers Power over Ethernet (PoE) to edge devices, which is especially beneficial in powering access points and other equipment without having to locate devices near power or run separate dedicated power to the device. This reduces the amount of cabling in the building by 80 percent compared to a Copper LAN.

Because the T. Marzetti Company IT team re-cabled or adapted their Internet infrastructure so many times over the years, they still had existing hardware that was viable to use, such as Ethernet switches. The FiberLAN network supports the Ethernet switches the company already owned, which saved them more resources. And because it's a POL network, there are far less switches for T. Marzetti IT team to manage.

Downtime is detrimental to any business, but especially one this size. All ONTs throughout the headquarters building are powered using power distribution units in the IDF closet. This design ensures network uptime in the event of a power outage, because all equipment can run on battery backup until power is restored.

Fiber is imperative to the success of T. Marzetti Company's technology structure as the company continues to grow. FiberLAN GPON from DZS provides the company with an affordable, future-resistant solution that saves space and improves infrastructure lifespan so that the company can continue to do what it does best – provide delicious food and superior service to its customers.