# Convenience Store Chain Boosts Business Intelligence With Security Camera Analytics

## The client

The organization is a convenience store chain and gasoline retailer with more than 60 years in the industry. The company employs tens of thousands of people, operating hundreds of stores across the country and bringing in billions in revenue each year.

## The challenge: Driving competitive differentiation with existing technology

Security cameras are essential technology for convenience stores. But what if the video they captured could also be used for optimizing store layouts and product placement, better managing long lines at the register, and analyzing hot spots in the store? This was the question asked by the client's enterprise architects two years ago. The skunkworks project showed promise and was eventually given a green light by leadership.

**Industry:**
Convenience stores

**Insight provided:**
- Infrastructure planning
- Architectural design and testing
- Field deployment of the solution
- Warehousing and warranty support

**Insight services:**
- Professional Services

## The solution: Innovative, supportable, and scalable technology

The client had been working with Insight for nearly a decade, so they turned to our teams for strategic guidance to plan and execute the project.

Together, we evaluated whether to go with a cloud provider, or consider on-premises architecture with local processing. The deciding factor was connectivity. With many of the client's retail locations located in remote areas, often with poor internet connectivity, we determined that an on-premises solution would be the best choice.

We then worked in close collaboration with a video analytics provider selected by the client to design the optimal configuration. Specs, software needs, and requirements for Artificial Intelligence (AI) and Machine Learning (ML) workloads were discussed. Cost and scale were big considerations as well — the client needed a solution that could work and be affordable at scale, across all the company's hundreds of stores.

The Insight team consulted many vendors on the client's behalf, navigating chip and GPU shortages, to identify certifiable and supportable combinations of servers, processors, and GPUs.

Ultimately, we identified a final solution: a Supermicro® server, AMD processor, and NVIDIA® A40 GPU. This combination met the client's unique criteria, along with the technical requirements we determined with the video analytics provider. The technology was then ordered and shipped — quickly and at scale.

The solution has been running in a pilot phase successfully and will be rolled out to all stores very soon.

## The benefits: A wealth of insights, better decision-making, and a competitive edge

The client is clearly proving the value of curiosity and innovation in business. What started as an unfunded project exploring bold possibilities quickly became a critical application and differentiator for the client.

The business is now able to make better decisions about product placement, store layouts, and staffing, and can do so without sending workers into each store to manually monitor. Individual solution components can be upgraded without needing to redesign the solution, with extra capacity to support future growth via more cameras, 4K upgrades, and more. The client's leadership team is on track to take advantage of more opportunities that will continue to optimize business in the future.

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**Benefits:**

Increased business intelligence

**Brand-new, custom, certifiable, and supportable configuration**

**Cost-effective solution built for scalability**

**Technical and professional expertise from a trusted partner**

Peace of mind about solution performance and reliability, **thanks to depot and warranty services**

AI- and ML-based video analytics solution to drive business value

**Insight**