



Lenovo and NVIDIA solutions for retail

## Graymatics unlocks critical business insights for retailers using Video AI

Retailers can now go beyond security surveillance to capitalize on store cameras for accurate consumer insights. Through passive CCTV cameras, Graymatics can convert real-time data into alerts to improve the store's operations and day-to-day business.

Graymatics is an AI video analytics company. Their application "VistaMart" leverages the latest AI technologies to extract deep insights from any installed CCTV camera, using over 100 AI video analytical solutions.

Graymatics utilizes the NVIDIA Accelerated AI platform and NVIDIA GPUs to run video analytics so retailers are able to access accurate, real-time information from VistaMart's key features, which include:

**Customer data analysis:** learn more about customer demographics, their traffic through the store, dwell time, behaviors, and emotions.

**Staff flow:** optimize staff placement to boost efficiency, reduce customer wait time, and manage queues.

**Planogram management:** track and efficiently manage inventories to help with restocking decisions and shelf displays.

**Loss and theft detection:** monitor shoplifting by customers or employees and trigger alerts that call for immediate action.

**Predictive analysis:** harness the power of machine learning to analyze historical trends and make predictions that can help with decisions that drive business.

**Edge solutions:** improve decision making through mobile, camera equipped, edge devices that can be attached to shelves in retail stores for targeted monitoring.

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# Lenovo AI Solutions and the NVIDIA AI Platform

Graymatics solutions are optimized through NVIDIA products for training natural language processing (NLP) models and training and inference in production.

## Results

The VistaMart platform collects and organizes all relevant information, which can then be used to generate real-time alerts to store management or serve as a database to be consulted as needed to improve efficiency and learn about customers, product placement, and inventory.

- Reduce customer wait time exponentially through queue management analysis and provide real-time alerts to assist at the counters
- Detect suspicious activities and provide real-time notifications of store theft to aid product recovery
- Improve promotional and marketing directives with data driven information to better engage customers and help drive sales

## AI solutions from Lenovo

Lenovo provides proven, ready-to-deploy solutions to help realize your AI transformation and unleash the power of your data.

Lenovo ThinkEdge provides the power of edge computing to take your enterprise from data to insights faster than ever.

Lenovo ThinkSystems deliver scalable performance for High Performance Computing (HPC) and AI workloads demanding the best GPU acceleration.

## Conclusion

Together, Lenovo and NVIDIA are empowering businesses with innovative solutions in AI to help deliver business intelligence and the agility to respond rapidly to changing market dynamics while delivering an exceptional customer experience.

Discover more about AI in the retail industry:  
[www.powerof2.nvidia.lenovo.com/industries/retail](http://www.powerof2.nvidia.lenovo.com/industries/retail)

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## Why Lenovo

Focused on a bold vision to deliver smarter technology for all, Lenovo is developing world-changing technologies that create a more inclusive, trustworthy, and sustainable digital society. By designing, engineering, and building the world's most complete portfolio of smart devices and infrastructure, we are also leading an Intelligent Transformation—to create better experiences and opportunities for millions of customers around the world.



GRAYMATICS