

# Lenovo NVIDIA and Fingermark Build an AI Solution for Quick Service Restaurants

**An innovative partnership that brings together cutting-edge AI technology to deliver a seamless customer experience and improve operational efficiency**

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## Summary

Fingermark offers a comprehensive solution that delivers real value to their clients in the Quick Service Restaurant industry. By leveraging cutting-edge AI and computer vision technology, they provide accurate and timely data that enables businesses to quickly address key issues and deliver exceptional customer experiences while driving growth.

With extensive industry experience spanning 17 years, Fingermark possesses an in-depth understanding of the QSR landscape and works closely with industry leaders to stay ahead of emerging trends. Their commitment to innovation ensures the technology is always up-to-date and aligned with the evolving needs of the market.

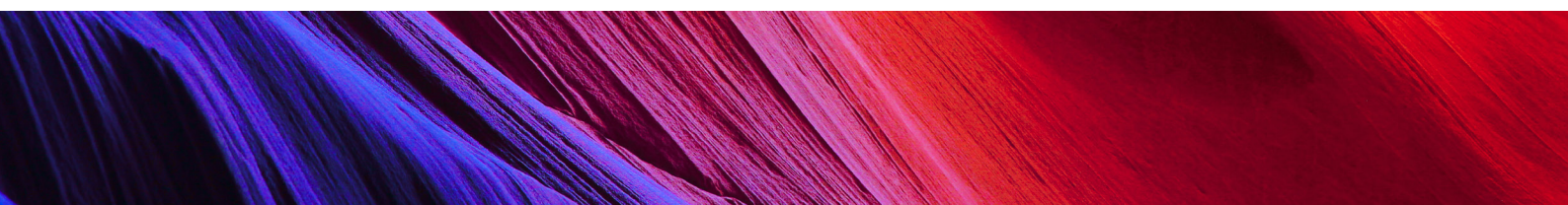
By providing real-time, accurate data, their solutions empower decision-makers at all levels of the business to make informed decisions that benefit all stakeholders. As a result, Fingermark has established itself as a global leader in computer vision technology for those in the QSR industry.

## Challenge

Drive-thru operations can be challenging, especially during peak hours when the number of customers increases. The challenge can include long wait times, inaccurate order taking, and staff under pressure to make quick decisions that have a direct effect on customer satisfaction and overall profits.

Walk-ins add pressure to serve the customers efficiently as the staff needs to serve both walk-ins and drive-thru customers. The amount of orders during peak hours can become overwhelming, especially if staff is limited. Meal availability is also harder to track with higher volumes of work.

Hiring staff can also impact performance as the training is done during work hours, adding to the stress of keeping customers satisfied.



## Solution

Fingermark's Eyecue drive-thru technology uses artificial intelligence (AI) and computer vision to address these challenges. It uses cameras to capture the complete customer journey including human-to-vehicle interactions. The technology also enables real-time data to be delivered to staff within the restaurant to receive targeted alerts that prompt them to make the right decisions at the right time.

Some key features of Eyecue:

- Computer vision to track the full customer journey
- Unique designs for complex drive-thrus
- Real time data to empower your team
- Human-to-vehicle detection
- Identify vehicle pull outs
- Order, cashier and pull forward tracking
- Vehicle re-acquirement
- Live dashboards configurable for each workstation
- Record and store data for training and process improvement



## Results

Installing Fingermark's Eyecue technology delivers multiple benefits, resulting in a more efficient business with increased visibility in real-time and post events. With highly accurate data capture, Eyecue helps improve customer satisfaction, provides greater visibility, and enhances employee efficiencies, leading to increased revenue and greater profitability.

By enabling staff members to receive real-time alerts, Eyecue empowers them to make quick decisions during busy periods and deliver a better customer experience with greater accuracy and speed. Additionally, Eyecue's strategically placed cameras capture events that can be used for staff training and process improvement opportunities. This allows managers to review past events, identify issues and find solutions for a more efficient restaurant.

Overall, Eyecue is an invaluable tool that facilitates both real-time and post event capture, delivering significant benefits to businesses.

## Validated Architecture

Eyecue can be deployed in a Lenovo ThinkStation P3 Tower with NVIDIA RTX 4000 or RTX A4000 depending on the customer requirements with an Intel Core i9 CPU. Eyecue can also be deployed using Lenovo ThinkSystem SE350 and ThinkEdge SE450 and NVIDIA RTX 4000 or RTX A4000 depending on customer requirements.

This allows for a standard deployment with 6 to 20 cameras to capture customer and vehicle data for Eyecue to analyze and provide real time information to staff. The solution offers visual prompts to empower employees to make the right decisions at the right time, integrated into a company's existing systems.

# Design Components

Servers	CPU	Accelerator	Storage	Software
ThinkStation P3 Tower	Intel Core i9	RTX4000 or RTX A4000	256GB SSD M.2 1TB HD 7200RPM 3.5	Fingermark Eyecue
ThinkEdge SE350	Intel Core i9	RTX4000 or RTX A4000	256GB SSD M.2 1TB HD 7200RPM 3.5	Fingermark Eyecue
ThinkEdge SE450	Intel Core i9	RTX4000 or RTX A4000	256GB SSD M.2 1TB HD 7200RPM 3.5	Fingermark Eyecue

## Resources

- [Explore Lenovo's AI Innovators Program](#)
- [Explore the Lenovo HPC and AI Innovation and Briefing Center](#)
- [Lenovo Validated Design for AI Infrastructure on ThinkSystem Servers](#)
- [Fingermark Website](#)
- [Fingermark - Enhancing Operational Efficiency at a Major Burger Chain](#)
- [Lenovo-NVIDIA Alliance](#)

## 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.

## Why NVIDIA

NVIDIA pioneered accelerated computing to tackle challenges no one else can solve. Our work in AI and the metaverse is profoundly impacting society and transforming the world's largest industries—from gaming to robotics, self-driving cars to life-saving healthcare, climate change to virtual worlds where we can all connect and create.



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