IGT SOLUTIONS

CASE STUDY

Autonomous Shopping Solutions Provider Reduces Store Latency by 31% with IGT Solutions' Tech-Enabled Retail Optimization Services

> We've come a long way collectively since we started working with each other, more stores, better processes from both IGT Solutions and our side and a system that works much better!
>
> *- Director, Data Operations*

With millions of consumers relying on our Client's autonomous shopping platform, store latency poses a significant challenge to the company's commitment to a seamless checkout experience.

Store latency is the time gap between a customer starting a transaction and the transaction being fully completed and recorded. This encompasses the time needed for data capture, processing across various systems (like inventory and payment gateways), and updating the store's records. High store latency not only impacts the customer experience, resulting in frustration and potential sales loss but also disrupts the flow of operational data crucial for prompt decision-making and efficient inventory management. Reducing store latency is therefore essential for improving customer satisfaction and operational efficiency, ultimately driving revenue growth and competitive advantage in the fast-paced retail industry.

Faced with obstacles causing delayed transactions and revenue loss due to high store latency, the Client had to quickly transform its transaction processing system.

SNOWBALL EFFECT

The Client encountered several operational hurdles that impeded their transaction processing efficiency and accuracy. One of the challenges was the delayed transaction processing caused by high store latency, affecting receipt generation, resulting in revenue loss and customer dissatisfaction. Effective transaction processing, utilizing data annotation models, necessitates AI/Machine Learning skilled operators, which are currently in short supply. Furthermore, the current support team faced challenges in achieving the targeted 95% accuracy level in data annotation.

Additionally, the Client's platform relies on a robust, up-to-date Machine Learning pipeline. However, they struggled to employ trained analysts capable of conducting in-depth research and industry analysis to identify data trends and industry developments that would prompt workflow enhancements.

AT A GLANCE

INDUSTRY
Retail Automation Systems & Services

THE CLIENT
The largest provider of AI-powered shopping solutions that simplify retail by offering shoppers a convenient, accessible, and personalized camera-first checkout experience, enabling anonymous in-store purchases without the need to wait in line, scan, or pay.

CHALLENGE
Optimize retail transaction processing workflow and address specialized staffing shortages to drive more revenue and achieve accuracy targets.

SOLUTION
Reduced store latency by improving machine learning accuracy rate and stabilizing critical KPIs through a comprehensive Operations Improvement program integrating AI-driven process enhancements and scalable resource deployment.

RESULTS
- Decreased store latency
- 2021-22: 40 stores with 95% accuracy rate
- 2023-24: 100+ stores with >99% accuracy and <30 sec AHT

RESILIENT. FRICTIONLESS. RELEVANT.

MULTIFACETED, TECH-ENABLED SOLUTION DRIVEN BY SCALABLE TALENT

IGT Solutions tackled the complex challenges of our Client by using a collaborative and forward-looking strategy that combined advanced technology and extensive domain knowledge. Emphasizing the importance of transaction speed and accuracy, our main objective was to improve operational efficiency through innovation and workforce optimization. This comprehensive and insightful approach not only resolved the immediate issues but also established a solid groundwork for continuous operational excellence and innovation. By prioritizing skilled staff deployment, improving data annotation services, and utilizing analytics, we have set a new benchmark for the Client, demonstrating our dedication to providing innovative solutions that yield measurable outcomes.

Deployment of Skilled Full-Time Equivalents (FTEs)
To promptly resolve the delay in transaction processing, we efficiently deployed over 100 experienced Full-Time Equivalents (FTEs) in just 45 days. Their task was to carry out real-time video transaction reviews, aiming to expedite transaction processing and minimize store latency.

Enhanced Content Tagging Methods
Introducing advanced content tagging techniques, including data annotation and video tagging, marked a significant milestone. These refined methods and procedures reduced review queue backlogs, leading to a more efficient and effective transaction processing system.

Scalable Operations Model
We showcased remarkable adaptability in scaling operations, acknowledging the fluctuating transaction volumes. Our agile model was designed to accommodate peak periods and seasonal variations, ensuring consistently high service standards even during demand spikes.

Optimized Data Annotation Services
Providing access to large diverse annotated datasets significantly accelerated the training of the Client's AI algorithms, addressing the constraints of their internal datasets and enhancing the accuracy of their machine learning models. Actionable insights were shared to enhance and future proof workflows.

Custom Store Module Development
Developing customized store modules allowed operators to gain a better grasp of store demographics, leading to improved service customization. These modules were then shared with other vendor partners.

Utilizing Analytics to Improve Decision-Making
Our Business Intelligence (BI) team's insights and actionable recommendations were crucial in redesigning the client's internal reporting practices and process, offering them a reliable tool for making informed decisions and strategic plans.

SETTING A NEW BENCHMARK FOR OPERATIONAL EXCELLENCE

The implemented solutions delivered significant benefits to our Client. Through consistent attainment of key performance indicators (KPIs), we reduced store latency by 31%, exceeded the accuracy rate target of 95% by achieving over 98.5%, slashed handle time by 15%, and reduced Meta Variance to under 0.5%. These improvements enhanced operational efficiency and service quality.

Moreover, our flexibility during peak and seasonal spikes decreased store latency, ultimately enhancing overall performance. Through close collaboration with our Client, we optimized system loading time by 50%, resulting in increased operator productivity. Improving handle time drove 18% efficiency gains while outsourcing non-core tasks such as AI algorithm training enabled them to free up scarce resources to focus on strategic initiatives and innovation, stimulating growth and differentiation in their markets.

Our commitment to ongoing improvement continues with us bringing insights to reduce leakage and improve case management, improve store layout and technology, and pinpoint areas that streamline operations and boost efficiency. This collaborative strategy has reshaped our Client's operational landscape, setting a new standard for excellence in efficiency and service delivery.

Consistent Results that Drive Success

31 %
Store latency improving operational efficiency

>98.5%
Accuracy rate of issues for machine learning

18%
Efficiency gains leading to greater profits at lower costs

50 %
System loading time leading to increased operator productivity

<0.5%
Meta variance translating to world class machine learning pipeline accuracy

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Explore what IGT Solutions can do for you.

Visit www.IGTSolutions.com or email us at mktg@igtsolutions.com