

# Case Study on AI and Video Analytics at Smart Restaurants



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# Elevating Security and Hygiene Standards through Video Analytics in Charcoal Eats

## Introduction:

Maintaining top-notch security and impeccable hygiene standards is paramount in today's dynamic restaurant landscape. Charcoal Eats embraced innovation by integrating advanced video analytics technology to fortify its security measures and uphold stringent hygiene protocols.

***“Enhance Operational Efficiency and Customer Experience Through AI and Video Analytics”***

## Challenges addressed

**Hygiene Monitoring:** Ensuring adherence to hygiene standards in food preparation and handling.

**Security Surveillance:** Safeguarding the premises against theft, fire, vandalism, and unauthorized access.

**Real-time Oversight:** Monitoring critical areas and responding promptly to potential issues.

## **Solution Implemented:**

Charcoal Eats deployed cutting-edge video analytics software equipped with:

**Hygiene Compliance Tracking:** Monitoring kitchen and food preparation areas for adherence to hygiene protocols by detecting Chef's uniform including face masks, shower caps, hand gloves detection while preparing food and garbage around the kitchen.

**Attendance:** Face Recognition based Attendance of employees.

**Anomaly Detection:** Alerting staff to unusual activities or breaches in restricted zones.

**Live Surveillance:** Real-time monitoring of various sections to ensure continuous oversight.

**Access Control:** Managing and tracking entry to sensitive areas for authorized personnel only.

## **Implementation and Outcomes: Hygiene Maintenance:**

Regular monitoring led to a 25% decrease in hygiene-related incidents and improved compliance with industry standards.

**Enhanced Security:** Prompt alerts and real-time surveillance contributed to a 40% reduction in security-related incidents such as theft or vandalism.

**Operational Efficiency:** Streamlined operations due to automated monitoring, enabling staff to focus more on customer service.

## **Impact on Customer Trust and Business Success: Customer Confidence:**

Visible adherence to strict hygiene protocols boosted customer trust and loyalty, leading to increased patronage.

Business Reputation: A safer and hygienic environment positively influenced online reviews and word-of-mouth recommendations, enhancing the restaurant's reputation.

Cost Savings: Preventing security breaches and hygiene incidents saved the restaurant considerable costs associated with potential liabilities.

**Conclusion:**

By integrating video analytics for security and hygiene purposes, Charcoal Eats not only fortified its defenses against potential threats but also ensured a safe and hygienic environment for both patrons and staff. This proactive approach not only instilled trust among customers but also safeguarded the business's integrity and success in a competitive market.



