GBS — The quality of your thoughts!

Associated with SMAP Counterlens

Intelligent Surveillance-Enabled Transaction Monitoring System

Overview

The video showcases an integrated surveillance and POS monitoring system designed for enhanced transaction transparency and security in a retail or service environment. The system combines real-time video feedback, automated alerts, and secure data logging to ensure accountability and owner awareness.

Observations from the Video

01 Live Reflection of Activities:

02 Automated Greetings and Monitoring:

03 Fraud Detection - Data Deletion Handling:

04 Smart Incident Detection and Reporting:

05 Video Data Storage:

Live Reflection of Activities:

- As the cashier enters transaction details at the billing counter, both their physical actions and the transaction screen are visibly reflected on the surveillance camera feed.

- The camera setup ensures that the product being billed and the typing activity are clearly captured.

Automated Greetings and Monitoring:

The surveillance system is equipped with an automated greeting feature, providing a voice-based or on-screen welcome when a customer or cashier is detected.

Fraud Detection – Data Deletion Handling:

- In cases where the cashier deletes a product from the transaction, the system marks it with a distinct "**".

- This serves as a digital flag for any potential manipulation or manual override of transactions.

Incident Detection and Reporting:

- Any unusual activity - such as abrupt item removals, mismatched items, or unusual customer behavior is automatically captured as image snapshots.

- These snapshots are instantly forwarded to the store owner or admin within seconds.

Video Data Storage

- All activities, including routine transactions and flagged incidents, are securely stored in the DVR memory.

- The footage can be reviewed later for auditing, dispute resolution, or compliance purposes.

Real-Time Event Alerts and Notifications

1. If staff deletes a line item while serving the customer, the video records that specific moment and sends it to the owner live.
2. If staff deletes all items during a transaction, the system captures and forwards the video of that moment to the owner live.
3. If a refund is processed, the video of that exact moment is recorded and sent to the owner live.
4. At the end of the day, during the TILL closing process (which includes money counting and generating the Z report), the video is recorded and sent to the owner for review.
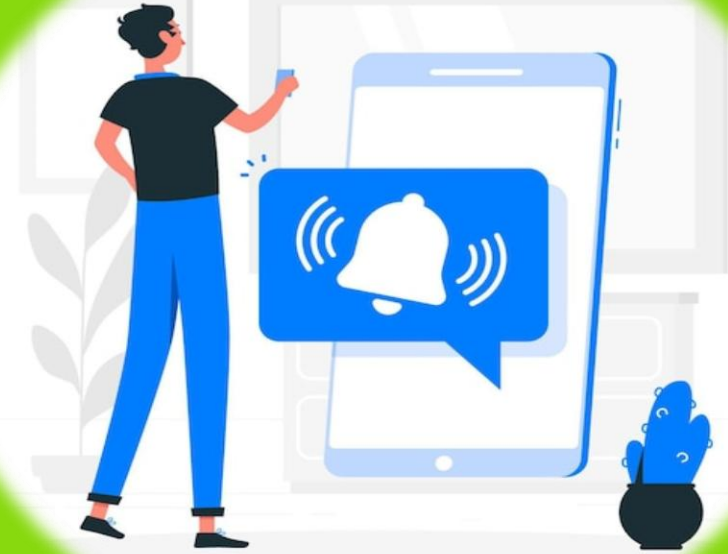
Flowchart: Intelligent Surveillance-Enabled Transaction Monitoring System

- Customer Arrives
- Automated Greeting Trigger (Motion/Face Detection)
- Billing & Transaction Starts (Cashier inputs details)
- Live Surveillance Feed Active (Screen + Cashier View Captured)
- Monitor for Suspicious Activity Product Deletion (**) - Abrupt Removal Mismatched Behavior
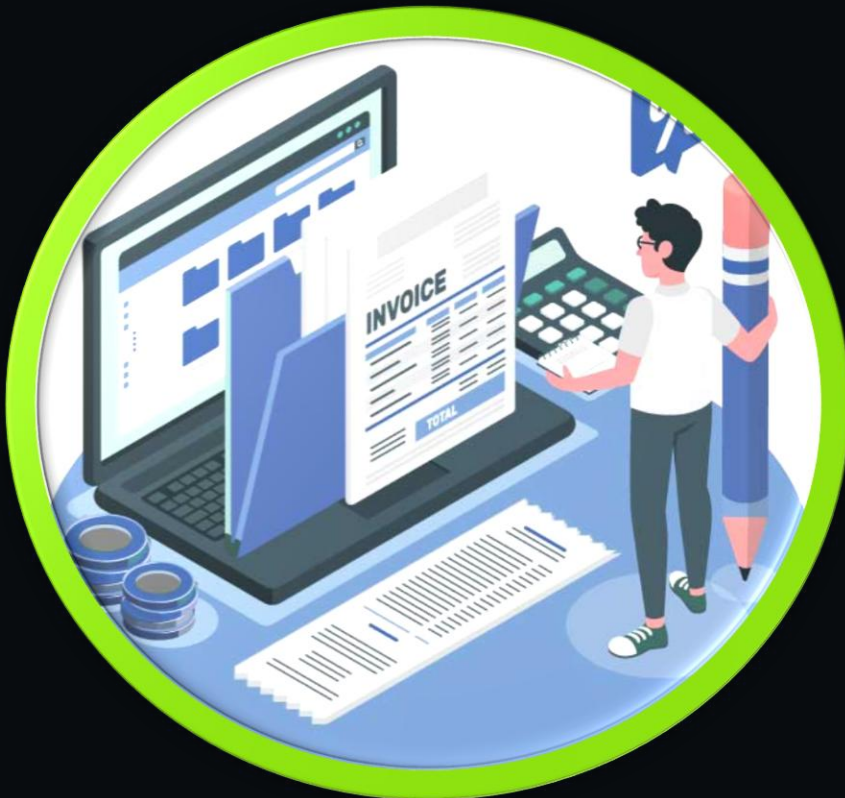- Snapshot Captured (if needed)
- Alert Sent to Owner (Live if needed)- Deleted item - Refund Processed - All Items Deleted
- DVR Stores All Video & Snapshots
- Day-End TILL Close (Z Report, Cash) - Recorded & Sent to Owner

Key Features in Flowchart

- Real-time Camera Reflection of cashier and transaction screen.
- Motion-Triggered Greetings for user-friendly interaction.
- Automatic Alerts & Snapshots for flagged events.
- Live Event Forwarding to store owner/admin.
- Secure DVR Storage of all activities.

System Capabilities Highlighted

Feature	Description
Camera Reflection	Visual overlay of billing screen and cashier behavior in real time
Voice Greeting	Auto-greeting based on motion or face recognition
Transaction Flagging	Deleted entries marked with '**'
Alert System	Captures images and sends alerts to owner on suspicious actions
Storage	DVR-based long-term storage of all activities

Conclusion

This video demonstrates the effectiveness of an AI-assisted surveillance system integrated with the POS terminal. The layered approach to visibility, automatic alerts, and record preservation establishes a robust mechanism for preventing fraud, ensuring transparency, and enhancing customer trust.

Thank you