



Connecting Commerce



W H I T E P A P E R

Unlocking business value with intelligent surveillance for NBFCs



The management of physical cash continues to be a crucial operational facet for NBFCs but is prone to several inherent risks that require constant vigilance and mitigation





Introduction

Non-Banking Financial Companies (NBFCs) play a crucial role in the Indian economy by acting as a medium for strengthening financial inclusivity by providing financial products and services to lower-income and under-served segments of society, similar to traditional banks. This includes small business owners, farmers, and consumers in rural and remote areas of the country. Currently, over 9,450 NBFCs are operational and registered with the Reserve Bank of India (RBI), and as of December 2022, they share a combined market cap of INR 15.05 lakh crore across the economy. The growing significance of NBFCs can further be observed with their dominant share of the micro-finance sector, which has clocked an annual growth of over 20% by the end of 2022. However, as NBFCs continue to extend their footprint across the country, they must also navigate several internal and external challenges that arise in their day-to-day operations.

Understanding the risks within physical cash flow in NBFCs

There are several risks associated with cash transactions like wrong counting, fake notes, pilferage, cash transportation etc. Following the approval and disbursement of loans, the cash flow within NBFCs is primarily demarcated into three stages—collection, reconciliation, and cash management. While there has been a surge of digital payment modalities in recent years, physical currency is still prevalent across India, specifically in semi-urban and rural areas. The management of physical cash continues to be a crucial operational facet for NBFCs but is prone to several inherent risks that require constant vigilance and mitigation.

Security challenges faced by NBFCs

In addition to the risks associated with the movement and management of currency, NBFCs must also address the below security concerns that may arise at the physical sites of their operations:



Round-the-clock on-site surveillance

Offices and customer branches of NBFCs are prone to overcrowding, suspicious activities, robberies, and other potential risks. Dedicated personnel must constantly monitor these sites through comprehensive CCTV coverage.



Deployment of guards on premises

Hiring more guards and site managers adds to your costs and complexity. And the question remains—who will supervise them? Meanwhile, you're missing out on vital insights every time a customer walks in through the door.



Monitoring of transport vehicles

NBFCs must also monitor the vehicles transporting cash and valuables to deter theft, robberies, or fraud.



AI has evolved as a technology that can enhance legacy surveillance systems to provide real-time and efficient security while being cost-effective



Elevating remote surveillance with artificial intelligence

The limitations of traditional surveillance systems can render it ineffective for NBFCs who seek cost-efficient solutions to scale their operations while maintaining robust security and compliance. Today, Artificial Intelligence (AI) has evolved as a technology that can enhance legacy surveillance systems to provide real-time and efficient security while being cost-effective. Furthermore, the integration of the Internet of Things (IoT) and deep learning algorithms has paved the way for AI-based video analytics, helping improve business productivity with actionable insights. Let's take a look at the ways in which AI can augment surveillance capabilities:

Predictive maintenance

By leveraging AI algorithms, surveillance systems can monitor the health parameters of the equipment in real time. This would not only reduce the downtime of the equipment but also eliminates the necessity of conducting physical inspections and device checks.

Anomaly detection

AI algorithms can analyse massive volumes of surveillance footage to identify deviations from any standard operating procedure indicating either a malicious intent or an intentional violation of procedure/process. This can include suspicious behaviour of employees or other individuals and detecting unauthorised access or movement in restricted areas.

Real-time monitoring and alerts

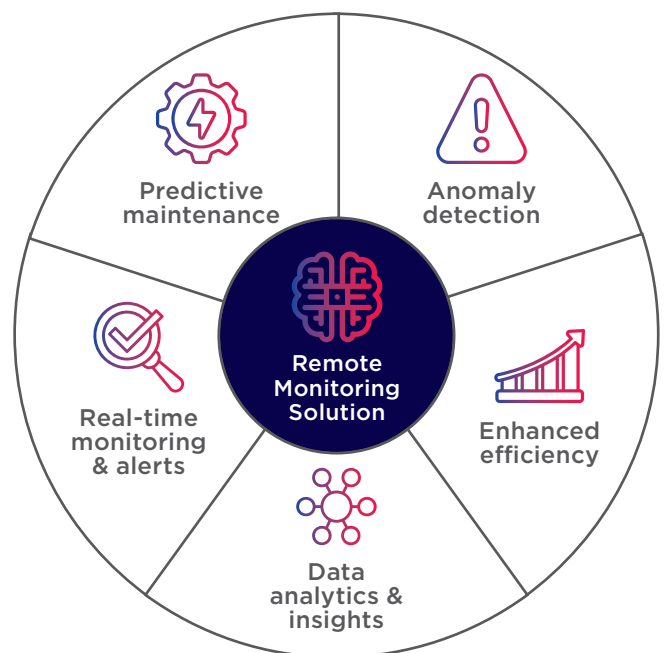
Intelligent surveillance systems can monitor all activities in real time and raise alerts quickly when needed. This enables quick response times to prevent theft or other incidents and speedy resolution in case of any issues.

Data analytics and insights

AI algorithms enable surveillance systems to gather and analyse data centrally, such as customer footfall, gender analysis, opening/closing time etc., across multiple physical points spread geographically. Through data analytics, NBFCs can gain insights such as high-traffic areas, peak hours, customer behaviour and experience, among others.

Enhanced efficiency

With the integration of AI technology, surveillance systems can function with greater efficiency and self-sufficiency, as they no longer require manual intervention to perform tasks such as monitoring and analysing data.



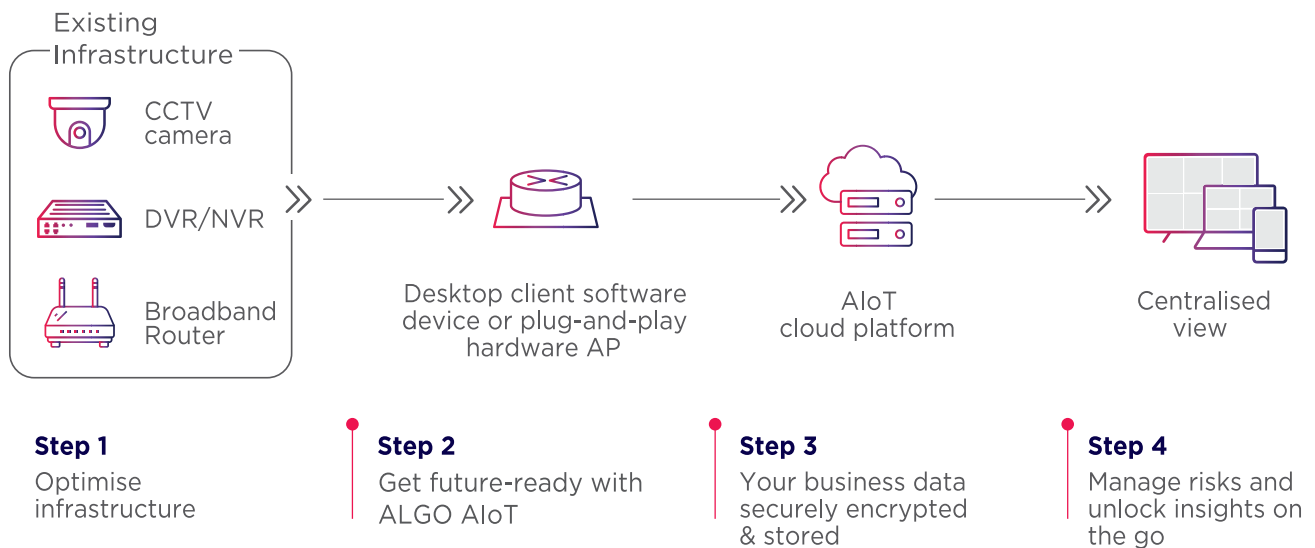


Using intelligent thresholds and data based analytics, recurring problems are automatically identified and addressed to minimise repeat occurrences





India's pioneering intelligent surveillance system



ALGO AIoT — an Advanced Remote Monitoring Solution by CMS Info Systems is India's first AIoT-powered surveillance system, which goes beyond conventional surveillance with its state-of-the-art robotic process automated (RPA) monitoring platform. Underpinned by a central command and control centre, ALGO AIoT is equipped with an integrated on-site IoT panel that can manage diverse devices, including cameras, smart plugs for energy and ambience management, and electronic sensors that monitor potential threats and routine activities.

Empowered by over 40 customisable AI modules, ALGO AIoT features a cutting-edge AI platform that can collate and analyse data to identify and flag any anomalies outside the Standard Operating Procedures (SOP) in real-time. While our solution is well equipped to manage risks at scale by detecting any anomalous behaviour, it additionally brings a new dimension to your business by providing critical insights.

For example, these insights could assist in anticipating demand through predictive analysis, and boost conversion by assessing branch performance. It also drives efficiency by automating energy consumption pattern at the premise. It can also strengthen the security by monitoring video footage in real-time and easily detect threats to prevent and save on costs and complexity for providing security to the business.

As networks and infra continue to grow in both size and complexity, system integrators and telecom service providers often rely on partners to extend their capabilities as they go on their digital transformation journey.

The solution is also helpful in issues impacting network devices and their software. Using intelligent thresholds and data based analytics, recurring problems are automatically identified and addressed to minimise repeat occurrences. This end-to-end, proactive process allows requests to be tracked, validated against current configurations, and managed via a closed-loop change management process. The team also coordinates with any on-site resources as required.

With RPA at the helm of the central command centre, incoming alerts are monitored constantly, where every alert triggers warnings in the form of local hooters or voice messages. This system has proven to be highly effective in deterring threats and other risks, with a success rate of 100%.



NBFCs can now undertake proactive measures and decisions to streamline operation through data-driven insights such as branch open and close statistics, footfall analytics, personnel missing alerts, hygiene audits, and more

NBFC



Enhanced security, scalability and productivity for NBFCs

With ALGO AIoT, NBFCs can ensure the safety of their assets, employees, and customers in real-time, thereby reducing financial losses and operational risks. The solution also helps with increased equipment uptime through proactive system-wide maintenance, thereby enabling reduced maintenance costs and improved security.

By leveraging automated and centralised threat detection and alert management, NBFCs can also streamline security protocols and eliminate the need for monitoring personnel or security guards on the premises. This approach not only results in significant cost savings on human power but also minimises the potential for manual errors in security management. This, in turn, enables NBFCs to scale their operations across various locations, including rural and remote areas, in a highly efficient and cost-effective manner.

Customer Success Stories



Leading Gold Loan Provider

ALGO AIoT today safeguards 35 vaults for one of the country's leading gold loan provider. The vaults are located in a highly secure area, with stringent access control measures. No individual, whether a staff member or customer, can enter the vault area without clearing the face recognition software. With the help of ALGO AIoT, the entire area is monitored through video surveillance around the clock, deterring any unauthorised activities in real time and alerts the control room immediately.



Largest Insurance Provider in India

ALGO AIoT is helping one of India's largest insurance company across their 65 branches with centralised cloud-based monitoring. With the help of à la carte AI modules, they track everything in their branches, right from the footfall to demographics, from in-branch customer activity to queue lengths, from section-wise analytics to aisle-wise analytics, based on monitoring. The company receives an analytical report from the data collected. This helps them anticipate demand and increase business performance.

Additionally, ALGO AIoT also keeps an eye on energy consumption at the branch by tracking lights, power supplies, and air conditioning.



The Bottom Line



Tracking



Analyse



Intelligence gathering



Communicate

New technology and evolving consumer behaviour is constantly colliding against legacy infrastructure and limited back-end visibility, forming a perfect storm for operations teams. The negative perceptions about an institution's brand that could be conjured when consumers are dissatisfied with a service are potentially significant. A truly holistic monitoring solution will be able to automatically collect and report on data, sending it to various departments and levels of management, allowing your organisation to make refinements to help optimise the network.

However, if the data is only understandable to one or two software engineers in your team, it's not going to be of much help in the day-to-day management of your network. A good monitoring tool will offer key stats and data points in an easy-to-understand format, through a desktop computer, tablet, or mobile device—whatever works best for your team.

Over the last 14+ years, we have steadily built and introduced our tech-stack which has helped us add efficiencies across our business services value chain. Our tech stack is customised to address the complexities of the market and addresses the evolving business necessities of our clients.

A Reserve Bank of India (RBI) mandate demands that all NBFCs have e-surveillance installed in all their branches to prevent discrepancies and promote transparency. ALGO AIoT can work on your existing infrastructure and use the power of AI to develop and deliver customised solutions so you can deliver better results across your entire business channel.

As your organisation transcends from manual oversight to an intelligent monitoring tool, your strategy needs to shift as well. Rather than focusing on ad hoc challenges as they arise, you can focus on creating a personalised system. Your monitoring tool should enable you to filter out some issues while highlighting the issues your team wants to prioritise. It should also enable you to respond to issues in real-time through complete site overview, it offers cost-efficient monitoring of sites and assets with trigger-based alerts, remote controls and two-way communication. Besides security, it revolutionises energy management, staff monitoring and site compliance tracking, unlocking a new world of business insights.

Let's start a conversation today. Write to us at algo.aiot@cms.com.



Connecting Commerce

Cash Logistics | Banking Automation | Managed Services

Remote Monitoring Solutions | Technology Solutions

 cms.com

 [CMS Info Systems](#)

 [systems_cms](#)

 [cmsinfosystems](#)

All content copyright @2023 CMS Info Systems Ltd. All rights reserved. CMS, the CMS logo are trade/service marks of CMS Info Systems Ltd. All other brand and product names are trademarks or registered trademarks of their respective companies. CMS claims no proprietary or any other rights in respect thereof.