

The future of technology and how it can impact Africa's industry

- Wifi 6 and IoT
- Edge AI
- Doc AI
- Edge orchestration
- uCPU
- SND/NFV
- Intelligent Connectivity



Edgedock

inq.

PRESS RELEASE

Introducing the next evolution of connectivity in Africa: inq. Wi-Fi 6 and Edge solutions

[CITY, DATE] — inq. Zambia has today announced its Wi-Fi 6 and Edge products that are designed to set to new standards in connectivity and usher in a new era of seamless communication and productivity across Africa.

Designed to meet the evolving needs of businesses and government, the inq. Wi-Fi 6 products offer speed, capacity, and efficiency, transforming the way people experience wireless networks. With enhanced performance in crowded environments, improved latency, and support for multiple devices, the technology paves the way for uninterrupted streaming, and efficient remote work collaboration.

Complementing the inq. Wi-Fi 6 offerings, its Edge solutions redefine the concept of edge computing, bringing processing and data storage closer to the source for real-time insights and improved time to decision-making. This empowers businesses across industries to harness the power of data, enhancing operational efficiency and enabling rapid innovation.

"We are excited to introduce our Wi-Fi 6 and Edge solutions to the African market," said Glad Dibetso, Group CEO at inq. "These advanced solutions exemplify our commitment to delivering the best-in-class technology that transforms the way people connect, communicate, and conduct business."

Key features of the inq. Wi-Fi 6 and Edge solutions include:

- Fast connectivity and increased network capacity.
- Enhanced security protocols for a safer online experience.
- Integration with smart devices and Internet of Things (IoT) applications.
- Advanced data processing at the edge, enabling real-time insights and analytics.
- Comprehensive installation assistance and ongoing technical guidance to ensure customers can optimally benefit from the solutions.

inq. will be showcasing these solutions at a launch event to take place in Lusaka, Zambia on 30 August 2023. Clients will be able to network with inq. specialists and see the solutions in action.

For more information about the inq. Wi-Fi 6 and Edge products, please visit www.inq.inc or email inq. at sales@inq.inc

For more information:

Jeanette Theu - Marketing Manager at inq.

e: comms@inq.inc



WIFI 6

Empowering Zambia with Wi-Fi 6: inq. Zambia's Commitment to Connectivity and Customer Support

In the age of rapid digital transformation, reliable and high-speed internet connectivity is no longer a luxury but a necessity. As we move forward into a world driven by technology, "Inq. Digital Zambia" is proud to introduce Wi-Fi 6, a groundbreaking advancement in wireless technology, as part of our commitment to empowering Zambia with cutting-edge connectivity solutions and exceptional customer support.

The Wi-Fi 6 Revolution

Wi-Fi 6, also known as 802.11ax, represents a significant leap forward in the evolution of wireless networks. This new standard offers several key benefits that will reshape the way Zambian businesses and individuals connect and interact online

Blazing Fast Speeds:

Wi-Fi 6 provides faster data transfer speeds compared to its predecessors. With speeds of up to 9.6 Gbps, you can download large files, stream 4K videos, and engage in online gaming with unparalleled speed and efficiency. Please see below the picture for quick comparison

Improved Capacity:

One of the most significant advantages of Wi-Fi 6 is its ability to handle multiple devices simultaneously without sacrificing performance.

This is especially important in today's world where homes and businesses are equipped with numerous connected devices, from smartphones and laptops to smart appliances and security cameras.

Enhanced Range:

Wi-Fi 6 offers better coverage, even in areas with many obstructions like walls or furniture. This means you can enjoy a strong and stable connection throughout your home or office, ensuring seamless online experiences

Lower Latency:

Reduced latency ensures a more responsive online experience, crucial for online gaming, video conferencing, and real-time applications. With Wi-Fi 6, you'll experience minimal lag and a smoother connection.

Energy Efficiency:

Wi-Fi 6 is designed to be more power-efficient, which means your devices will consume less energy when connected to our network. This is not only environmentally friendly but also extends the battery life of your devices

Enhanced Security:

The introduction of WPA3, the latest encryption protocol, enhances data protection, making it significantly more

challenging for unauthorised users to breach the network. This is especially critical in an age where data privacy and cyber threats are constant concerns.

Your Gateway to the Future

inq. Zambia is committed to making this transformative technology accessible to all Zambians. By introducing Wi-Fi 6 as a managed service, we are ensuring that individuals and businesses across Zambia can harness the full potential of this cutting-edge technology. Here's how you can benefit:

Seamless Connectivity:

With Wi-Fi 6, your online activities will be smoother and more efficient than ever before. From working remotely to streaming your favourite content, you can rely on a consistently excellent connection.

Entertainment at its Best:

Enjoy uninterrupted 4K streaming, lag-free online gaming, and crystal-clear video calls. Wi-Fi 6 transforms your home into an entertainment hub.

Cost-Efficiency:

Our managed Wi-Fi 6 service ensures you get the most out of your investment. You won't need to worry about complicated installations or maintenance; we'll take care of everything.

Conclusion

Wi-Fi 6 is not just another technological upgrade; it's a gateway to the future. inq. Zambia is proud to be at the forefront of this revolution, bringing the benefits of Wi-Fi 6 to Zambia. With our managed Wi-Fi 6 service and unwavering commitment to customer support, we aim to empower individuals and businesses across the country, fostering a more connected, productive, and prosperous Zambia.

Join us in embracing the future of connectivity with Wi-Fi 6.

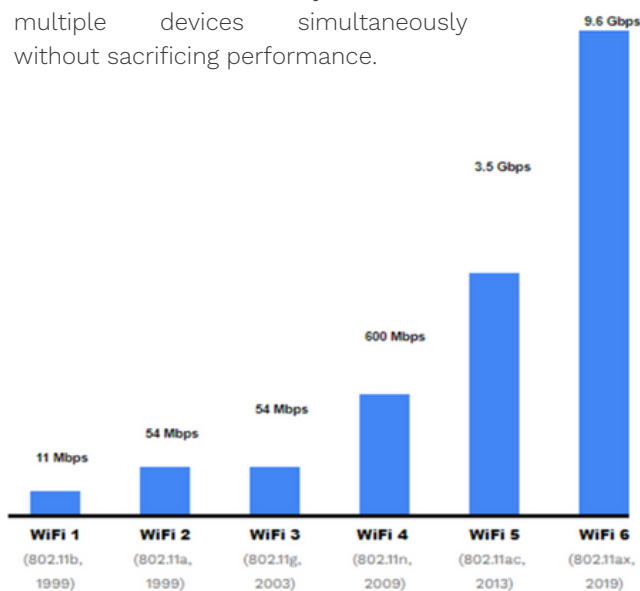


Figure 1: Speed Comparison WiFi

EDGE ORCHESTRATION

We live in ever-changing and fast-paced times where businesses are looking for ways to improve their competitiveness, stay relevant, be client-centric and ensure financial sustainability by either increasing their top line or managing costs and related efficiencies.

This phenomenon cuts across all the verticals, whether it's banking where the traditional banks are, on the one hand, thwarting advances from the disruptive Fintech companies or changing their revenue focus areas from traditional interest-based income to transaction and going branchless. Retailers have to cope with customers who expect quality product availability within the shortest turnaround time, as well as coping with online retailers that do not have the added cost of shop infrastructure. The competition for a percentage of the customer's wallet share is intense.

The trends mentioned above are compelling businesses to utilise technology, automation and data analytics to meet their business imperatives. Across all industries, there is growth in data traffic and network traffic. The Cisco Annual Internet Report 2018 - 2023, forecasts the number of devices connected to IP networks will be more than three times the global population by 2023. Driving and related to this is the connectedness of devices and sensors, providing valuable information and insights across the entire value chain. Businesses have a dire need to access reliable, agile information to make informed decisions. There is rising demand for low latency processing, real-time and automated decision-making solutions. We have a client in Financial Services that we worked with to reduce the turnaround of loan application evaluation from one week to one day using an AI-based natural language solution.

The pressure on our clients is enormous, and Edge computing services are gaining popularity across industries as it gives business real-time information to track their assets, client data and requirements. The effect is Enterprises are able to grow their revenue, reduce costs, increase margins, minimise and standardise their operations. The Markets and Markets research on Edge Computing forecasts a CAGR of 19% to reach a total size of \$87 Bn by 2026. Edge is forecasted to surpass centralised cloud by 2025. Edge-based solutions and services will drive not only digital transformation but also the digital economy.

In addition to Edge Computing services, Private 5G or Service Provider Cloud Edge will complement and enhance Enterprises' requirements for access to low latency and real-time access to information to drive business decision-making. Private 5G allows industries and organisations to architect a bespoke network depending on the application it would be used for rather than just creating a framework for Mobile Broadband which has traditionally been the case. Additionally, 5G has introduced the concept of network slicing, where the same network can be split depending on the applications being run on the network, such as IoT, Low Latency Applications, Vehicular Mobility, and Robotics for maximum impact, increased efficiency and better utilisation of the spectrum.

Many industries are now in the advanced stages of deploying massive IoT, Robotics, AI and other advanced control system technologies. In doing this, they seek to leverage the flexibility of the cloud with the on-premise deployments of next generation technologies. To achieve this, Private 5G deployments are the most cost-effective way to build and scale a network with different SLA requirements rapidly.

Written by:

*Duncan Pie
Group Chief Operations Officer
inq.*





The inq. Edge Orchestration software product is targeted to Enterprises in Banking, Insurance, Health Services, and Government Organisations as a category of direct end users and Service Providers and Cloud Providers as a category that enables services for end users.

The typical architectural flow would be that the sensors and various devices in the field (warehouse, manufacturing plant, mine etc.) will connect to the business apps in the Enterprise network at the Edge (within the Warehouse, Manufacturing plant) or at the nearest network point where processing will happen for real-time quick decision making. The Edge Network is then connected back to the Enterprise Core Network at the Central Data centre.

To achieve the benefits of Private 5G and Edge computing stated above, Enterprises and Service Providers alike have a need for network automation, network security and centralised virtualisation. As a result, Orchestration is being positioned as a solution to help them achieve this requirement. Orchestration technologies will help businesses improve the speed of data transfer using real time bandwidth allocation and policy implementation. The orchestration of networks provides an approach to networking professionals with tools and technologies to reduce the operational burden of managing a network.

The implementation of orchestration tools entails simplified architecture that is easy to manage, with a reduced number of managed devices and an abstract complexity of the network topology. Automation of networks allows services to be provisioned quickly and helps reduce the chances of human error.

The inq. Edge Orchestration software product is targeted to Enterprises in Banking, Insurance, Health Services, and Government Organisations as a category of direct end users and Service Providers and Cloud Providers as a category that enables services for end users. The direct user clients need the Orchestration tools to create a central hub which is the base for managing all aspects of the technology stack to drive efficiency and enhance agility in the most cost effective manner. As the adoption of IoT devices and technologies increase and the expansion of their ecosystem as they onboard partners, the need for a simple, less complicated network increases.

Service Providers and Cloud Providers are continually seeking to offer innovative and relevant solutions to their clients, and this invariably leads to increased data load on their networks, especially during peak hours. Network Virtualisation services are on the rise for most service providers, and Orchestration enables them to be able to offer this service through a centralised platform by efficiently utilising and allocating network resources.

The inq. Edge Orchestration product is an open virtualization and management platform for Edge Devices such as Whitebox uCPEs.

Our clients use it for orchestrating virtualised Security, SD-WAN, NFV and other voice services. Being a virtualised networking product, the inq. Edge Orchestration product is ideal for service providers and MNOs looking at rolling out 5G services by providing an orchestration layer.

It is built using Netconf, making it very extensible and easier to scale and integrate as its an Industry standard protocol.

Our inq. Edge Orchestration product encompasses three areas:

- 1.inq. Edge OS, a white-box operating system providing virtual machines and containers
- 2.inq. Edge Manager for platform and application/VNF lifecycle management
- 3.inq. Edge Automation a Framework for automating deployment and operation of large-scale networks

Our Edge Orchestration product is designed for automated deployment, with zero-touch provisioning, ansible automation and orchestration integration. We have a large ecosystem of verified white boxes, applications and orchestrators to cater for a wide and expansive requirements our clients will have.

Some of the key features are:

- **Future-Ready**
Replace or extend with new applications on-demand on already deployed uCPEs
- **Optimised for uCPE**
Low footprint and high networking performance optimised for cost-efficient deployments
- **Secure**
Secured using NETCONF for all management communications, secure boot and role based access control

About inq.

inq. is a Convergence Partners company and a Global leading edge computing technology company. We have clients in Africa, America and Europe across various verticals including BFSI, FMCG, Service Provider and Public Sector.

We deliver our services directly in 10 countries and a further 25 through our partners. Our Product Development centre in India, Bangalore drives development of our software products. We render innovative solutions and services such as Edge AI & IoT, Fabric, SDN/NFV, Edge Orchestration and Elastic Edge.

About the Author

As the Group Chief Operating Officer of inq. Duncan is responsible for the operational oversight of the Group's digital transformation strategy, end end business process optimization to enable data-driven business operations and to define the Go-To-Market, Sales and Marketing strategy.

simpler. seamless. solutions.



Discover Edge

Global EDGE Orchestration Provider

Easily and quickly operate unified
applications and network services

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A CASE STUDY: VISION AI IN TELECOMMUNICATIONS

Background

The tower industry is critical to modern communication, providing support for wireless networks, broadcasting, and other telecommunications services. However, the sector faces various security challenges, such as theft, vandalism, and attacks on guards. To address these challenges, tower companies must implement robust security and surveillance systems to protect their infrastructure and personnel, but it helps form the foundation for actual UX.

Case Study

One of our top clients in Zambia faced multiple challenges related to security and surveillance. The challenges included life-threatening attacks on guards, collusion with site guards, theft and vandalism of cameras and tower installations, and lack of visibility in certain regions. To address these issues, the company turned to Edgedock's Vision AI solution.

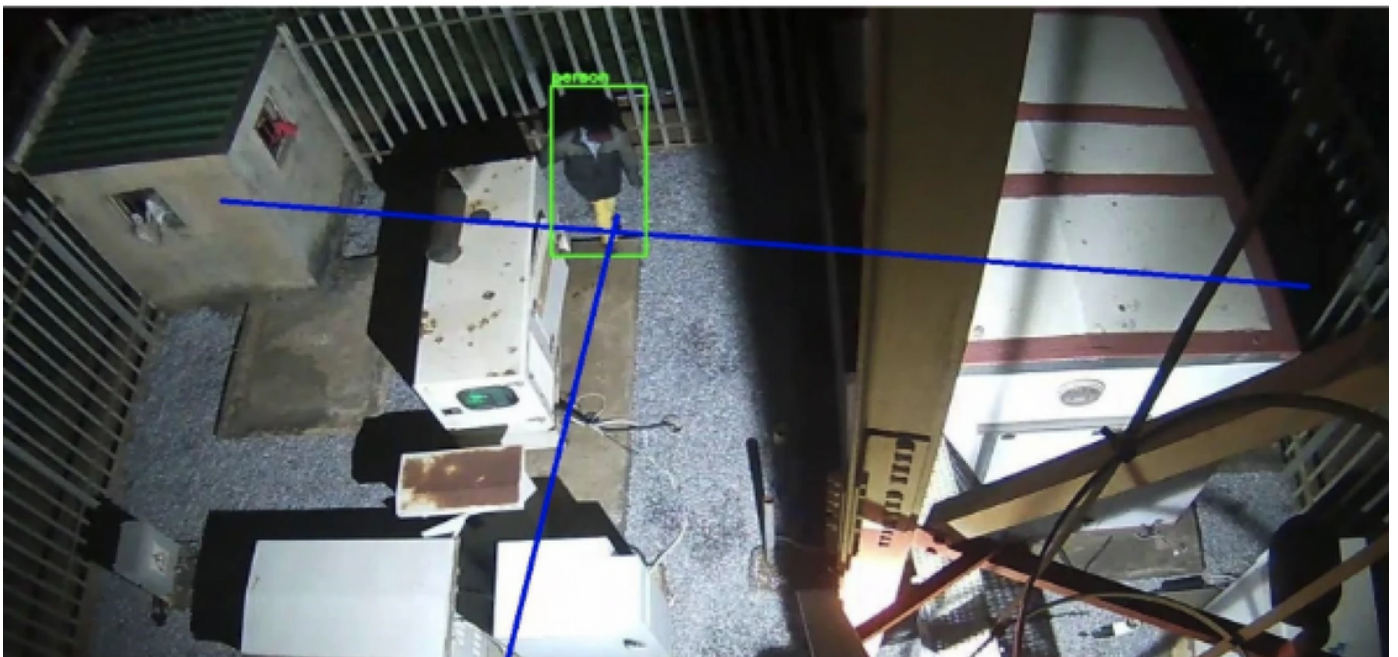
Vision AI Solution

The Vision AI solution involved electronic guarding using AI, remote panic button trigger with rapid response, and tampering detection monitoring. Rapid response was at hand to curb crime with adequate weaponry. Additionally, the tracking of tampering detection helped prevent vandalism and theft of cameras and tower installations, resulting in zero camera vandalism and enhanced visibility.

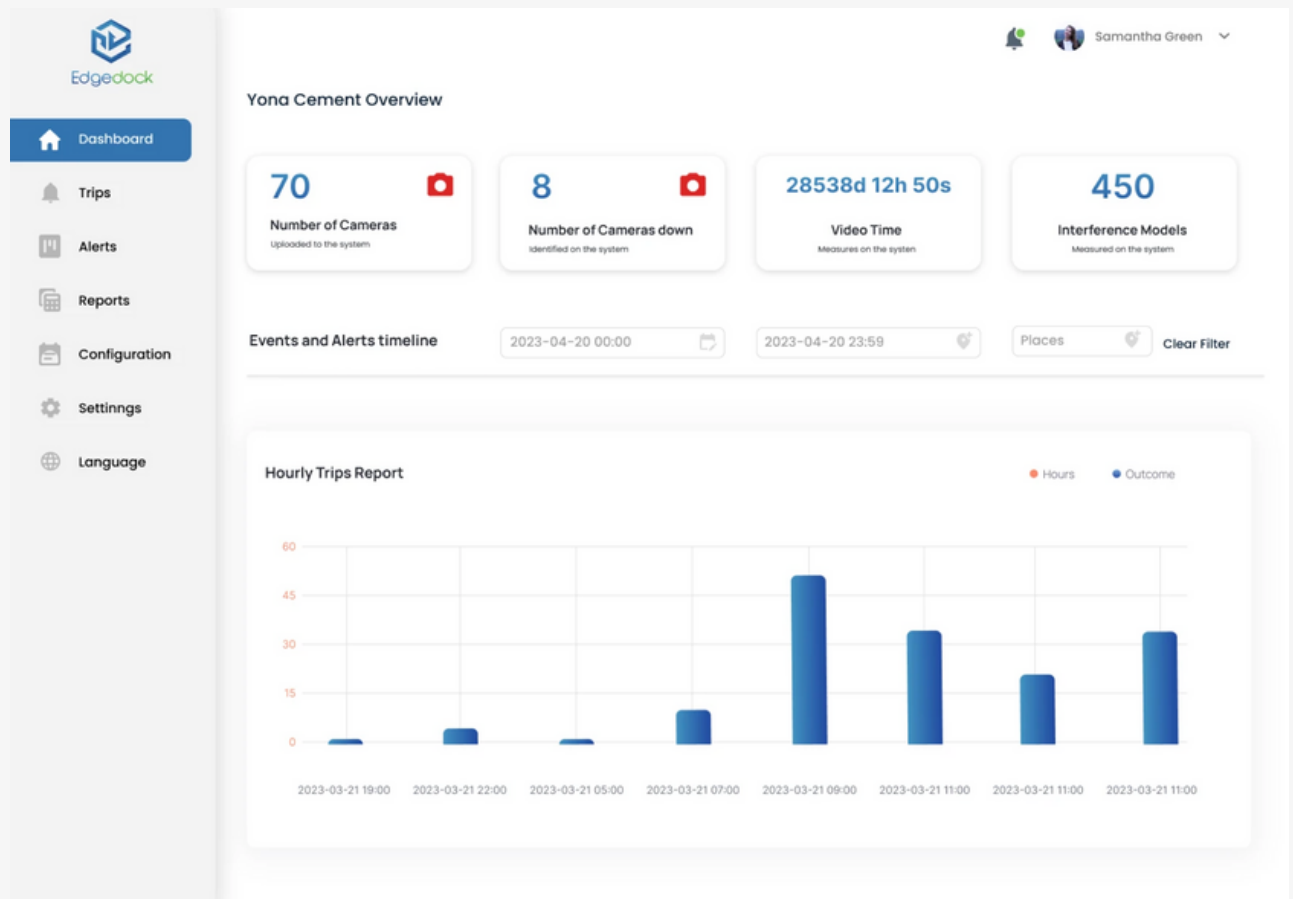
The solution also provided video footage that was stored both on-premises and in the cloud, ensuring 100% data availability and accessibility. The solution helped reduce battery theft by 98% and replaced floodlights upon failure, thereby increasing security.

Outcome

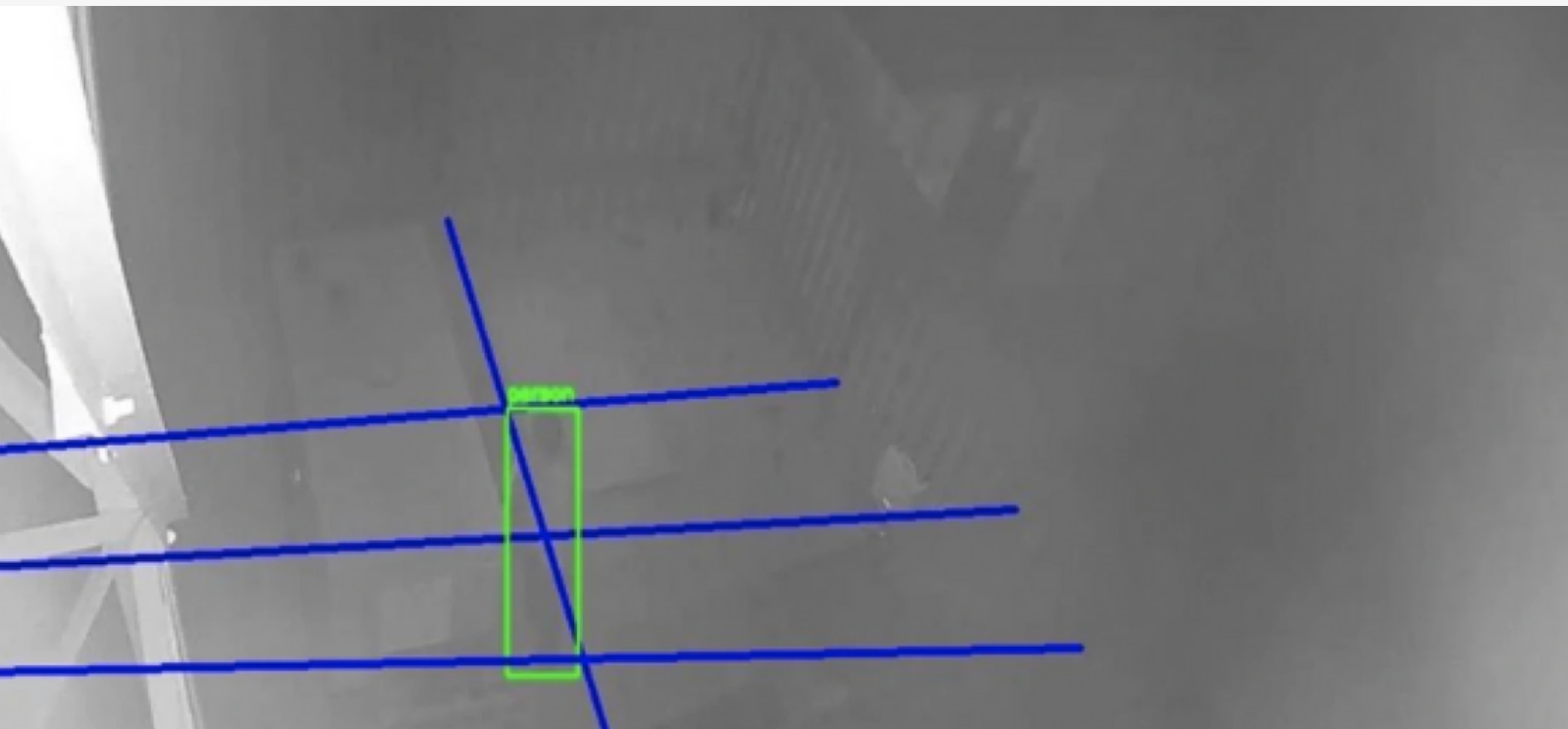
The implementation of the Vision AI solution proved to be successful in addressing the security and surveillance challenges faced by the tower company. The solution helped reduce collusion thefts by 95% and battery theft by 98% and enhanced visibility by providing 24/7 efficient tower monitoring. The solution also offered a quick and efficient response to crimes, capturing all dishonest acts and ensuring proper security.



Edgedock Panic Button: Upon triggering the Edgedock Panic Button solution the criminal fled and the rapid response team retrieved the above empty container with a drain pipe.



Top Left: Alert was received on May 11, 2022 03:36:36 as captioned above the criminal damaged the floodlight and alert was received for both the floodlight and intrusion detection. (this a very good example of how accurate and effected our AI intrusion detection is)



High priority line crossing.

Business benefits that the Video AI Solution has brought to Tower Client

The table below shows a summary of the thefts/losses reported during the same period before and after the implementation of the solution;

Service	Physical Security	Electronic Guarding – Video AI
Period	May – September 2020	May – March 2023
Sites	43	43
Number of thefts	33	3
Amount Lost	\$75602	\$6873

Success Metrics of Edgedocks AI integration

95%

Reduced collusion theft

98%

Reduction of battery theft

The implementation of Vision AI solution helped a client in Zambia reduce collusion thefts by 95%, battery theft by 98%, and enhance visibility for efficient tower monitoring. This success story highlights the importance of incorporating cutting-edge technology like our Vision AI to address complex security challenges faced by tower companies.

Thank you for joining us

