# lytehouse

## Smarter Security From Detection To Dispatch

## Building smarter safer cities worldwide

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# Origin Story

*Lytehouse was founded on a basic human instinct; a need to protect our families, wherever they are. This simple idea evolved to become the bedrock of our company, the power of our platform and the core of our mission.*
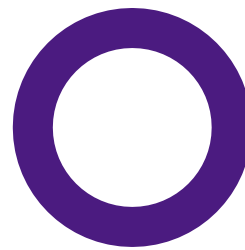
Coming from a family of small business owners in South Africa, our CTO, Jean, and his family were constant victims of crime. In just in his lifetime, there had already been 37 instances of armed robberies, kidnappings, and bombings.

In 2018, Jean's Dad's store was robbed again and despite 16 CCTV cameras, a panic button and a subscription to armed response, no one came to stop it. When the footage was finally reviewed by the police, Jean saw the moment his Dad accepted his life may end. Enough was enough.

Jean began coding a real-time threat detection software for CCTV that would alert security providers if his family was in trouble. He quit his job and joined an accelerator program in Singapore, where he and Natalie, our CEO, would evolve that software into Lytehouse and build a powerful team of inspiring individuals who wanted to make a difference.

We were founded on human connection, experience and a shared vision for the future. From the guard in the grocery store to the nighttime patrols, security providers risk their lives every day and we believe that with the right tools, local security companies can be supercharged with next-generation technology that makes every home, business and neighborhood safe.

*Actually Jean's Dad!*

## Company Details

📅 **Incorporated:** November 2019

📍 **Locations:** Singapore and South Africa

👥 **Backed by:** Cocoon Capital and Entrepreneur First

# Security is changing

The security market is growing exponentially with huge advances in hardware technology and AI software capabilities, and yet, a lot of this technology is not meeting the needs of site managers and security providers.

Security shouldn't be expensive, time-consuming and slow to react. There is large demand for enterprise-grade solutions however, these don't cater to challenging emerging market environments and are not accessible to large sectors of the market due to cost and bandwidth requirements..

### Key challenges faced by our customers include:

Slow and unreliable internet connectivity and bandwidth

Crippling 99% false alarm rate across the control room

Increasing cost of guarding and response teams

Strict operational environments and restrictive contracts

Inability to scale operations due to legacy systems

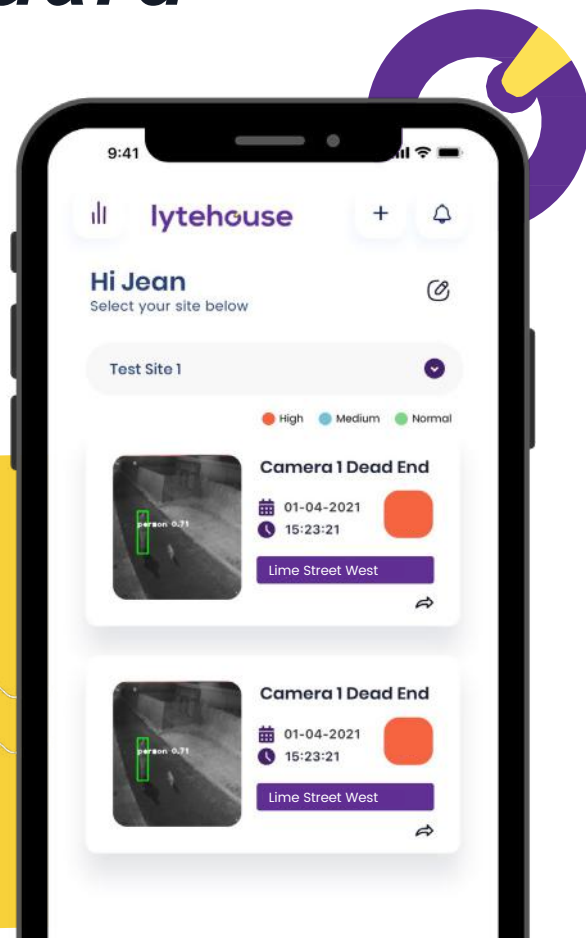Lengthy and costly customer onboarding

Our customers want a solution that is fast, accurate and deployable in any environment to maximise their existing security infrastructure effortlessly.

## That's why we created Lytehouse

# lytehouse

## Turn any camera into a virtual security guard

Lytehouse is changing the face of threat detection with powerful computer vision and machine learning technology that is fast, accurate and live in just five minutes. Our modular platform and proprietary video analytics are fully customisable and deployable in any environment to ensure your sites are effortlessly protected.

*Lytehouse's cutting-edge video analytics transforms any camera stream into a feed of intelligent alerts for total risk visibility and fast, proactive response*

Camera agnostic which allows our customers to bring intelligence to dated infrastructure

Seamlessly integrated with leading VMS systems and accessible anywhere

Dramatically increase risk visibilty with a 99% reduction in false-alarms

Smarter allocations of manpower and resources creating a better ROI for site managers

# lytevision

## Cutting-edge surveillance with Lytevision™

Lytevision is our proprietary real-time video analytics solution that puts our customers in the driver's seat of threat management by allowing them to create powerful rules around any monitoring needs.

Available via Lytevision Cloud™ or Lytevision Keeper™, we provide enterprise-grade video analytics that puts a security guard on every inch of your sites. Our proprietary machine learning engine identifies multiple threats in real-time and only sends verified alerts to our mobile app, VMS integrations and network of trusted security partners.

## You Make The Rules

Nobody knows your sites better than you do, that's why our analytics engine is intuitive and fully customisable to ensure you detect the right threats for every site, camera, and customer – no coding or technical expertise required.

### Why it works:

**Time to detection:** 0.2 seconds from event to operator

**Rule accuracy:** up to 99% accuracy for detection of your rules

**Camera health:** 100% visibility to online status and instant reset
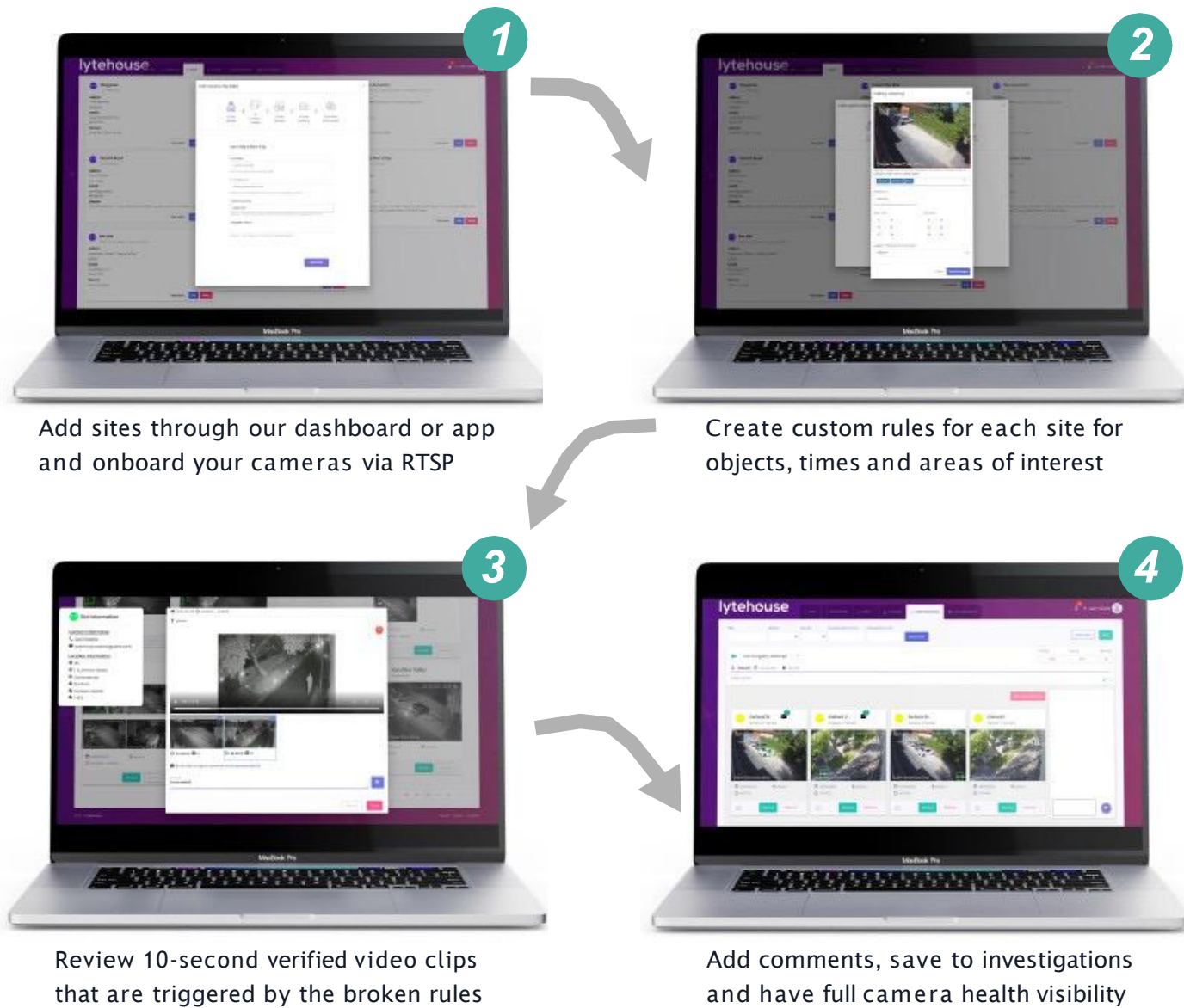
**Bandwidth savvy:** 15x bandwidth reduction using our edge device

# How it works

Choose your deployment by either Lytevision Cloud™ or Lytevision Keeper™ to begin onboarding your sites and cameras.
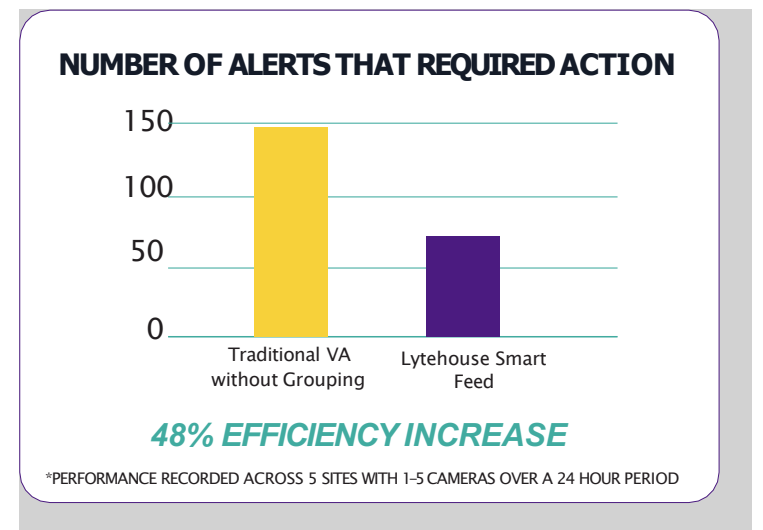
**1**

Add sites through our dashboard or app and onboard your cameras via RTSP

**2**

Create custom rules for each site for objects, times and areas of interest

**3**

Review 10-second verified video clips that are triggered by the broken rules

**4**

Add comments, save to investigations and have full camera health visibility

*Manage alerts via our native app, web dashboard or import Lytehouse directly into your existing VMS/PSIM*

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## If you can see it, you can protect it:

Detect what you care about, when and where

Cut out all noise from foliage, wildlife, shadows

People counting, crowds and loitering detection

Create multiple rules for different days and times

Intruders, scaling walls or perimeter defences

Detect cars, vans, bikes and pick-up trucks

Protect your assets from theft

Share different cameras, sites and rules with other users.

### Set up and go

We've trained our AI using millions of images and real world data sets to ensure the highest level of accuracy. This means that when you use Lytevision there is no time spent 'training' the AI, it's an analytics solution that works right out of the box.

**NUMBER OF ALERTS THAT REQUIRED ACTION**

150

100

50

0

Traditional VA without Grouping

Lytehouse Smart Feed

*48% EFFICIENCY INCREASE*

*PERFORMANCE RECORDED ACROSS 5 SITES WITH 1-5 CAMERAS OVER A 24 HOUR PERIOD

### Lytehouse Smart Feed

With customised rules powered by your security intel, Lytehouse provides you with a powerful Smart feed that increases alert management efficiency by over 48% through grouped alerts and live feed capabilities. Lytehouse is designed to be user friendly, easy to navigate so you can focus on what matters.

### Lytehealth

The second a camera goes down, your site is at risk. Receive real-time notifications with Lytehouse Health Monitoring for 24/7 camera status and instant reboot with a single click.

# Adaptable for any environment

## Lytevision Cloud™

Our fully cloud-based solution processes camera streams and filters them through our proprietary machine learning algorithms on our cloud servers. The only requirement to run Lytehouse on your cameras is an RTSP URL and an internet connection, enabling fast, efficient and fully remote deployment that requires no additional hardware.

Our models are lightweight and built to accommodate more challenging bandwidth requirements. Sites with strong internet connections or lower volumes of cameras can benefit from seamless onboarding and the latest in AI technology all in the cloud.

### What do I need to run cameras on Lytevision Cloud?

Bandwidth – 1mbps per stream, but we can squeeze 2-3 streams per Mbps by downscaling the substreams to 3fps.

Public static IP or DNS set up on the router, as well as a port forwarded to the DVR / NVR. Once that's done, all that's needed is to drop the RTSP url in the site portal when onboarding a camera and Lytehouse will be able to connect.

RTSP URL – Available on any IP camera, or analogue camera with an NVR or DVR.

Access and manage your alerts through the Lytehouse webapp, mobile app or directly from your existing VMS / PSIM.

## Lytevision Keeper™

Keeper, our edge-solution, is stepping up to the challenge of limited internet bandwidth and larger camera volumes. This small edge device delivers powerful processing on-site, which means only alerts are sent to the cloud. Keeper's algorithms are constantly updated with the latest software, no need to download pesky drivers or pay for callouts.

We recommend Keeper for remote sites, restrictive bandwidth environments and plug-and-play deployments,

### What do I need to run cameras via Keeper:

Up to 12 camera streams with Lytevision analytics per device.
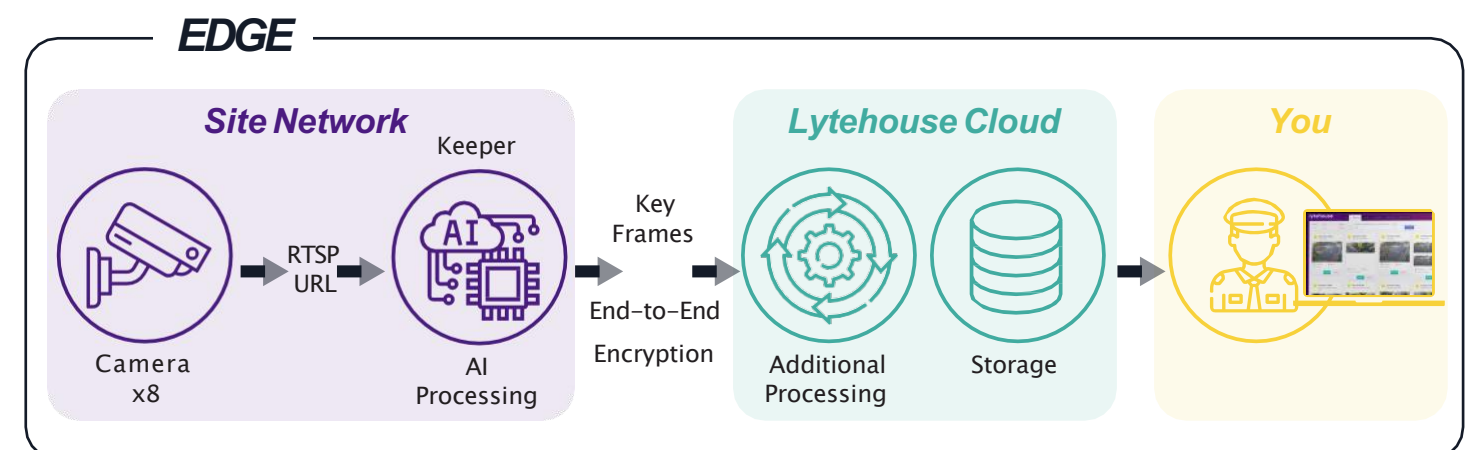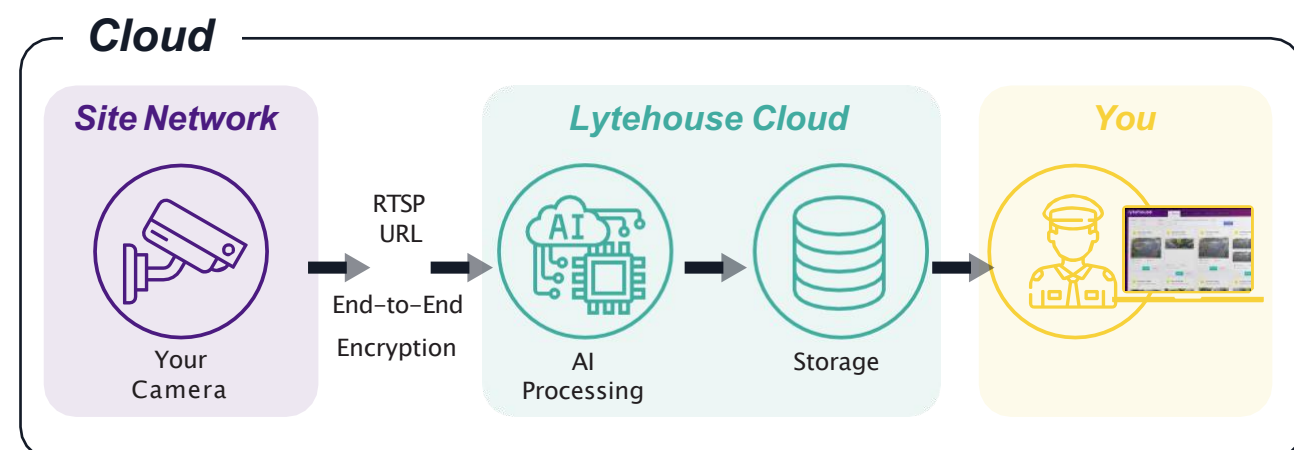
1Mbps upload can support up to 12 cameras.

Only a local RTSP URL required, no port forwarding, public static IP or DNS needed.

Access and manage your alerts through the Lytehouse webapp, mobile app or directly from your existing VMS / PSIM.

## Architecture

### Cloud

**Site Network**
Your Camera

→ RTSP URL / End-to-End Encryption →

**Lytehouse Cloud**
AI Processing → Storage

→

**You**

### EDGE

**Site Network** — Keeper
Camera x8

→ RTSP URL →

AI Processing

→ Key Frames / End-to-End Encryption →

**Lytehouse Cloud**
Additional Processing → Storage

→

**You**

# Security & Privacy

We take security seriously and have put in place a number of measures to ensure that we keep our Platform and our customers' data secure and available. Our team follows industry best practices from design to deployment and partner with industry-leading cloud hosting providers Amazon Web Services (AWS) and Google Cloud Platform (GCP).

In addition to the safeguards put in place to protect the information of our customers, it is important to us that we are transparent about how we collect, use and share information too. For further details please see our Privacy Policy at **www.https://www.lytehouse.io/privacy-policy**.

End-to-end Data encryption in transit and at rest

User and access activity logs are maintained for auditing purposes

AWS and GCP experts conduct security audits to continuously improve our infrastructure

PDPA and POPI compliant, with GDPR coming soon

# Contact Us

**Sales enquiry:**
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**Technical:**
CTO – jean@lytehouse.io

# Supported Cameras

**World-class brands we are compatible with:**

VIVOTEK

dahua TECHNOLOGY

PROVISION ISR

HIKVISION

Hanwha

UNV

AVIGILON
a Motorola Solutions Company

BOSCH

Honeywell

AXIS COMMUNICATIONS

*Plus, many more!*