

# AiVis – Smart Camera and AI Processor

**COVID-19 has changed how we work, shop and live.**

**The New Normal  
Checklist**



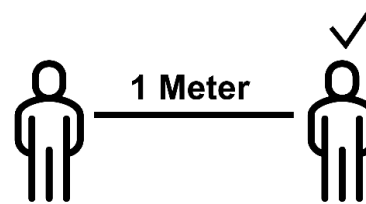
Temperature  
Screening



Mandatory  
Mask



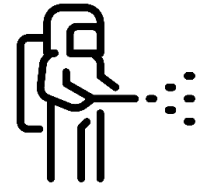
Footfall  
Count



Social  
Distancing



Hand  
Sanitization



Deep  
Fumigation

**Government has mandated on-site health screening and social distancing as essential at all spaces**

# The New Normal – New Threats



## Safety, approach and imperative

1. Manual checking, High risk
  - Close contact among the users can lead to potential risks of spreading the virus
2. Inconsistency
  - Reliability of service across areas, time of the day and season
3. High Cost, Low Efficiency
  - Increased manpower required, but 1-by-1 inspection is inefficient.
4. Lack of Intelligent Analysis
  - Manual registration is required, which may lead to human error and not so timely feedback.
5. Meeting the compliances
  - Govt regulations of tracking footfall count in all areas

- Thermal Camera converts IR radiations into detectable pixel values. Hence any objects temperature can be measured at a distance
- One of the first symptoms of Coronavirus is a fever, which results in a higher than normal body temperature
- Thermal cameras can be used for a preliminary screening of people having fever to eliminate chances of spreading the infection

# What are we solving?



## 01 Smart – AI enabled

Artificial Intelligence based detection, greatly reducing false alarms

## 02 Fast – Thermal camera

Super fast, skin-surface temperature detection

## 03 Safe

Non-contact measurement to avoid physical contact

## 06 Scalability

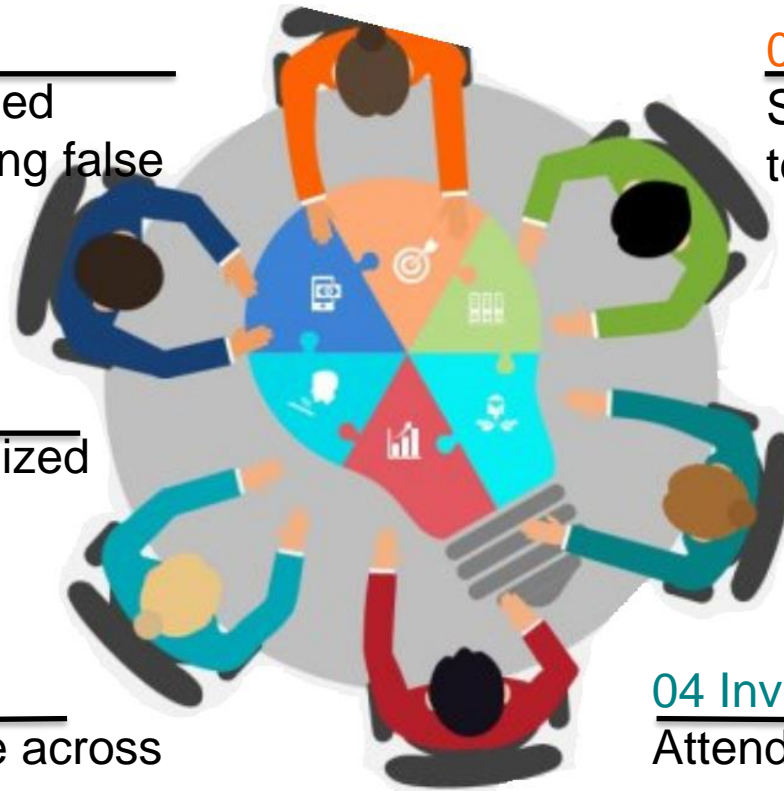
Plug & play solution and centralized dashboard for multiple sites

## 05 Consistency

Consistency of service across areas, time of the day, season

## 04 Investment for future

Attendance management, heat maps, facial recognition, etc





## Introducing – ALVis Smart Camera

## 1. Minimal Human Contact

- Smart human skin-surface temperature detection – No false alarms
- Temperature detection – from 10 m away
- Mask detection – from 5 m away

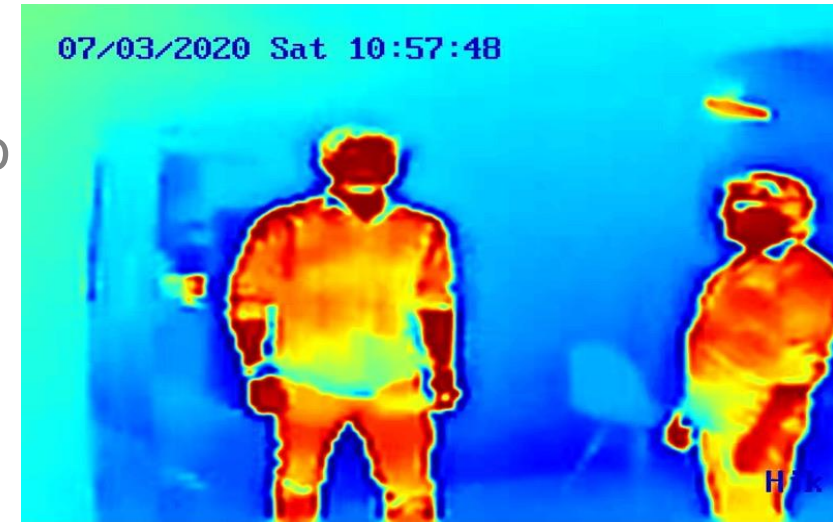
## 2. No Crowding, No waiting at entry gates

- High speed detection – Ideal for high footfall areas like large office complexes stadiums, temples, malls, societies etc.

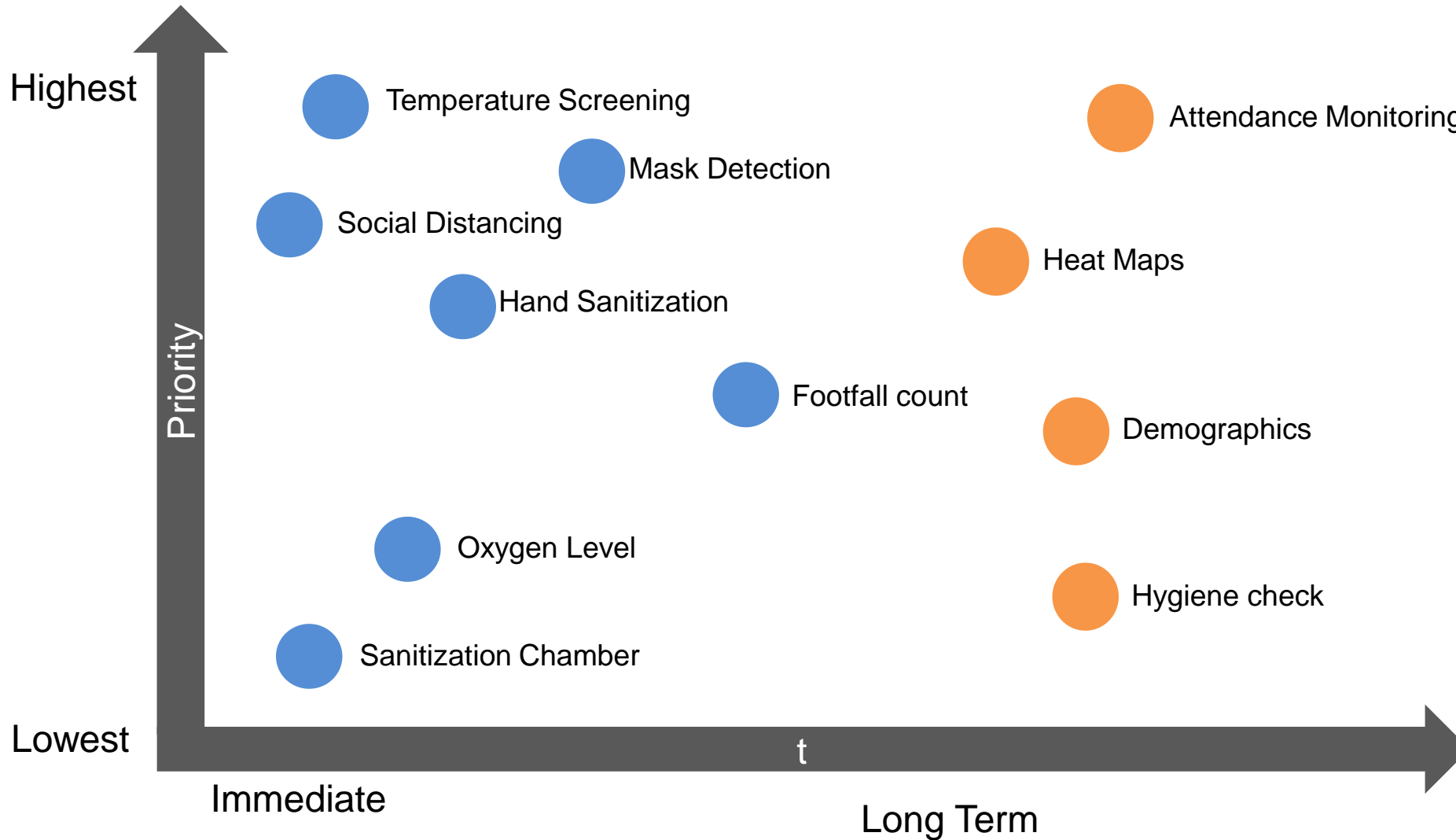
## 3. Real-time Alerts and Live Notifications

- Immediate warning through buzzer and on screen
- Auto recording of every person detected with fever or without mask



## 4. Up and running in 5 mins - Plug and play model



# Solution Response Roadmap



We are an **OEM** and can solve any business challenges

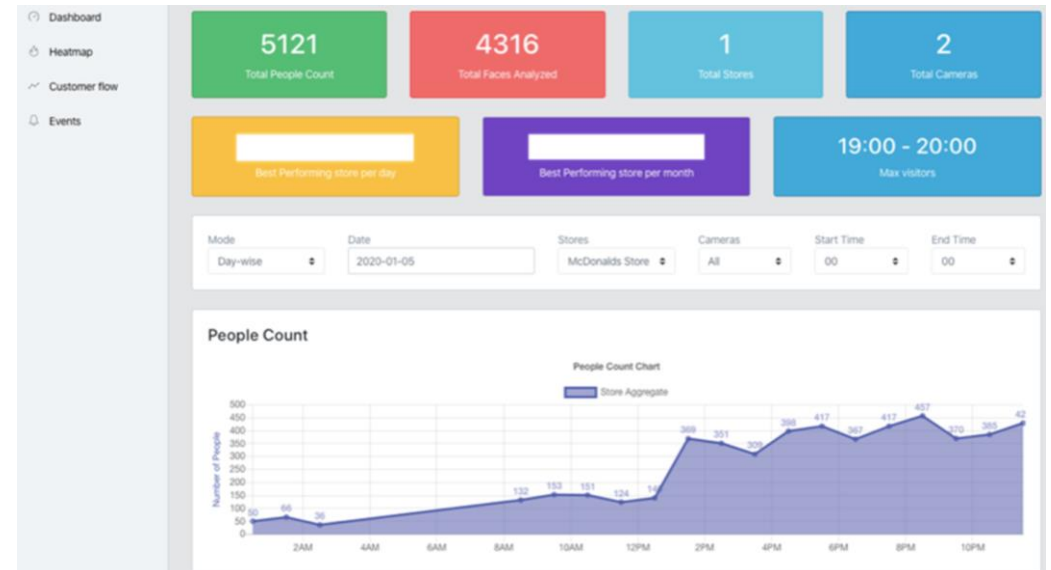
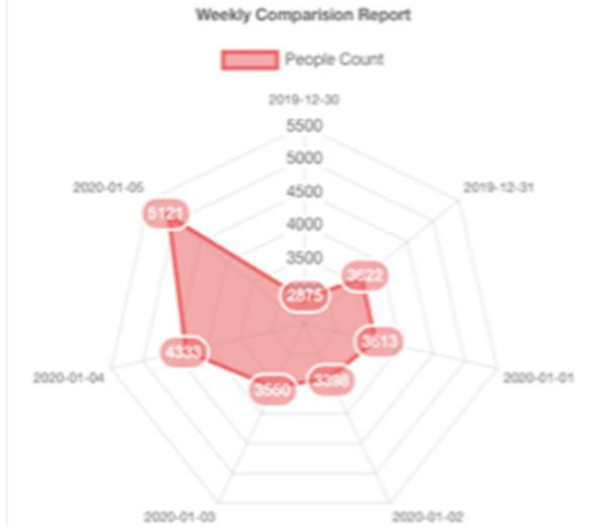
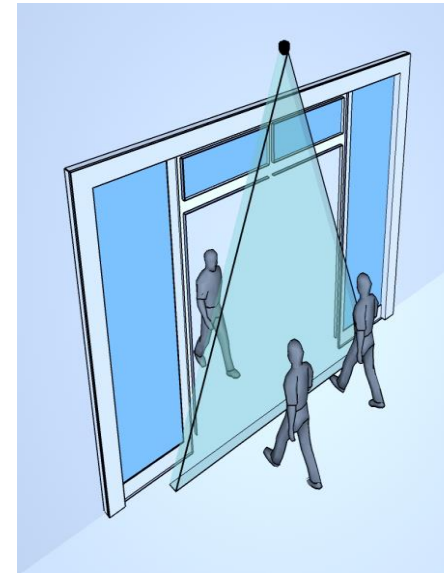
-  Covid19 Use Cases
-  General Use Cases



# People count



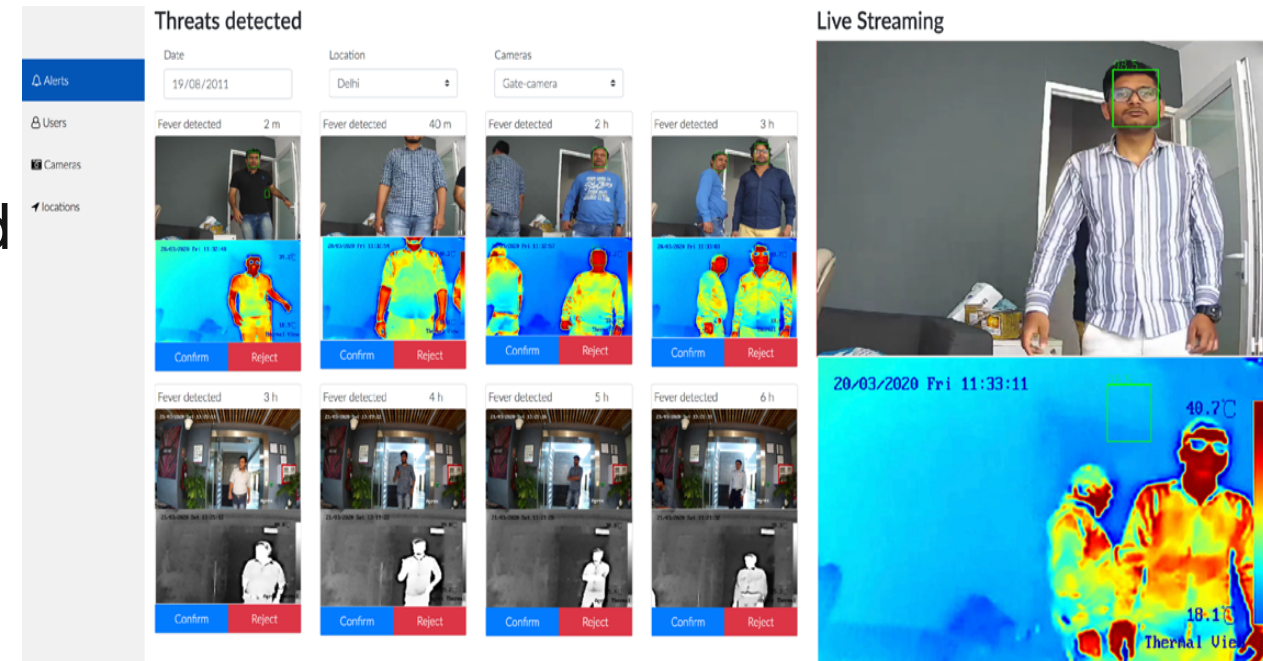
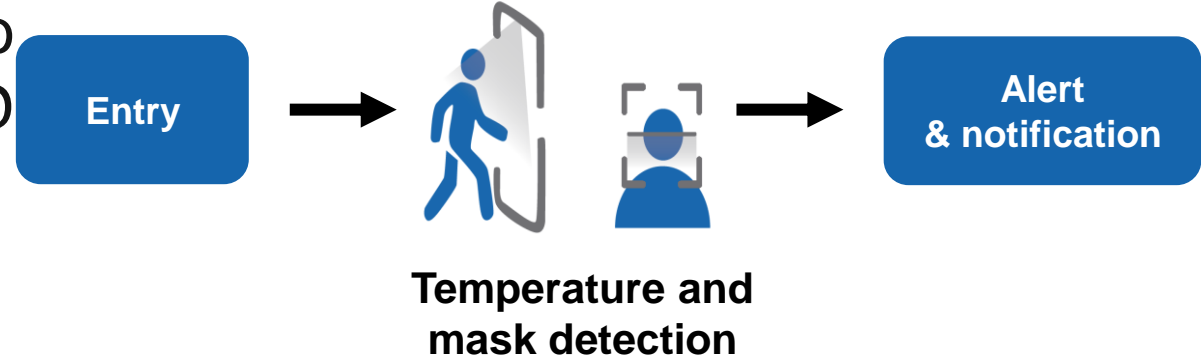
1. Count the number of people entering and exiting from a specific area- office, mall, event, social gathering etc.
2. Display and broadcast results on real-time basis
3. Helps in meeting the compliance
4. Prerequisites:
  - a. Optical camera + DVR recording
    - Existing optical camera can be used, subject to image quality
  - b. Analytics box



# Easy to Install and Setup



1. Setup a channel for people to walk into in an orderly fashion (Such as a DFMD machine, turnstile, or walkways)
2. Setup the camera at the termination of that line, so that all the people walking through can be scanned in less than 1 second / scan
3. The camera will beep an alert and send a notification on the dash board for those with high body temperature and not wearing a mask



# Make your existing surveillance network smarter



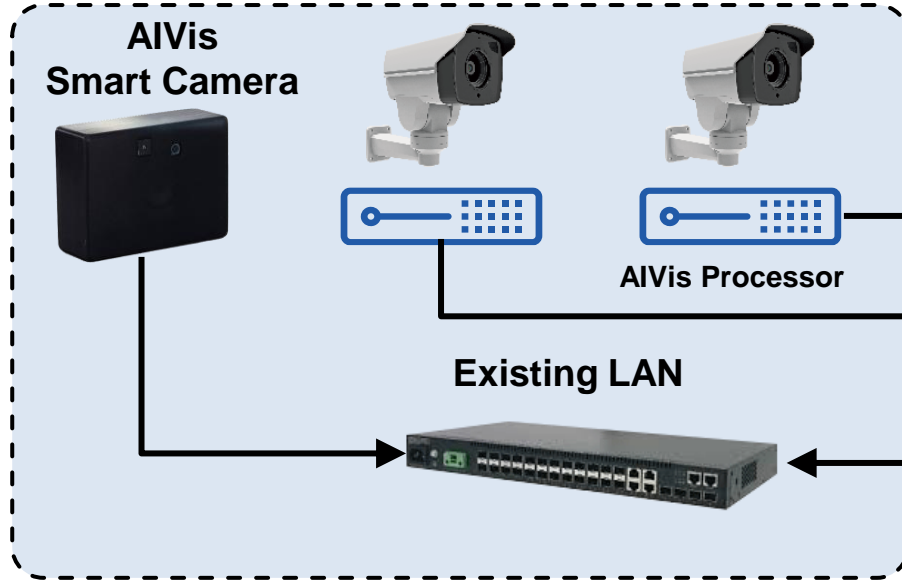
- Makes your existing surveillance network smarter
- Real-time remote monitoring, management and control
- Real-time analytics for smarter decisions
- Multi-Camera support – Can scale to 100s of cameras
- Works with any IP/Analog camera and even standalone
- Facial Detection - Demographics Analysis
- Alerts and highlights blacklisted customers too
- Count the number of people entering and exiting from a specific area

# AIVis Smart Camera and AIVis AI Processor



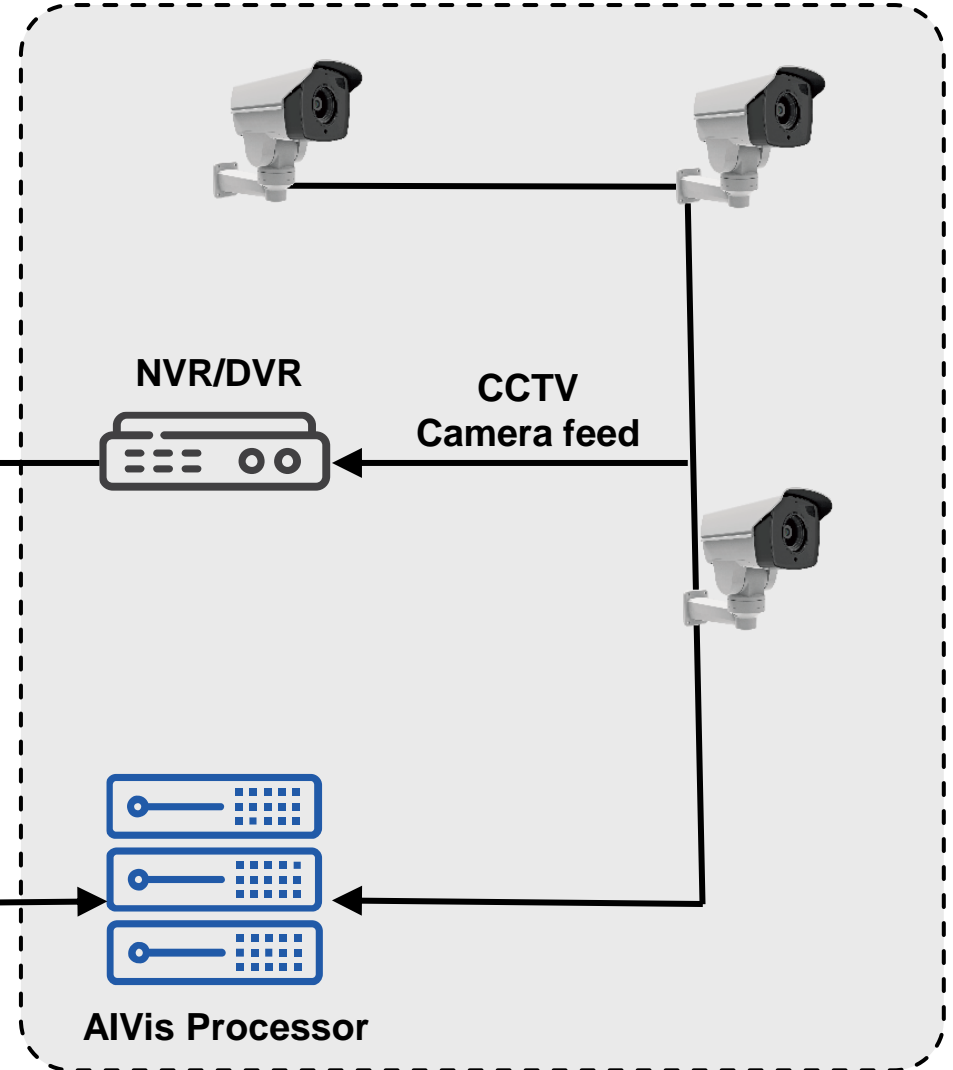
**Config-1**

1 analytics box per camera

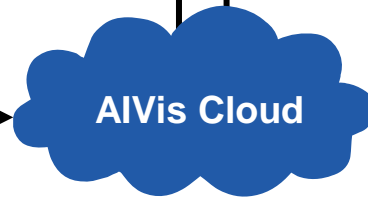


**Config-2**

Multiple camera 1 analytics



**Security Room**



	Feature	Single Camera	Multi Camera/ Site
<b>Standard</b>	Storage	SD-Card	SD-Card
	Dashboard	√	√
	Temp detection	√	√
	Mask detection	√	√
	Audio alerts	√	√
<b>Ad-on</b>	Attendance management	√	√
	Footfall count	√	√
	Centralised dashboard/Cloud based	X	√
	Demographics	√	√
	Heat maps	√	√
	Monitor	Optional	Optional
	Wi-Fi module	Optional	Optional

# Specifications- Thermal Camera



<b>Spectral Range</b>	Longwave infrared, 8 $\mu\text{m}$ to 14 $\mu\text{m}$
<b>Temperature Compensation</b>	Automatic
<b>Thermal Sensitivity</b>	<50 mK (0.050° C)
<b>Optimum Temperature Range</b>	-10 °C to +80 °C
<b>Sensor Technology</b>	Uncooled VOx microbolometer
<b>GPU</b>	128-core Maxwell
<b>CPU</b>	Quad-core ARM A57 @ 1.43 GHz
<b>Connectivity</b>	Gigabit Ethernet, M.2 Key E
<b>Display</b>	HDMI and display port
<b>USB</b>	4x USB 3.0, USB 2.0 Micro-B
<b>Temp Variation</b>	+/- 0.5 C
<b>Optical Camera Mega Pixel</b>	8 MP
<b>Height of the camera from floor</b>	1-1.5 Mtr

# Pre requisites



	Single Camera	Multi Site / Camera
<b>UPS enabled electricity</b>	√	√
<b>LAN connectivity</b>	√	√
<b>Internet connectivity over LAN- Thermal Camera</b>	Optional	√
<b>Internet connectivity over LAN- Analytics box</b>	√	√
<b>Monitor for direct HDMI O/P</b>	√	√, all cameras
<b>Web browser O/P</b>	Optional	√
<b>Optimal height from the ground</b>	1-1.5m	1-1.5m

# Scope of work



## VNL / Spectra

1. One stop shop for all the AI enabled requirements on the thermal camera
  - Requirement assessment
2. Shipment of the solution
3. Project Management & delivery of the solution
4. AI features (Attendance, heat map, footfall count, etc)
5. Remote demonstration of the app
6. Helpdesk
  - Remote HW & SW support
  - Support ticket creation
7. Back to bench warranty
8. Periodic Governance with IT team
9. Invoicing
  - Services

## Customer

1. Inputs for solution
2. Purchase order
  - Thermal camera and the standard solution
  - Additional services
3. Escalations for Project Management
4. Support ticket creation
5. Monthly Governance with Shyam group team
6. Deployment of the solution – plug & play
7. Create and provide the ideal environment for installing the device
8. Back to bench warranty
  - Send the device to the Spectra warehouse in case of any fault
9. Payment
  - OTC & MRC charges



Thank you