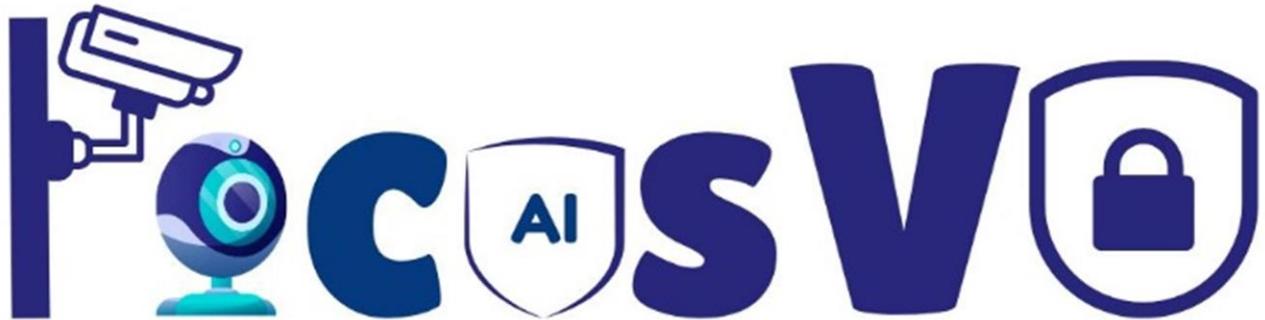


**“The Power of Intelligent Vision”**



**Detect. Decide. Defend, Instantly**



**The Eye of Future Security**

**Mr. Sumiit Katyal**



## FocusVU for Factories & Industrial Plants

### Overview

Factories today operate in highly competitive, compliance-driven environments. While CCTV cameras are installed everywhere, most remain **passive recording devices** with minimal real-time value.

FocusVU.ai transforms these cameras into an **active, intelligent command layer** capable of:

- Real-time threat detection
- Worker productivity analysis
- Machine status & temperature analytics
- Fire & smoke alerts
- Security & access control automation
- Compliance enforcement
- Operational decision-making

This document outlines **end-to-end use cases** demonstrating how factories can reduce losses, improve safety, and gain measurable ROI using FocusVU.ai.

### 1. WORKER PRODUCTIVITY & BEHAVIOR ANALYTICS

#### Problem Statement

Factories lose operational efficiency due to:

- Workers standing idle at machines
- Long unproductive breaks
- Crowding & gossip groups forming near workstations
- Operators leaving machines unattended
- Unauthorized time spent on mobile phones
- Low supervision during night shifts

### AI-Powered Solution

Area	No. of Cameras	AI Features
Shop Floor	6–12	Worker presence detection, idle time monitoring, grouping detection, mobile phone detection
Assembly Lines	4	Time-on-task analytics, operator absence alerts
QC & Packing Area	3	Work slowdown alerts, queue monitoring

### Advantages

- Heatmaps indicating zones with frequent idle time
- Alerts when workers leave machines unattended
- Detection of workers forming non-productive groups
- Analytics on shift performance, work patterns, and manpower utilization

### ROI Impact

- **15–30% productivity increase**
- **5–12 lakhs/month savings** from reduced idle time
- Accurate manpower planning & shift discipline

## **2. MACHINE TEMPERATURE & EQUIPMENT HEALTH MONITORING**

### Problem Statement

- Heavy machinery overheats, causing breakdowns
- Manual checks are inconsistent
- No automatic alarm when temperatures cross thresholds
- Resulting in production loss and expensive repairs

### AI-Powered Solution

Using thermal cameras integrated with FocusVU:

Machine Type	Feature
CNC, Press, Rotors	High-temperature alerts
Generators	Thermal anomaly detection
Motors & Bearings	Continuous thermal monitoring
Electrical Panels	Spark/flame detection

### Advantages

- Early warning system before machine failure
- Real-time alerts to maintenance team
- Trendline analytics for predictive maintenance

### ROI Impact

- Avoids ₹15–40 lakh annual loss from machine downtime
- Extends machine lifespan by 20–30%

## 3. SAFETY, FIRE, SMOKE & INCIDENT PREVENTION

### Problem Statement

- Fire & smoke incidents escalate quickly
- Manual monitoring of PPE is unreliable
- Workers entering hazardous zones without safety gear
- Delay in reporting accidents

### AI Features

Zone	AI Capabilities
Production Floor	Helmet, gloves, jacket detection
Chemical Storage	Fire, smoke, spark, leak alerts
Welding Area	Flame surge detection
Assembly Shop	Fall detection, emergency gesture detection

### Advantages

- Real-time alarms via SMS, WhatsApp & Email
- Incident footage archived automatically
- PPE compliance reports for audit teams

### ROI

- Reduces injuries & penalties by ₹10–25 lakh/year
- Lower insurance premiums

## 4. SECURITY, ACCESS CONTROL & PERIMETER SAFETY

### Problem Statement

- Unmonitored entries/exits
- Theft of raw materials, tools, consumables
- No tracking of vendor/contractors' movement
- Perimeter breaches go unnoticed at night

## AI Solution

Zone	AI Capability
Main Gate	ANPR, face recognition, attendance logs
Warehouse	Object removal / object left alert
Perimeter	Intrusion detection, line crossing alerts
Loading Bay	Vehicle dwell-time analytics

## Advantages

- Automatic gates & access control
- Visitor movement logs
- Protection against theft, sabotage & trespassing

## ROI

- Prevents losses of ₹5–50 lakh from a single theft incident
- Enables zero-error access control

## 5. AUTOMATION, ALERTS & COMMAND CENTER

### Smart Alerts

- **SMS, WhatsApp, Email notifications**
- Loudspeaker/hooter activation
- Automated warnings on shop-floor screens
- Escalation matrices (Operator → Supervisor → Plant Head)

### Command Center Setup

Using Toughbooks or factory control-room systems:

- Live dashboards
- Historical analytics
- Heatmaps for movement and activity
- Incident logs with time stamps
- Secure data retention

## 6. COMBINED ROI BENEFIT SNAPSHOT

Area	Annual Savings
Productivity Improvement	₹60 lakh – ₹1.2 crore
Machine Downtime Reduction	₹15–40 lakh
Theft & Intrusion Prevention	₹5–50 lakh
Accident Prevention & Compliance	₹10–25 lakh
Fire/Incident Detection	Catastrophic risk avoided

**Total measurable ROI:**

**₹90 lakh – ₹2.3 crore per year depending on factory size.**

**7. Summary: Why Factories Choose FocusVU.ai**

- AI trained specifically for industrial behavior
- Real-time actionable intelligence
- Automated control-room and alerting systems
- Integration with access control, ANPR, ERP & security
- Reduced manpower dependency
- Extremely high ROI with measurable, month-on-month savings