

SAFEX AI

SDG 8 – DECENT WORK AND ECONOMIC GROWTH

THE PROBLEM:

EVERY 15 SECONDS, A WORKER DIES FROM A WORK-RELATED ACCIDENT OR DISEASE;

EVERY 15 SECONDS, 153 WORKERS SUFFER A WORK-RELATED INJURY .

HIGH-RISK INDUSTRIES (CONSTRUCTION, MINING, MANUFACTURING) ARE ESPECIALLY VULNERABLE.

IN DEVELOPING NATIONS, POOR SAFETY

MONITORING AND WEAK ENFORCEMENT INCREASE RISKS.

URGENCY:

ANNUAL GLOBAL COST OF WORKPLACE ACCIDENTS: \$3 TRILLION.

ACCIDENTS CAUSE LOSS OF INCOME, LONG-TERM DISABILITIES, AND REDUCED PRODUCTIVITY.

WHO IS AFFECTED:

WORKERS, EMPLOYERS, AND NATIONAL ECONOMIES



AI-POWERED SOLUTION

SOLUTION NAME: SAFEX AI – SAFETY MEETS INTELLIGENCE



High-Level Idea:

An AI-powered workplace safety system that prevents accidents before they happen through:

- Real-Time Hazard Detection (computer vision spotting missing PPE, unsafe equipment use).
- Predictive Analytics (forecasts accident hotspots).
- Instant Alerts (warns supervisors and workers).

How AI Helps:

- Analyzes live video feeds and historical data.
- Predicts risks early and triggers preventive action.

Every 15 seconds, a worker dies from a work related accident or disease, every 15 seconds, 153 workers suffer an injury.

INNOVATION & IMPACT

- **What Makes SafeX AI Unique:**
 - Combines computer vision + predictive analytics for proactive safety.
 - Works with existing CCTV systems (low setup cost).
 - Industry-customized AI models for different hazards.
 - **Expected Positive Outcomes:**
 - Accident reduction → safer, healthier workers.
 - Productivity increase → fewer disruptions.
 - **Scalability:**
 - Adaptable to construction sites, factories, warehouses, oil rigs, and mining.
 - **Risks/Limitations:**
 - Initial setup cost.
 - Need for worker training & privacy compliance.
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IMPLEMENTATION PLAN

TARGET AUDIENCE



Target Users:

Large factories, construction companies, industrial plants, mining firms.

Step-by-Step Plan:

1. Install cameras or use existing CCTV feeds.
2. Train AI model on industry specific hazards.
3. Integrate with worker wearable devices & supervisor dashboard.
4. Launch pilot program in one facility.
5. Scale to multiple sites after success.

Technologies/Tools:

- Computer Vision (YOLO, OpenCV)
- Predictive Analytics (Python, ML models)
- Cloud dashboard for monitoring
- Mobile & wearable integration



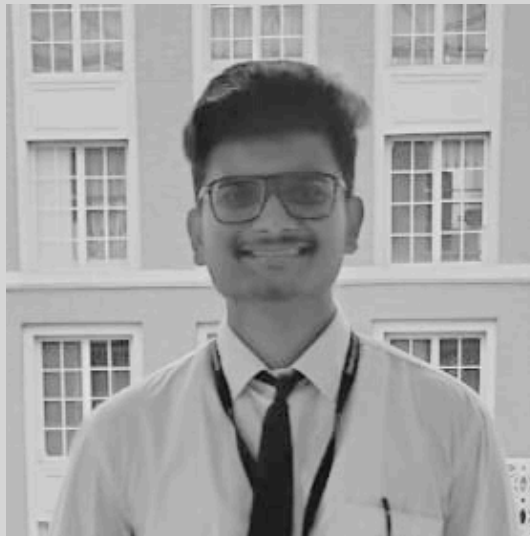
Stakeholders/Partners:

- Industrial safety regulators
- AI software developers

TEAM

**Aaviraj
Nikumbh**

CEO of Salford & Co.



–:FINAL TAGLINE:–

We believe every worker
should be able to return
home safely after a hard
day's work.



**Ruchi
Khairnar**

Head of Operations



**Shlok
Panchal**

PPT & Video Editor

**Parth
Koshti**

Lead Architect

