

CASE STUDY

AI-Powered Safety Surveillance for Industrial
Worksites



About the Client

The client is a leading construction and manufacturing group operating across GCC regions, including Saudi Arabia, UAE, and Qatar.

With over 500 employees and multiple high-risk worksites, strict adherence to PPE protocols was essential for worker safety, regulatory compliance, and risk mitigation.

Employees

500 - 600

Industry

Construction & Manufacturing

Region

GCC (multi-site)

Operational Hurdles



Reporting & Audit Challenges

Generating accurate compliance reports required significant manual effort and time.

No Centralized Safety Intelligence

Surveillance data remained siloed, offering no unified view of safety performance or trends.

Multi-PPE Compliance Complexity

Manual tracking of helmet, vest, and mask compliance across busy worksites was not scalable.

Lack of Real-Time Alerts

Supervisors were not notified instantly, leading to missed opportunities for immediate correction.

Passive Safety Monitoring

Existing CCTV systems recorded footage without providing real-time analysis or alerts, limiting their effectiveness in active safety enforcement.

Delayed Violation Detection

Safety breaches were typically discovered after audits or incidents, reducing the ability to intervene immediately.

Solution



AI-Powered Surveillance Platform

Difinity Digital implemented a computer vision-based safety monitoring system integrated with existing IP cameras to actively detect safety violations in real time.



Multi-Compliance Detection Engine

The system simultaneously detects human presence and monitors helmet, safety vest, and mask compliance in real time across defined work zones.



Real-Time Alerting

Instant notifications are sent to site supervisors via dashboards and mobile alerts, enabling immediate action.



Centralized Safety Analytics Dashboard

All detection data is visualized in a live dashboard, offering command-center visibility into compliance rates, violation hotspots, and trends.



Seamless Camera Integration

The solution enhanced existing surveillance infrastructure without requiring hardware replacement.

Impact

100% Automated Monitoring

Replaced passive CCTV with real-time intelligent safety oversight.

Real-Time Risk Prevention

Enabled immediate intervention through instant alerts.

Stronger Safety Culture

Improved accountability through visible, shared safety metrics.

85% PPE Compliance Improvement

Achieved higher adherence within three months.

100% Audit-Ready Logs

Automated, accurate compliance reporting without manual effort.

Multi-Site Scalability

Rolled out seamlessly across locations with centralized control.

Decoding Difinity: Our World and What We Do

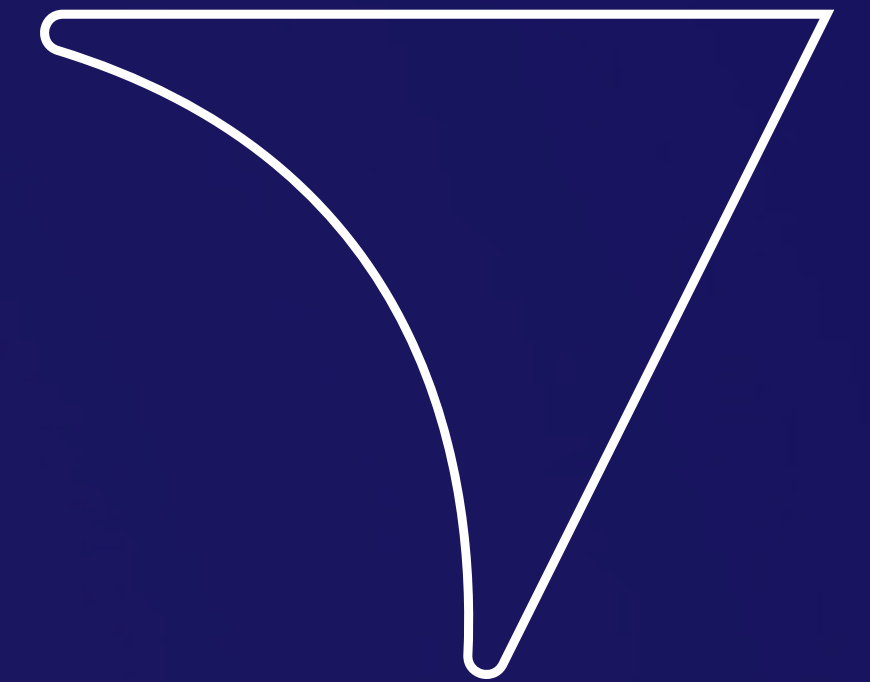
At Difinity Digital, we're not just a tech consulting firm; we're your innovation partners. We specialize in crafting transformative solutions that empower enterprises worldwide to redefine their technology engagement. Our mission is to drive sustainable growth by harnessing the power of intelligent automation, data analytics, and custom software development.

Our dedicated team of experts leverages cutting-edge technologies to streamline operations and boost efficiency across various sectors, including finance, accounting, banking, insurance, logistics, and software and digital platforms. From automating business processes with AI to enhancing KYC compliance and optimizing accounts receivable/payable workflows, our solutions are designed to elevate your business.

At Difinity Digital, we believe in revolutionizing industries and creating lasting impact. We're not just providing services; we're shaping the future of digital transformation.

+91 9995 099 503
info@difinitydigital.com

difinitydigital.com



FOLLOW US ON

