VTM

Construction Training Platform
In Extended Reality

Construction Training Platform (CTP)

Revolutionizing Site Safety and Efficiency

The construction industry has long struggled to balance effective worker training with safety and regulatory compliance. Traditional methods—such as classroom instruction and on-site shadowing—often fall short, resulting in persistently high accident rates and costly project delays.

VTM Digital's Construction Training Platform (CTP) leverages immersive Extended Reality (XR) technologies to provide interactive, lifelike simulations, enabling workers to gain hands-on skills in a zero-risk environment. CTP has been successfully implemented in over 80 government and major construction projects, training more than 80,000 workers while significantly reducing training costs and incidents.

Challenges in Construction Training

Construction sites are inherently high-risk environments, where errors can cause serious injuries, fatalities, and financial losses. Key challenges include:

Safety Risks

Insufficient training leads to falls, equipment misuse, and other preventable accidents.

Time and Cost

Traditional training methods are time-consuming and expensive, impacting project efficiency.

Skill Gaps

Workers often lack hands-on experience with high-risk tasks or complex machinery.

Compliance Pressure

Companies must comply with Hong Kong's Occupational Safety and Health Ordinance (OSHO), CITF certifications, and ISO/ANSI standards, ensuring complete and auditable training records.

VTM Digital Solution

CTP uses VR/MR technology to deliver immersive, safe, and measurable training:

Immersive XR Simulations

Heavy equipment operations (e.g., excavators, cranes, bulldozers), high-altitude tasks, and site safety workflows accelerate skill acquisition by 70%.

Accident Prevention Mode

Simulated high-risk scenarios (falls, equipment failures, etc.) reduce incident rates by ~83%, lowering fines and downtime costs.

Comprehensive Module Library

37+ ready-to-use XR modules, updated quarterly, covering 90% of high-risk site scenarios and aligning with the latest construction safety best practices.

Enterprise-Grade Analytics & Integration

Real-time dashboards track learner performance and generate reports compliant with OSHO, CITF, and ISO standards, fully integrable with HR/LMS systems.

BIM Integration

Supports Revit, Navisworks, and IFC models, interoperable with Autodesk and Procore platforms, reducing pre-construction training costs by 30%.

Benefits and Impact

CTP delivers measurable results:

Enhanced Safety

Average incident rates reduced by 83%.

Cost Savings

Annual training and downtime costs lowered by approximately 40%.

Skill Improvement

Workers achieve 80% operational accuracy after just two sessions (e.g., HKIA Third Runway Project).

Automated Compliance

Reports automatically generated to meet OSHO, CITF, and ISO standards, simplifying administrative tasks and ensuring regulatory compliance.

Reimagine your site training with VTM Digital's Construction Training Platform.

Contact VTM Digital to schedule a demo and discover how our OSHO, CITF, and ISO-certified platform can elevate site safety, compliance, and efficiency.

info@vtmdigital.com

+852 3590 3127