The Evolution of Training
in the Era of Virtual Reality Combined with Data Analysis

在新時代下數據分析與虛擬實境的結合與應用

Eunice Wong

VTM

XR Training & Learning

1 About VTM

Led by Experts
VTM was founded in 2016 by a group of visionaries and leaded by the Chairperson of Hong Kong Digital Entertainment Association, Mr. Dao Mun Chi as our CTO and Mr. Dao Mun Fun who has more than 30 years of experience in corporate and strategic planning, as our CEO.

Another Level of Learning
VTM's vision is to design cutting edge XR training systems to revolutionize the current approach to learning and training as well as to advocate higher-order thinking.
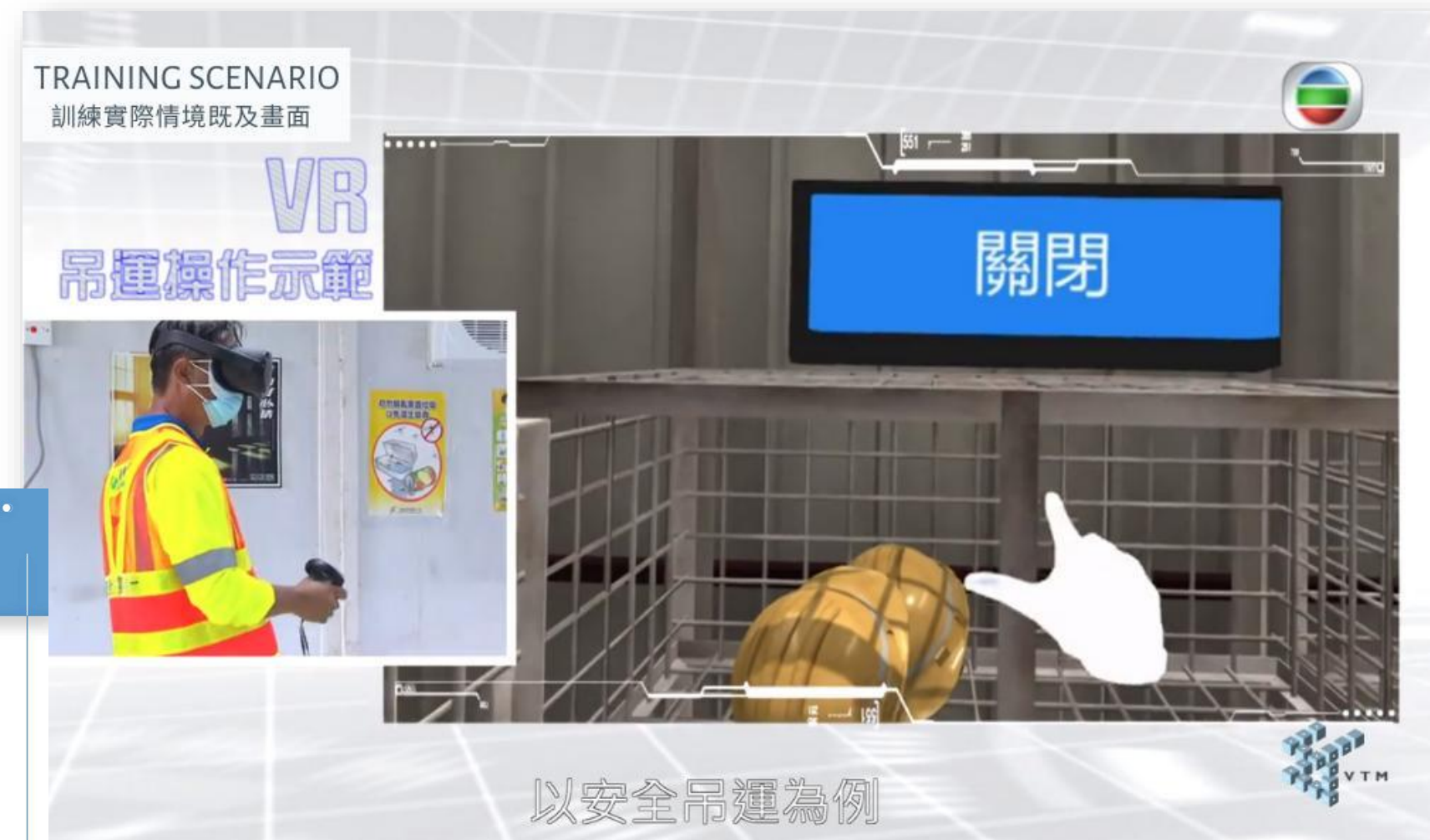
XR Training System
VTM's mission is to accelerate the XR training into an indispensable way of training with higher effectiveness and efficiency than existing methods.

About VTM

1

Media Interview
As Hong Kong market leader in XR, VTM has been interviewed by TVB, Hong Kong Economic Times (HKET), Wen Wei Po etc.

About VTM

1

100+
Projects Completions

80,000+
Number of Learners

79%
Level of Effectiveness Enhancement

1 About VTM

5 Key Areas
VTM's developed over 100+ solutions to our clients with different industry.

Operational Efficiency

Healthcare

Occupational Health & Safety
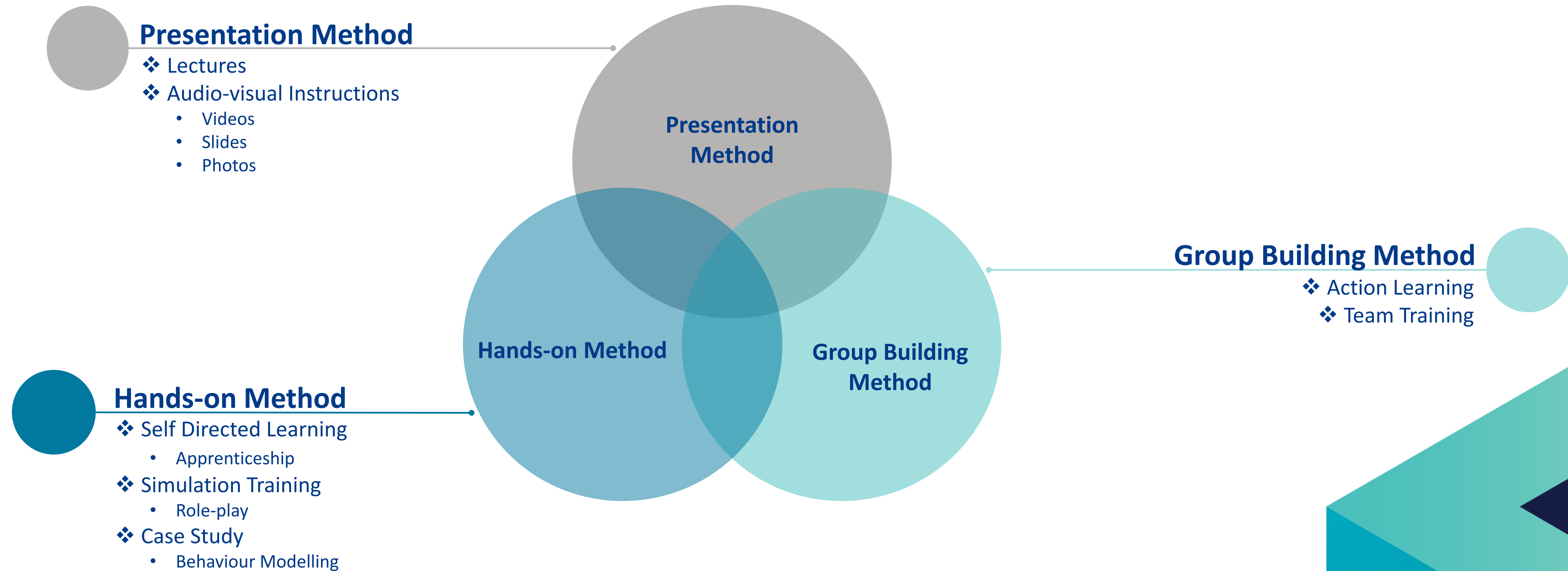
Education

Soft Skills

2 Traditional Training Methods

Presentation Method
- ❖ Lectures
- ❖ Audio-visual Instructions
  - • Videos
  - • Slides
  - • Photos

Presentation Method

Hands-on Method

Group Building Method

Group Building Method
- ❖ Action Learning
- ❖ Team Training

Hands-on Method
- ❖ Self Directed Learning
  - • Apprenticeship
- ❖ Simulation Training
  - • Role-play
- ❖ Case Study
  - • Behaviour Modelling

Presentation Method

2

Lecture

Audio-visual Instructions

Lecturer

Passive Recipient

One-way Communication

facts, process and problem-solving skills
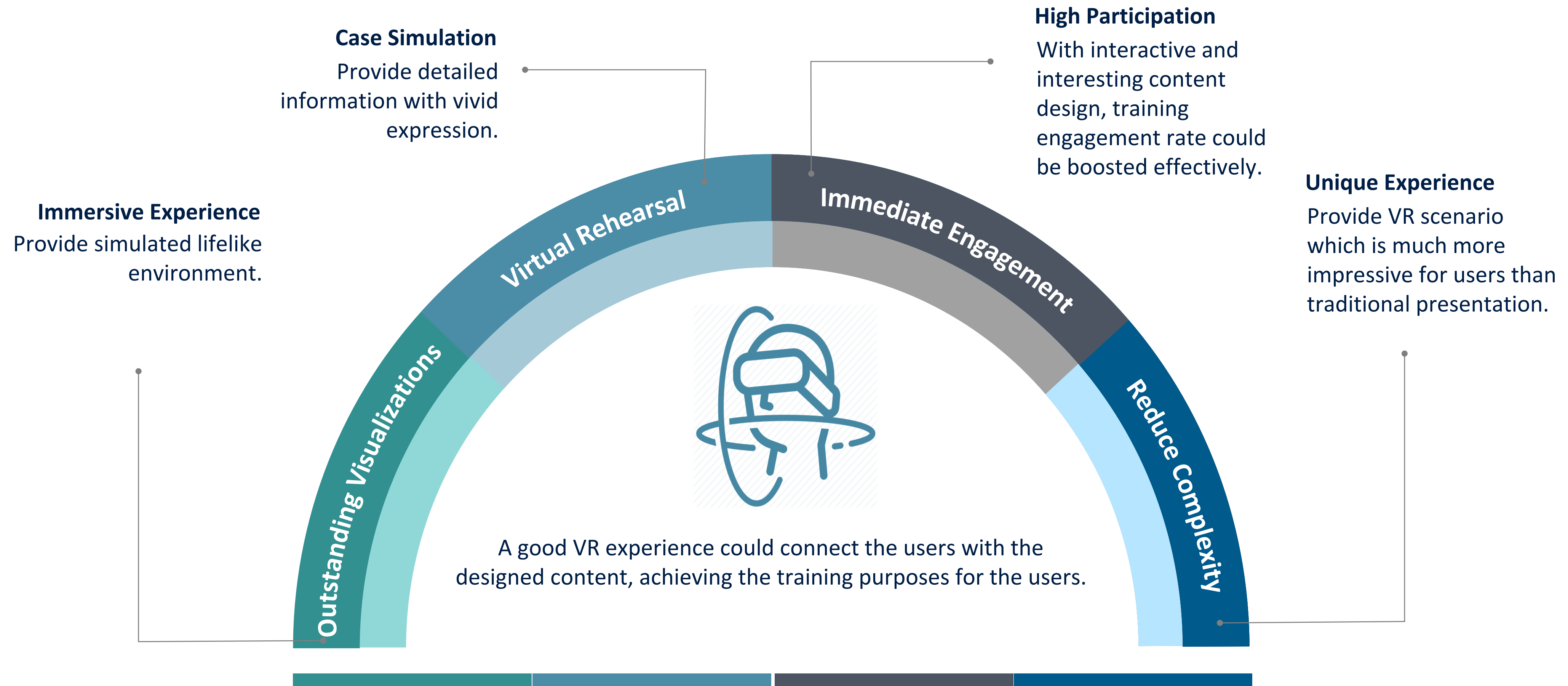
Hands-on & Group Building Methods

2

Self Directed Learning	Simulation Training	Case Study	Action Learning	Team Training

Expensive

Time-consuming

Low Engagement

3 Advantages of Virtual Reality

Case Simulation
Provide detailed information with vivid expression.

High Participation
With interactive and interesting content design, training engagement rate could be boosted effectively.

Immersive Experience
Provide simulated lifelike environment.

Unique Experience
Provide VR scenario which is much more impressive for users than traditional presentation.

Virtual Rehearsal

Immediate Engagement

Outstanding Visualizations

Reduce Complexity

A good VR experience could connect the users with the designed content, achieving the training purposes for the users.

3 Popularity of Virtual Reality

Growing Popularity in VR

In 2017, there were just 22 million VR users in the U.S., and by 2020 there were 50.2 million users. This number is expected to continue to grow and reach just under 70 million by 2023.

22,000,000

VR Users in 2017

70,000,000

VR Users in 2023

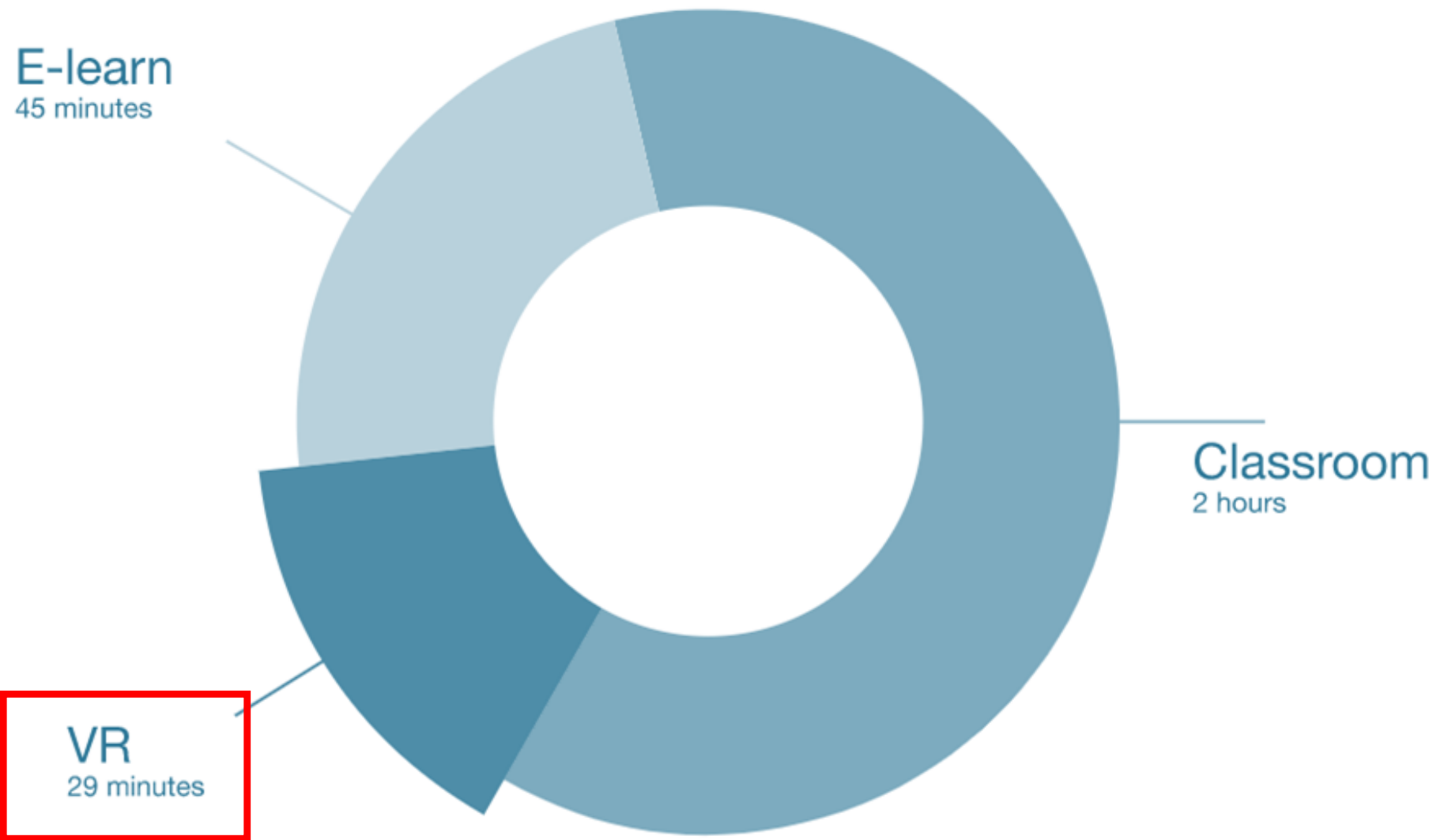**Percentage Increase in VR Popularity from 2017 to 2020**   **128%**

Percentage Increase in VR Popularity from 2020 to 2023   **40%**

3 Benefits of Using Virtual Reality

learners were:

4x

faster to train than in the classroom

275%

more confident to apply skills learned after training

3.75x

more emotionally connected to content than classroom learners

Time to complete training

E-learn
45 minutes

Classroom
2 hours

VR
29 minutes

	Classroom	E-Learn	VR
How many times were you multitasking or distracted during this experience?	0.78	1.93	0.48
How many minutes do you estimate it took to get back on task?	1.00	2.63	0.48

4 Virtual Reality Combined with Data System

Virtual Reality Training

Immersive VR training programs

Systematical Staff Training
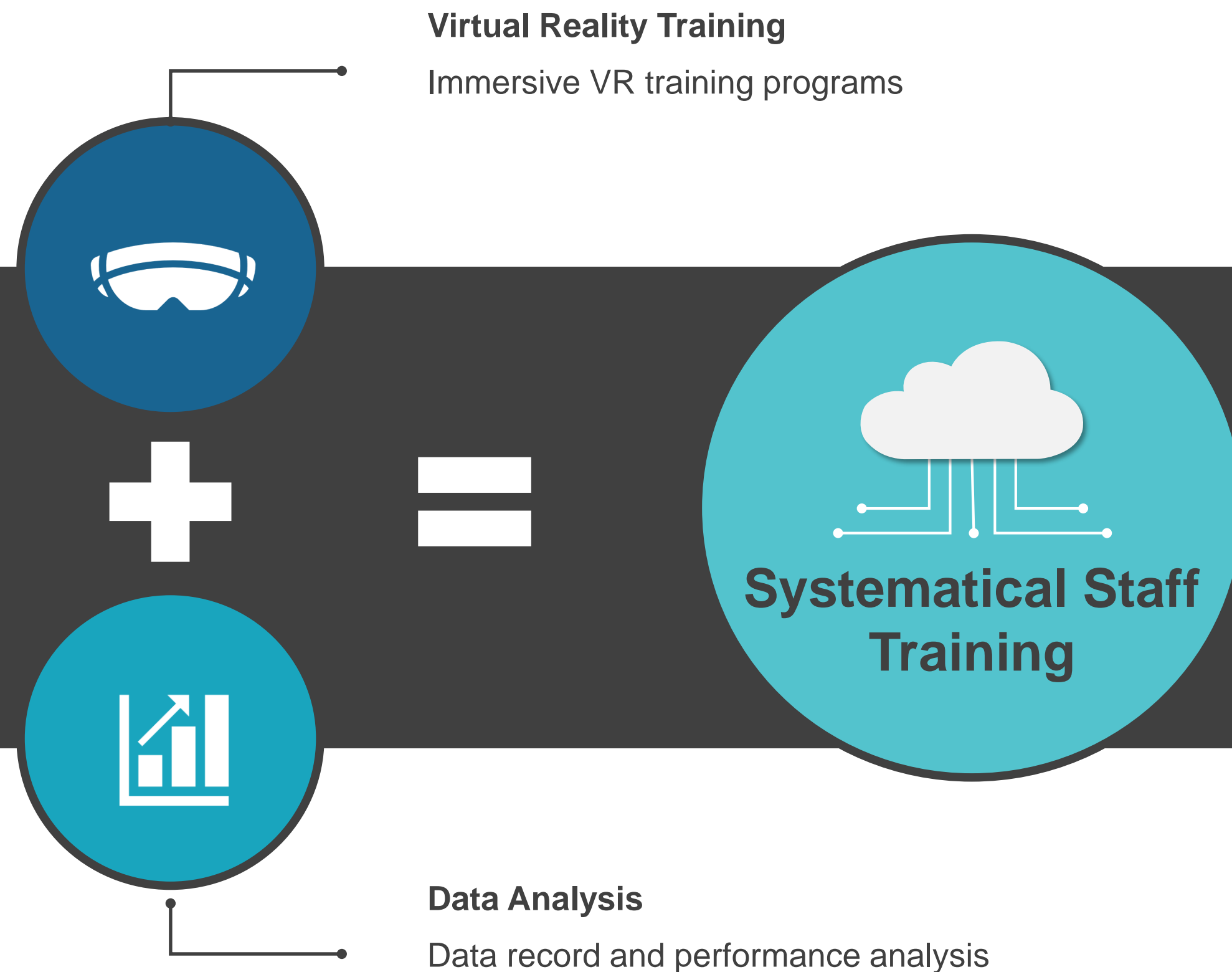
Systematical Data-driven Staff Training Programs

By recording the training data, trainer could develop training strategies for every staffs to have better training effectiveness and efficiency.
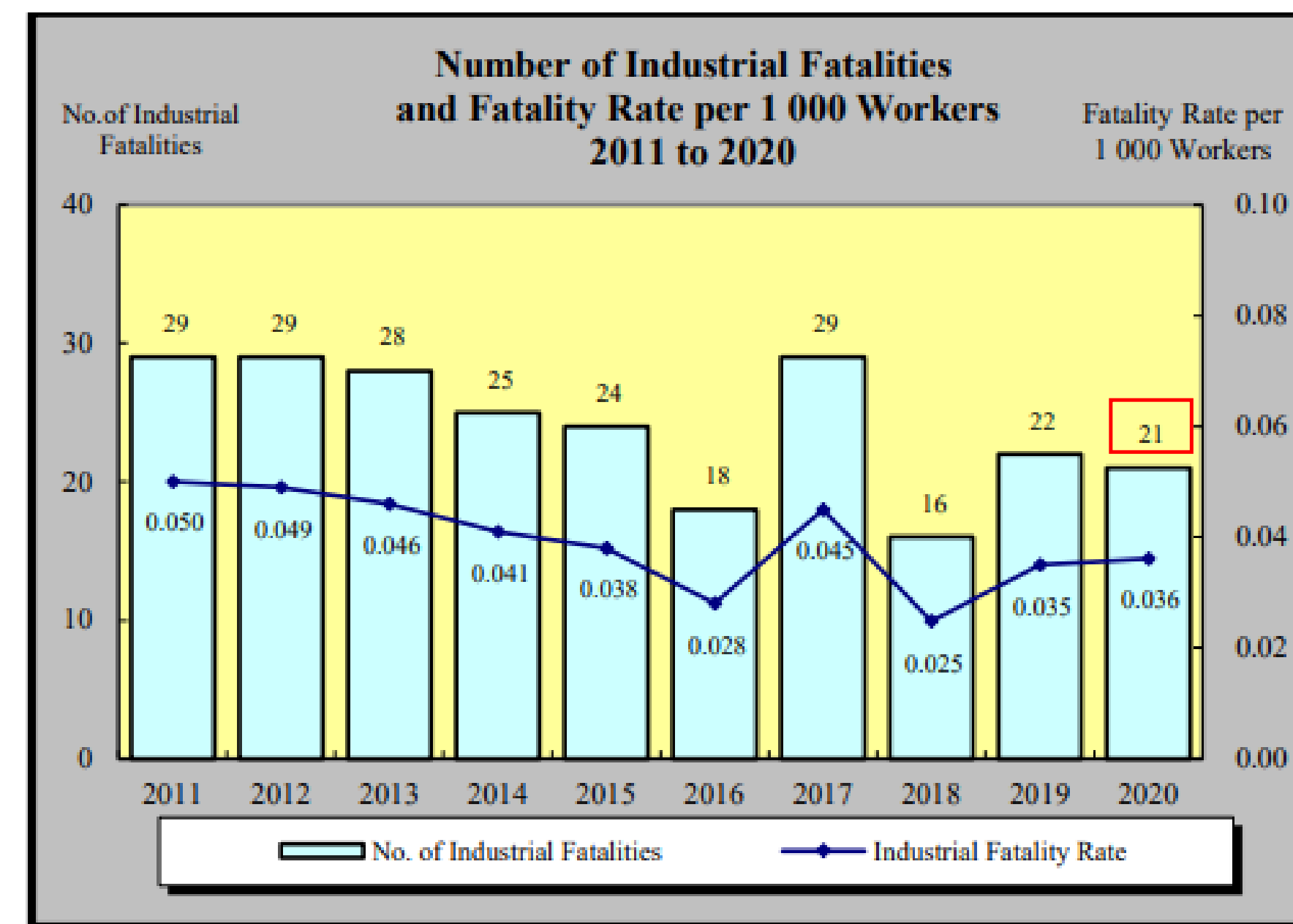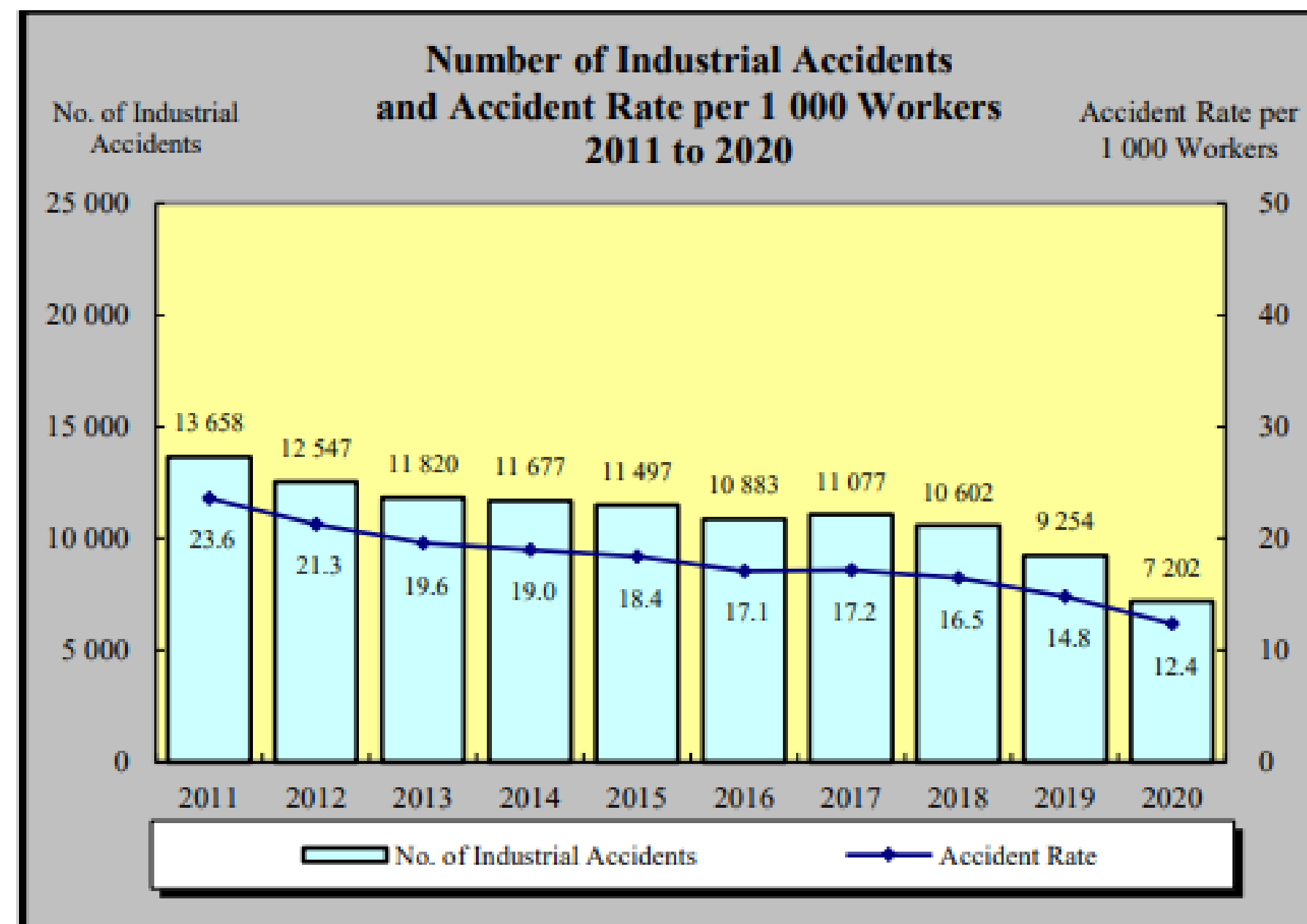
Data Analysis

Data record and performance analysis
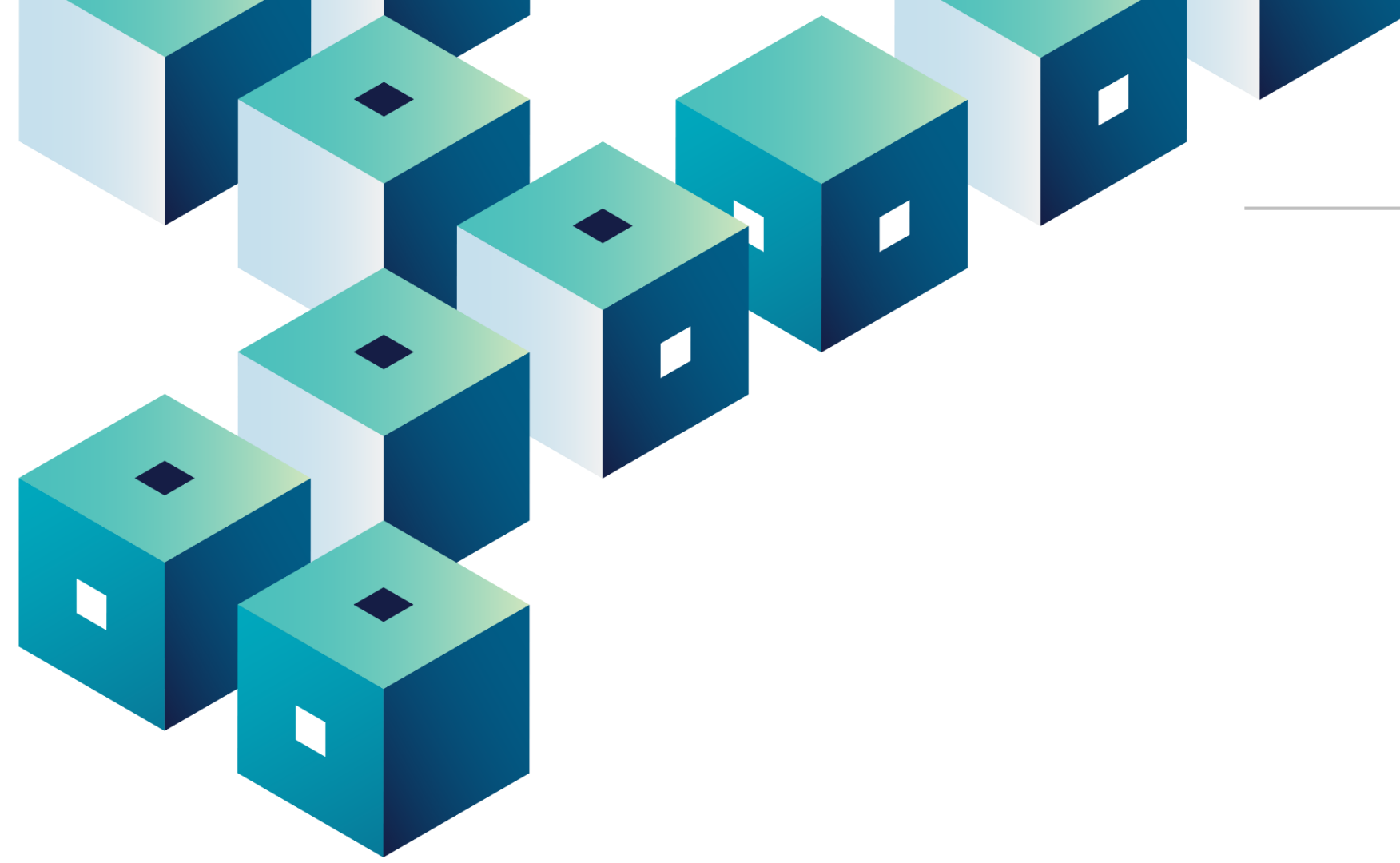
Case Study –
Construction Training Platform

5 Case Study – VR Training in Construction Industry

5 Case Study – VR Training in Construction Industry
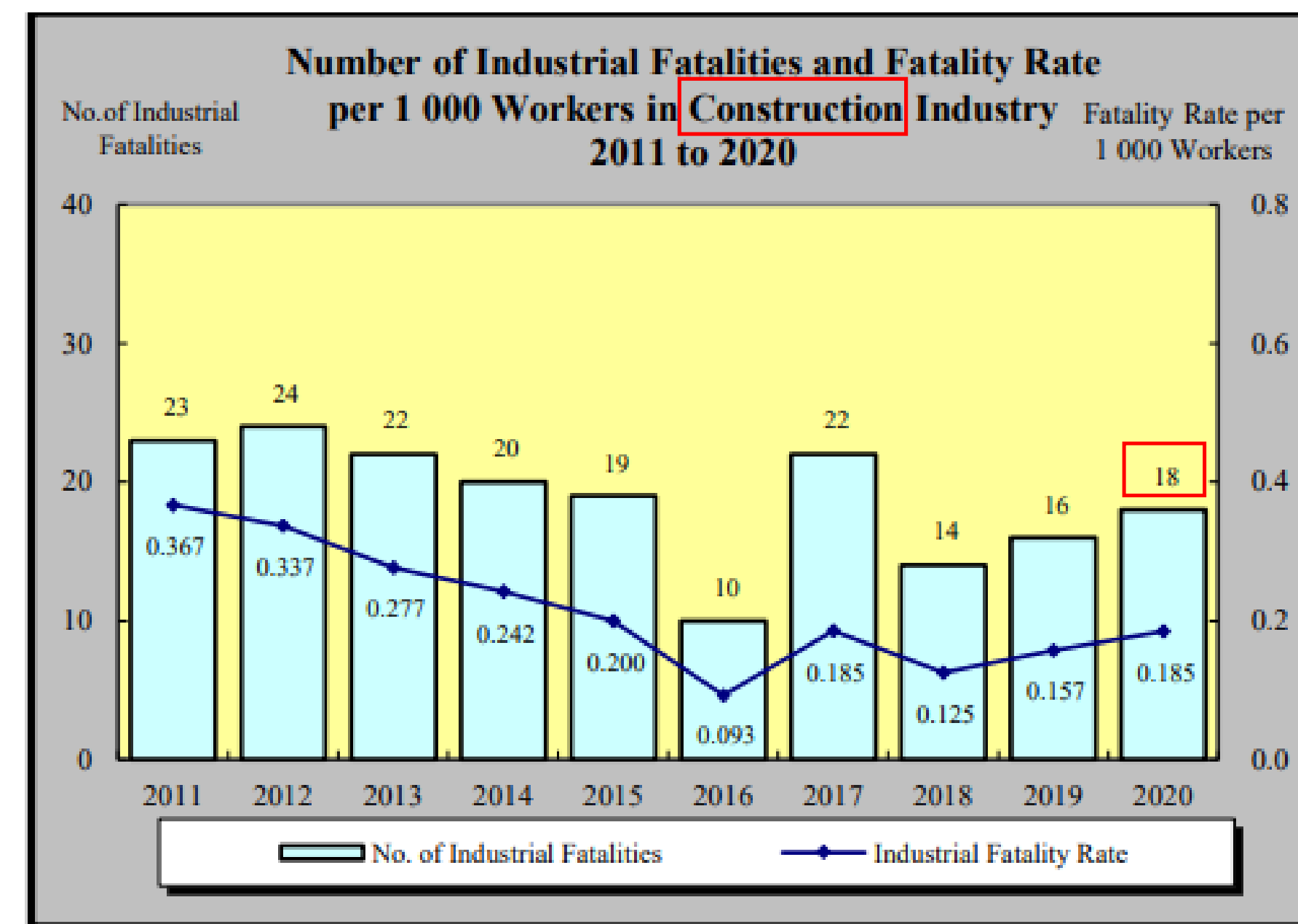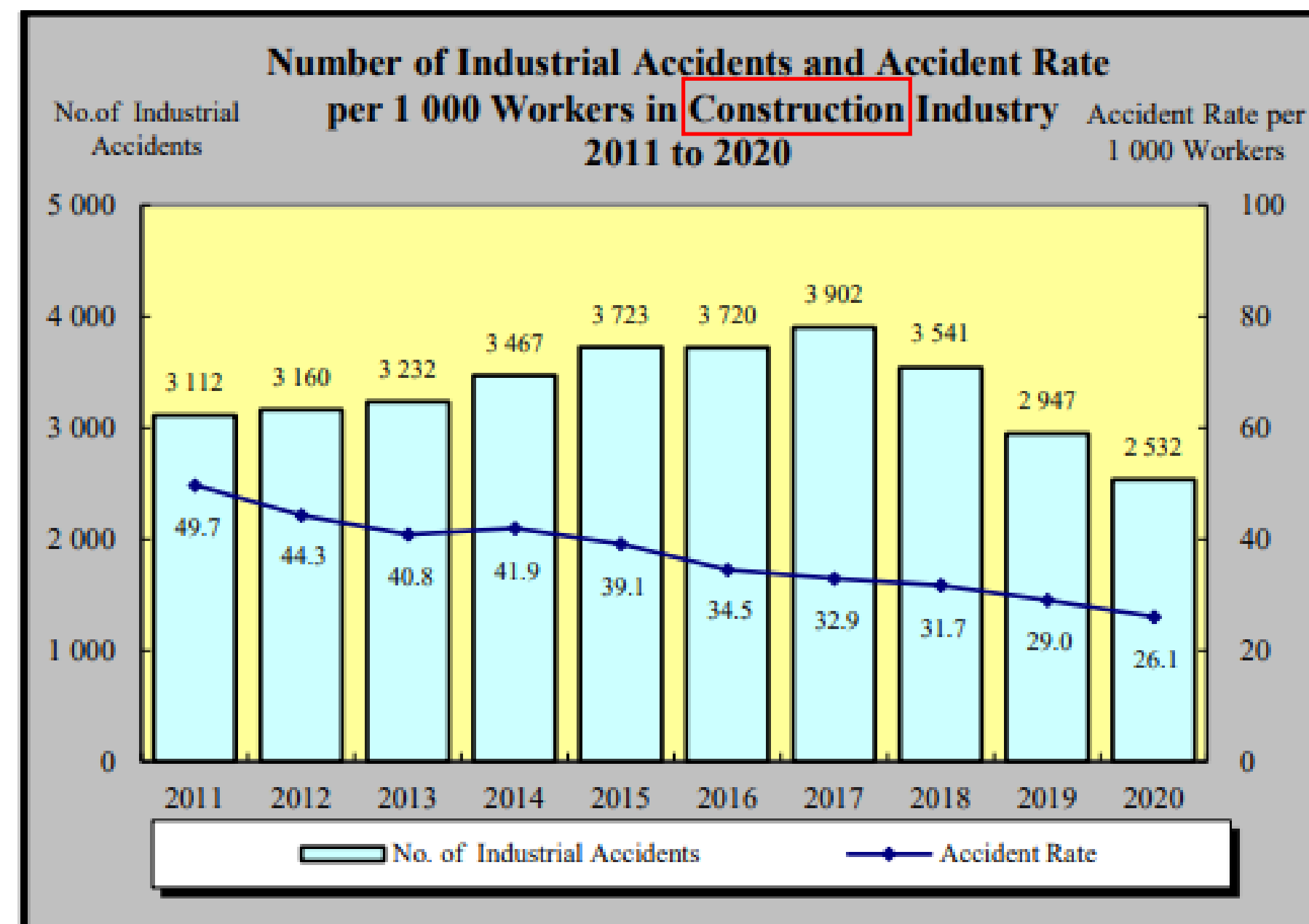
Number of Industrial Accidents and Accident Rate per 1 000 Workers in Construction Industry 2011 to 2020

Number of Industrial Fatalities and Fatality Rate per 1 000 Workers in Construction Industry 2011 to 2020

VTM – Construction Training Platform

Construction Training Platform
In Extended Reality

Professionalism

- Industry experts
- Safety consultants

VR Training

- Group of trainees
- Time saving
- Team spirit building

Multi-users

- Tailored according to your needs
- Lower training cost
- High flexibility

High Effectiveness and Efficiency

- Provide real-time performance evaluation
- Encourage two-way communication
- Enhance engagement

5 VTM – Construction Training Platform

Our Modules Covered:

1. Confined Space
2. Foundation Work
3. Lifting
4. Work from Height
5. Hot Work
6. Electrical Work
7. Emergency Handling
8. Building Maintenance Unit (BMU)
9. Digging
10. Power-operated Elevating Work Platforms

Construction Training Platform

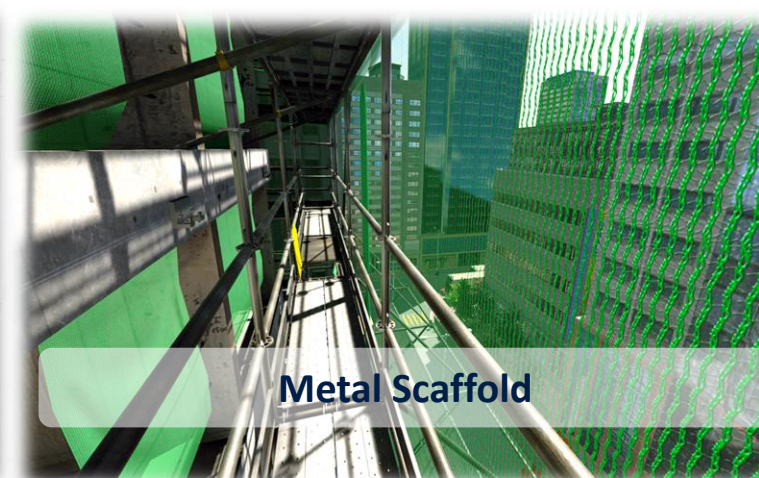In Extended Reality

5 VTM – Construction Training Platform

Construction Training Platform
In Extended Reality

Above training topics are part of our modules.

VTM – Construction Training Platform

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Over 60%
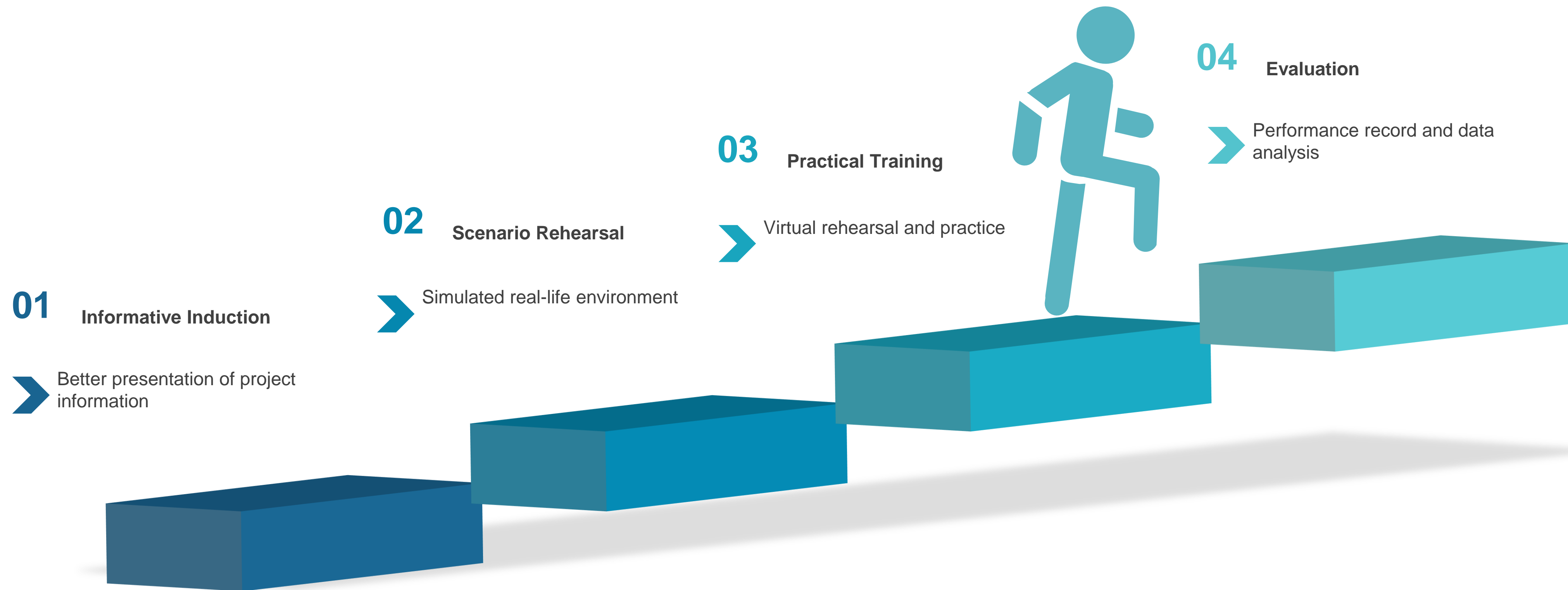Government Project

10,000 +
Learners

Over 90%
Satisfaction

VTM – Construction Training Platform

5

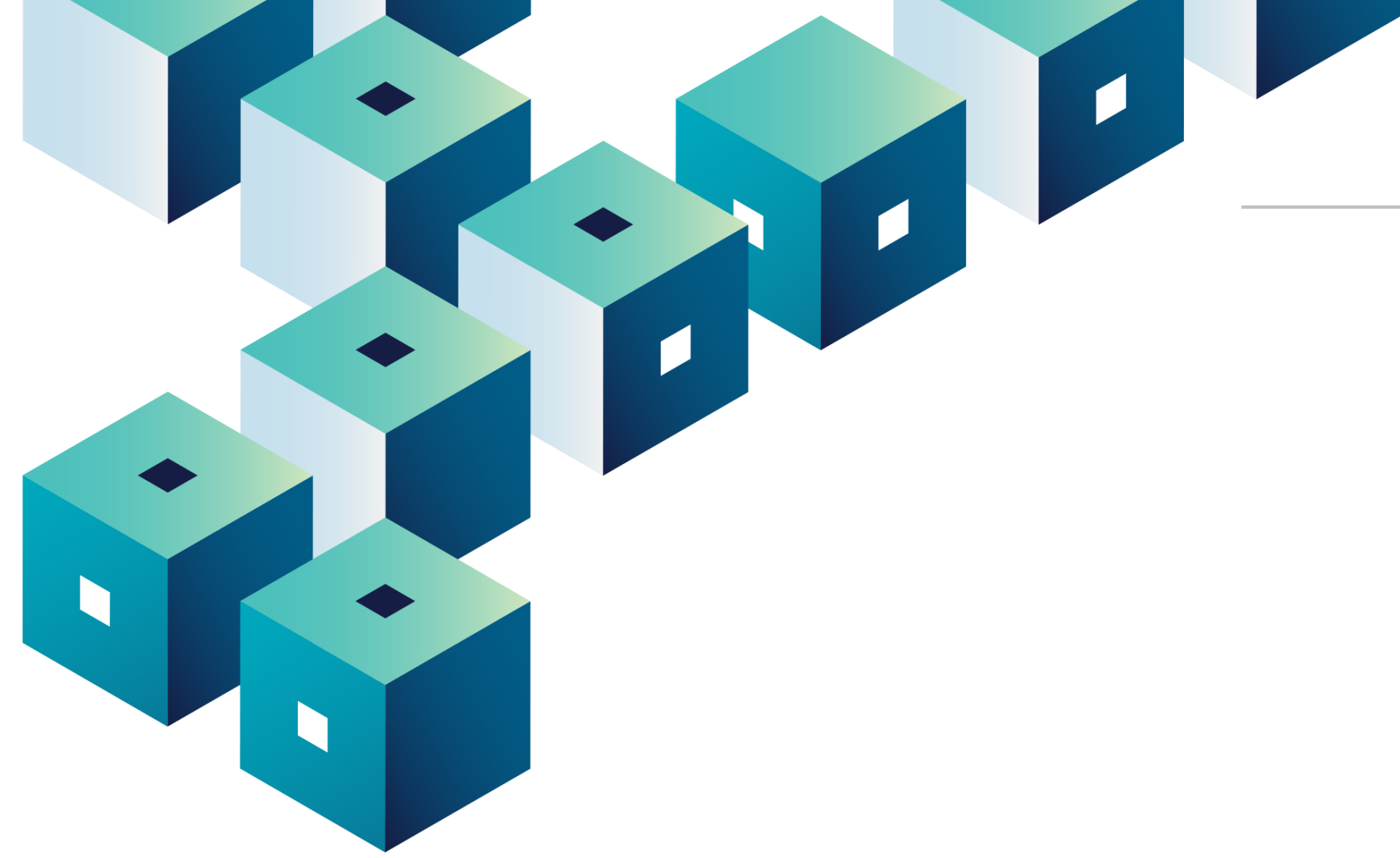**First and Only**

30 Sites

AAHK -香港三跑工程
ASD –沙田水泉澳小學工程
CEDD -東涌填海工程
CEDD -古洞北及粉嶺北發展工程
CEDD -古洞北新發展區至石湖墟的道路和渠務工程
CEDD-缸瓦甫警察設施土地平整及基礎建設工程
CEDD-洪水橋發展工程
WSD -將軍澳海水化淡廠工程
DSD -活化翠屏河工程
DSD -石湖墟淨水設施工程
DSD -坪輋污水處理廠工程
DSD -將軍澳污水收集系統工程
HYD -西貢公路工程
HA -青衣公屋項目
HA -屯門公屋項目
HA -葵涌醫院重建工程
Private developer -黃竹坑上蓋項目
Private developer -火炭房屋項目
Private developer-天榮站上蓋發展項目

VTM – Construction Training Platform

5

01 **Informative Induction**

Better presentation of project information

02 **Scenario Rehearsal**

Simulated real-life environment

03 **Practical Training**

Virtual rehearsal and practice

04 **Evaluation**

Performance record and data analysis

Case Study –
Property Management Training Platform

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6 VTM – Property Management Training Platform

Property
Management
Training **P**latform

Professionalism

- Industry experts
- Safety consultants

VR Training

- Group of trainees
- Time saving
- Team spirit building

Multi-users

- Tailored according to your needs
- Lower training cost
- High flexibility

High Effectiveness and Efficiency

- Provide real-time performance evaluation
- Encourage two-way communication
- Enhance engagement

6 VTM – Property Management Training Platform

Property
Management
Training **P**latform

Occupational Health and Safety

Operational Efficiency

Soft skills

Security Guard

Maintenance Worker

Cleaner & Gardener

Customer Service

6 VTM – Property Management Training Platform

Safe Use, Handling, Storage and Transport of Materials
- Manual Handling and Lifting
- Chemical Spill Handling

Environmental Protection
- 5S application in office

Customer Services
- Emergency handling
- General customer services training

7 Utilization of VR Training Data

VR Training Data

Management
- Number of training
- Overall training performance
- Training distribution

Trainer
- Real-time training record
- Individual performance
- Common mistakes

Trainee
- Individual training record
- Training recommendation

Thank You !

Start your XR training and learning today !
Please contact us for more details.

V T M

✉ info@vtmdigital.com

📞 +852 3590 3127

📍 **Unit 1606, 16/F, Stelux House,**
698 Prince Edward Road East,
San Po Kong, Kowloon, Hong Kong