5G O-RAN: Simplifying Training for Wind Power Operations
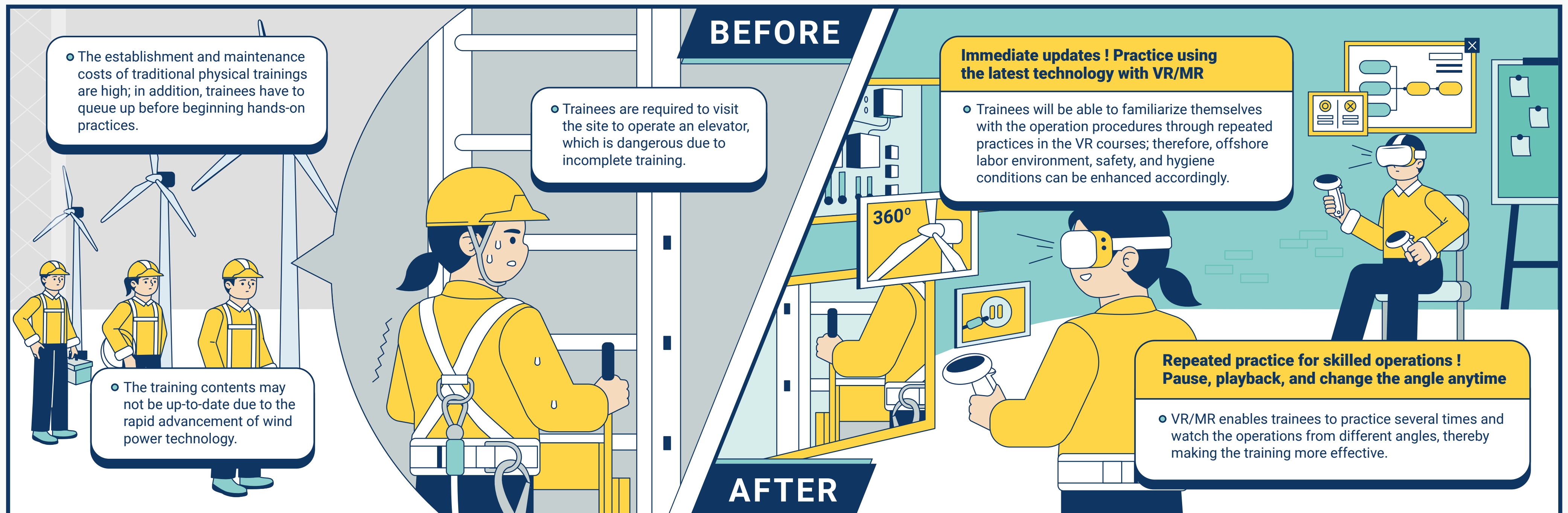
Smart Wind Power - Virtual and Real Integration Training System

Wind power plays a crucial role in Taiwan's goal of achieving net-zero emissions. However, the operation of wind turbines requires professional training. 5G private networks integrated with VR/MR technology can simplify such training.

Project Results

#First in the World | The 5G XR wind power virtual reality integration and simulation training system reduces the costs of offshore wind power training and significantly enhances the education and training of professionals.

#Enhancing the Competitiveness of the Wind Power Industry | Creating a domestic wind power industry cluster, and driving the transformation and upgrade of the wind power industry chain.

BEFORE

- The establishment and maintenance costs of traditional physical trainings are high; in addition, trainees have to queue up before beginning hands-on practices.

- Trainees are required to visit the site to operate an elevator, which is dangerous due to incomplete training.

- The training contents may not be up-to-date due to the rapid advancement of wind power technology.

AFTER

Immediate updates ! Practice using the latest technology with VR/MR

- Trainees will be able to familiarize themselves with the operation procedures through repeated practices in the VR courses; therefore, offshore labor environment, safety, and hygiene conditions can be enhanced accordingly.

360°

Repeated practice for skilled operations ! Pause, playback, and change the angle anytime

- VR/MR enables trainees to practice several times and watch the operations from different angles, thereby making the training more effective.

Key Technology #5G O-RAN #XR Virtual Reality Integration and Simulation Training System #Self-Developed Network Management System

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