VR simulator for power industry engineer staff trainings

Mr. Ilya Simonov

CROC Immersive Technologies

CEO

CROC ⊃
IMMERSIVE TECHNOLOGIES

**Ilya
Simonov
CROC**

IEEE

МЭИ NATIONAL RESEARCH UNIVERSITY

CROC

VR simulator for power industry engineer staff trainings

We create VR and computer graphics-powered training solutions for safe working at industrial enterprises.

Our team of **20+** professionals provides end-to-end services, from methodology development to product implementation.

WE HAVE COMPLETED 60+ PROJECTS FOR RUSSIAN AND INTERNATIONAL CUSTOMERS, INCLUDING

GAZPROM NEFT, SIBUR, MOSOBLGAZ, ROSATOM, GAGARIN RESEARCH&TEST COSMONAUT TRAINING CENTER, GE HEALTHCARE, DELAVAL, ETC.

VR simulator for power industry engineer staff trainings

What we do

We help companies to reduce risks of production shop downtime, accidents and emergencies.

How we do it

We digitize technological processes, plants, and entire industrial enterprises, create VR simulators, design and outfit training rooms, and integrate ready-to-use products with personnel training process.

VR simulator for power industry engineer staff trainings
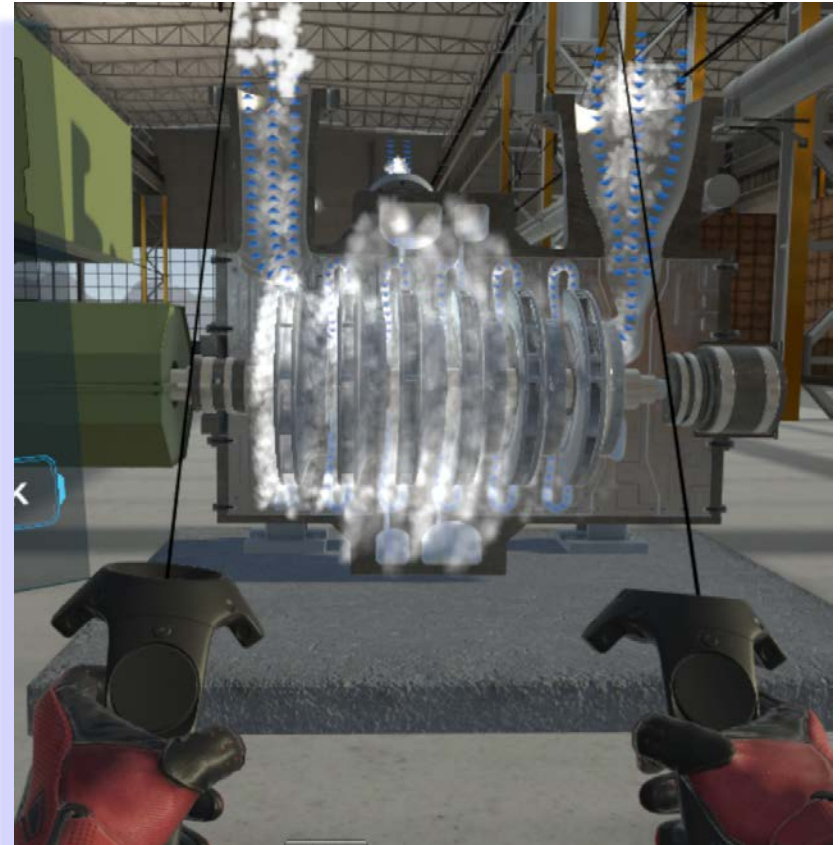
How we achieve this

We minimize human error by practicing scheduled maintenance and emergency activities in a safe environment.

VR simulator for power industry engineer staff trainings

VR Simulator

A hardware-and-software suite of interactive visualization tools with a set of training, hands-on, and testing scenarios to develop and improve professional skills and knowledge in a virtual environment.

IEEE

МЭИ | NATIONAL RESEARCH UNIVERSITY

CROC

Work site simulator

- A virtual copy of a work site, equipment, tools, and personal protective gear, including even employee avatars

- Logic simulation along with visualization of technological processes and operations

Training and testing modes

Training mode provides prompts during work performance and access to supporting materials.

During the testing mode, correct and incorrect actions are logged for further skill evaluation.

Механизм контроля

VR simulator for power industry engineer staff trainings
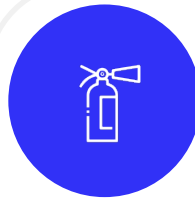
Instructor's workstation

- Assignment of training scenario and a role to a trainee

- Scenario management and event sequence editing

- Session video recording for detailed analysis

VR simulator for power industry engineer staff trainings

Training solution components

VR trainings

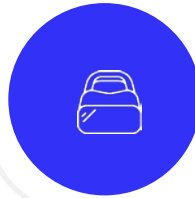Visualized production processes with training and testing modes being available

Integration with enterprise IT systems

Enterprise training systems, information security, and enterprise data transfer systems

Equipment and infrastructure

Designing and outfitting training rooms

Personnel briefing

Training in the using of VR hardware and software

VR simulator for power industry engineer staff trainings

Use cases

Introductory briefing

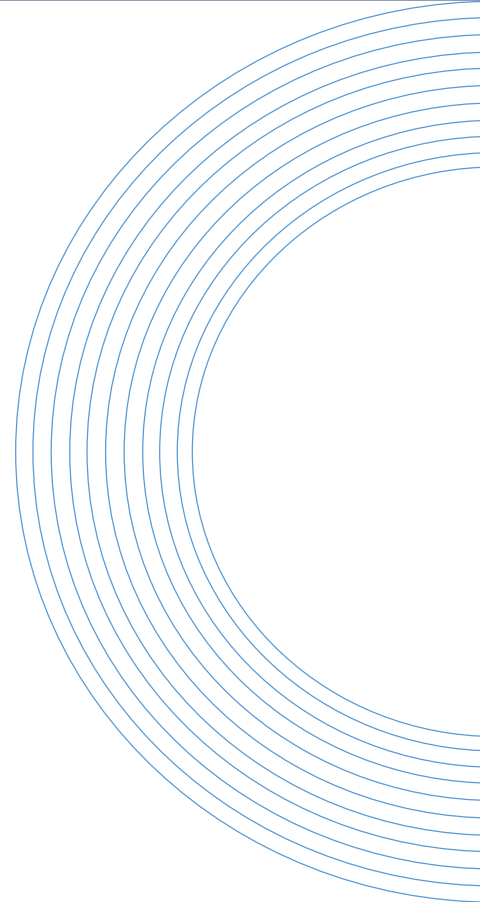Acquiring and practicing operation and maintenance skills

Acquiring and practicing repair skills
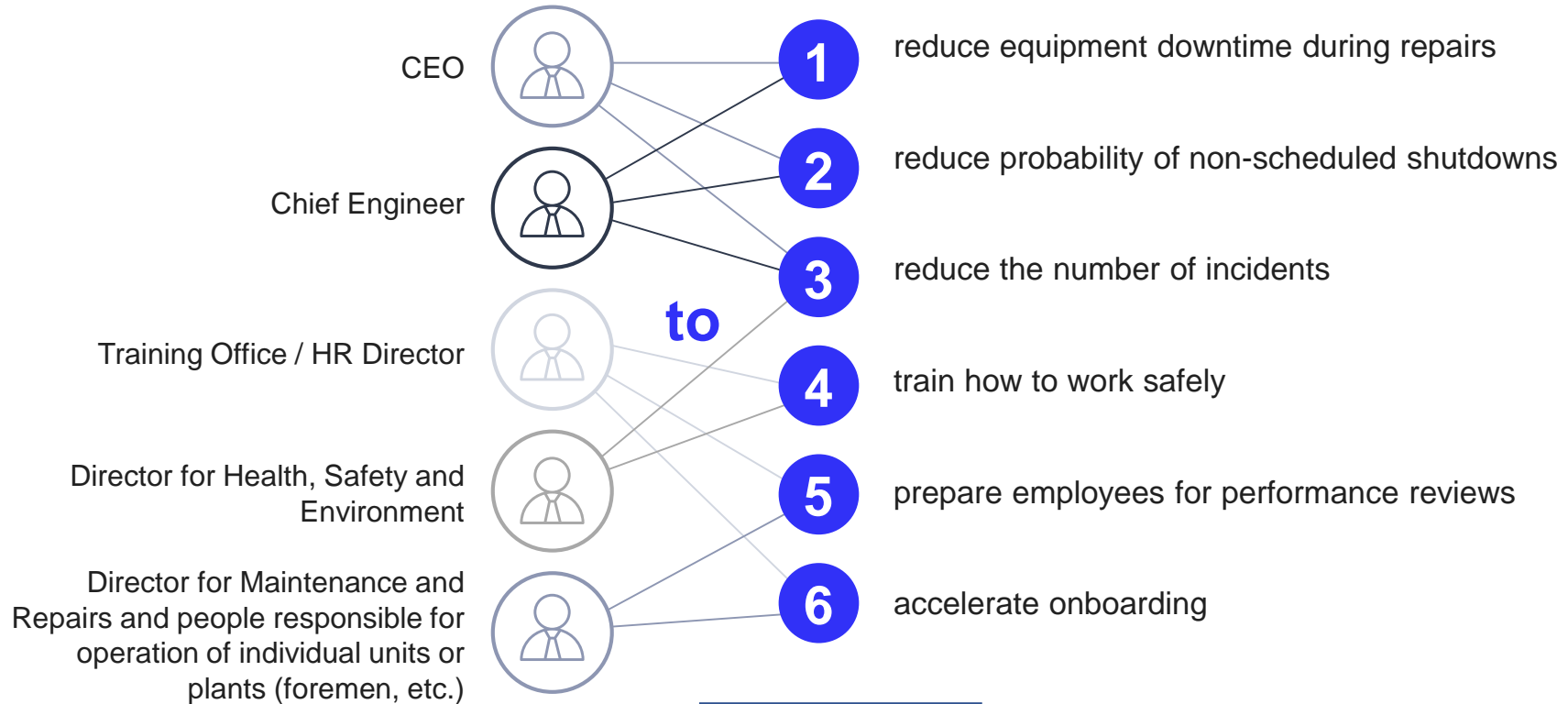
Practicing an Emergency Response Plan
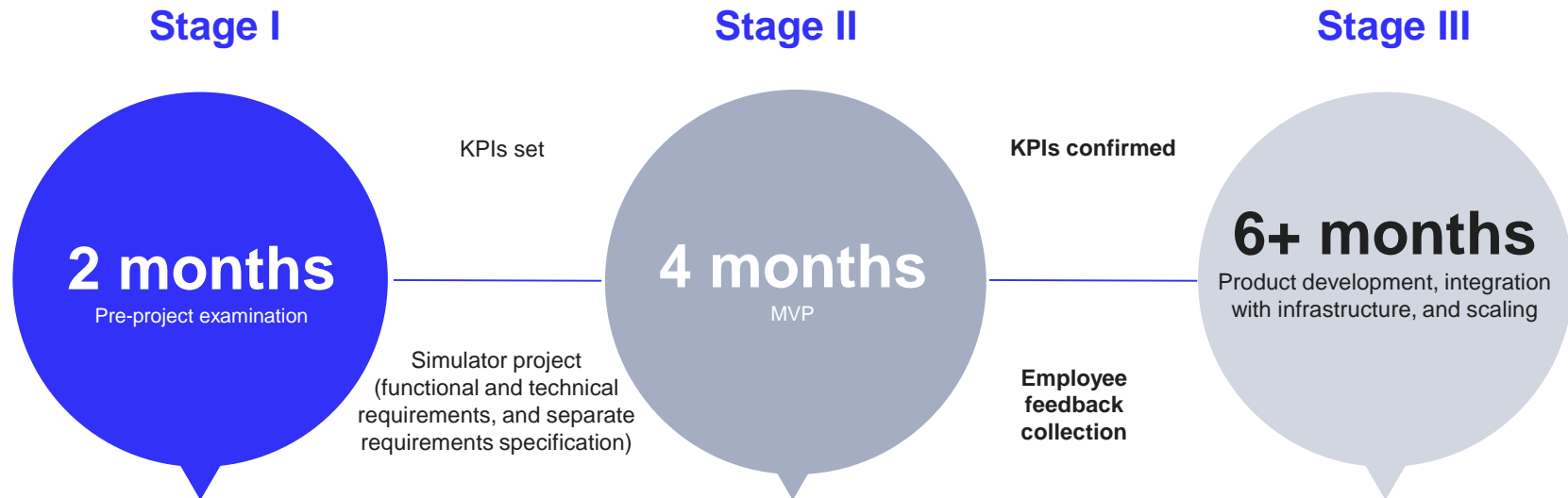
VR simulator is the right choice when:

➢ Technological process may not be interrupted

➢ No personnel training tools are available

➢ Physical simulator is too expensive

➢ Collective training is required

➢ Situation is hard to simulate in real life

➢ Deep analysis of employee actions is required

➢ Employees have multiple choices

VR simulator for power industry engineer staff trainings

Who can use VR simulator and what for

CEO

Chief Engineer

Training Office / HR Director

Director for Health, Safety and Environment

Director for Maintenance and Repairs and people responsible for operation of individual units or plants (foremen, etc.)

to

1 reduce equipment downtime during repairs

2 reduce probability of non-scheduled shutdowns

3 reduce the number of incidents

4 train how to work safely

5 prepare employees for performance reviews

6 accelerate onboarding

VR simulator for power industry engineer staff trainings

VR simulator project roadmap

Stage I

Stage II

Stage III

KPIs set

KPIs confirmed

2 months

Pre-project examination

4 months

MVP

6+ months

Product development, integration with infrastructure, and scaling

Simulator project (functional and technical requirements, and separate requirements specification)

Employee feedback collection

Thank you for attention!

Speaker's contacts:

ILYA SIMONOV

CROC Immersive Technologies

e-mail: ISimonov@croc.ru

www.croc.ru