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Meidensha Corporation

To members of the media

Meiden develops Metaverse hands-on safety educational program that offers non-contact experience

Meidensha Corporation (Meiden) , one of its subsidiaries, Meiden System Solutions Corporation have developed a hands-on Metaverse*-based safety educational program jointly with Infiniteloop Co., Ltd. and its group company, VirtualCast, Inc., both located in Sapporo, Hokkaido. The aim of this program is to enhance awareness about danger involved in manufacturing and other fields to prevent industrial accidents.

Background

The Meiden Group has offered hands-on safety education to employees since 2008 to make them more aware of danger in the workplace. Since 2016, the company has offered this educational program on a paid basis to other companies at their factories and construction sites. So far, more than 27,000 people have attended this educational program. Most of them have provided Meiden with positive feedback.

Besides classroom instruction, this program allows participants to have a virtual experience of industrial accidents. This type of safety education is expected to result in highly effective learning. Due to the spread of COVID-19, however, it has been difficult to provide education to groups of participants in a real-world environment. As a result, non-contact, hands-on safety education was required.

Introduction to Metaverse hands-on safety education

To develop the program, Meiden and Meiden System Solutions partnered with Infiniteloop, which develops apps for X-reality, smartphones and the web. Infiniteloop is well-known for developing many virtual reality and augmented reality games. By merging Infiniteloop's Metaverse technologies and Meiden's educational knowhow, a non-contact, hands-on safety education program was successfully created in the Metaverse. This is the first time the Meiden Group has entered a Metaverse domain.

VirtualCast, a VR Metaverse communication service run by VirtualCast, was used to develop the program. This made it possible to develop the content in a short period of time.

System outlines

In the program, a lecturer and participants appear as avatars in the Metaverse created inside the VirtualCast service. The educational environment is similar to one in the real world.

People can take part in the program remotely as long as they have a PC installed with the app, a head-mounted display and a controller. That means they don't have to go to a designated venue, and saves time to transfer and enables to avoid a chance to get infected by COVID-19.

The first part of the program has been used for in-house education since April 2022. It features virtually experiencing an incised wound caused by a mixer in operation. This enables participants to virtually experience the dangerous action of recovering a measuring cup that has accidentally dropped into a mixer that is in operation. Users can virtually experience a dangerous situation in the Metaverse that cannot be reproduced in the real world.



The partners plan to create more content to virtually replicate accidents such as fires, getting caught in a pressing machine, and being caught in a rotating machine. The idea is to offer content in the Metaverse to pass on the memories of industrial accidents that actually occurred in the Meiden Group and learn from them, with an eye set on future sales of the content.

As a company supporting social infrastructure, the Meiden Group will promote safety education to eliminate industrial accidents.

*Metaverse: A virtual-reality space where avatars can freely make actions on the internet.

- Website for VR hands-on safety education (Visit the site for details about the content, such as the moving image)(Japanese)

https://www.meidensha.co.jp/mss/system/sys_07/sys_07_01/index.html

- Link for the moving image(Japanese)

<https://meiden.box.com/s/7g0o5tbpmf2l27kg1h02zhicg24satiq>