



Making the Invisible, Visible: Immersive VR and Fostering Environmental Awareness in the Global Oil Industry

Erik Horn, Chief Creative Officer, Fair Worlds

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Imagine...





Image



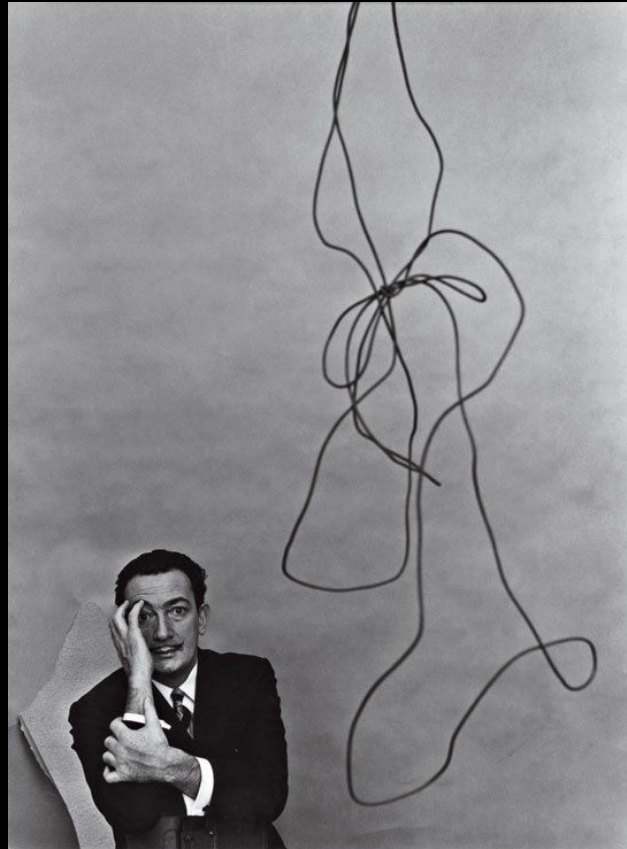
Isabel Mogstad
EDF







Erik Horn
Fair Worlds + Hunt, Gather





The Fourth Wave of Environmental Innovation



An Environmental Non-Profit Surrounded by this...



An Environmental Non-Profit Surrounded by this...



THE LARGEST GLOBAL GAS CONFERENCE



600
SPEAKERS



12,000+
ATTENDEES



600
ORGANIZATIONS



100
COUNTRIES



100+
SESSIONS



UNRIVALED
NETWORKING



ENTIRE GAS
VALUE CHAIN



CASE STUDIES, TOOLS,
MODELS & STRATEGIES



40,000m²
EXHIBITION

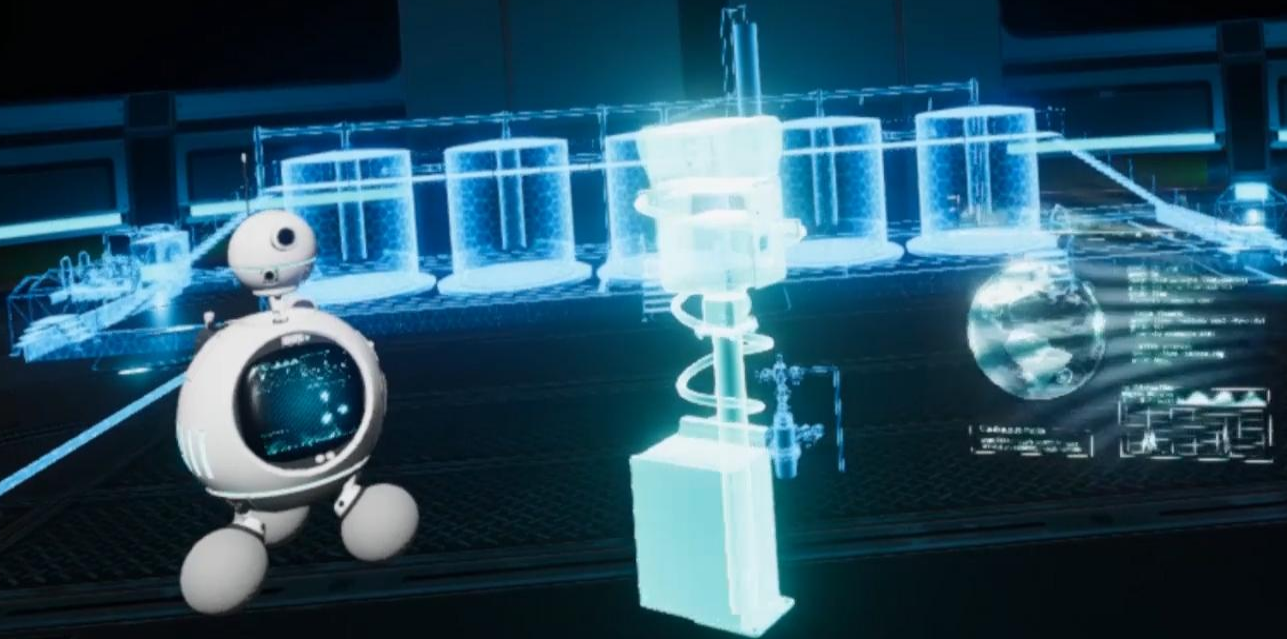


350
EXHIBITORS

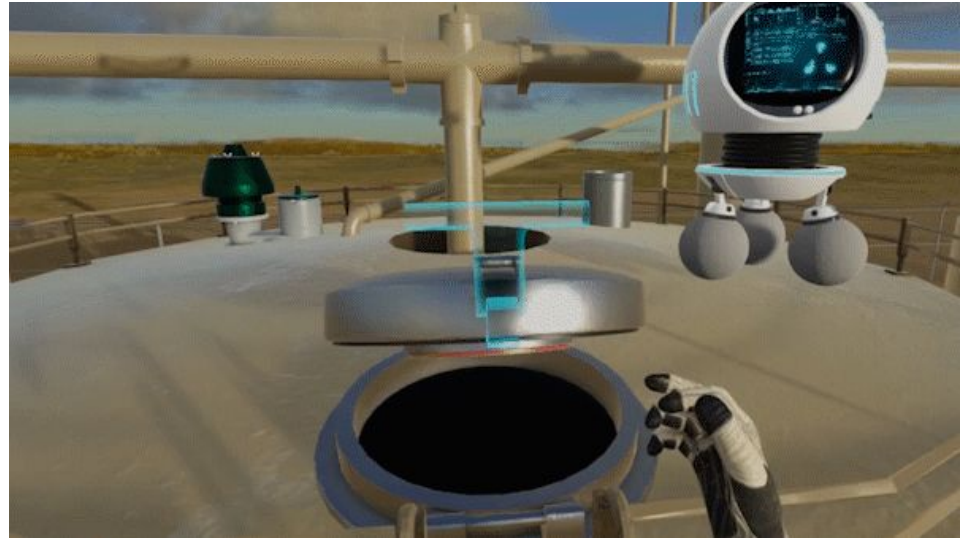
VR Makes Understanding Methane Easier



New ways to detect to methane leaks

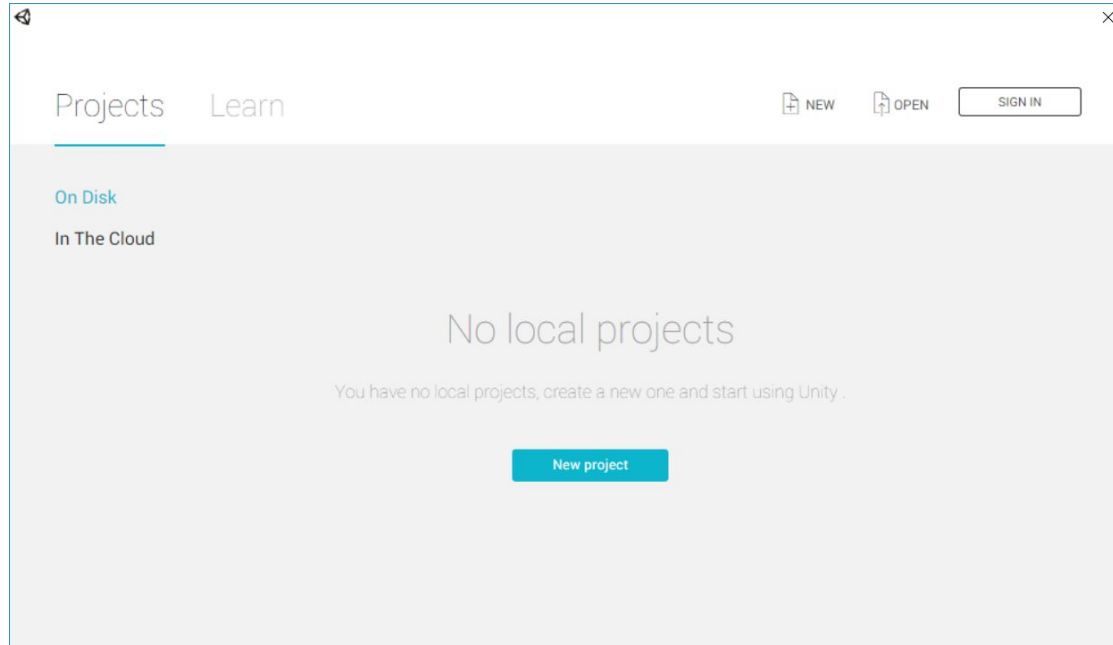


Simple Solutions – Big environmental gains

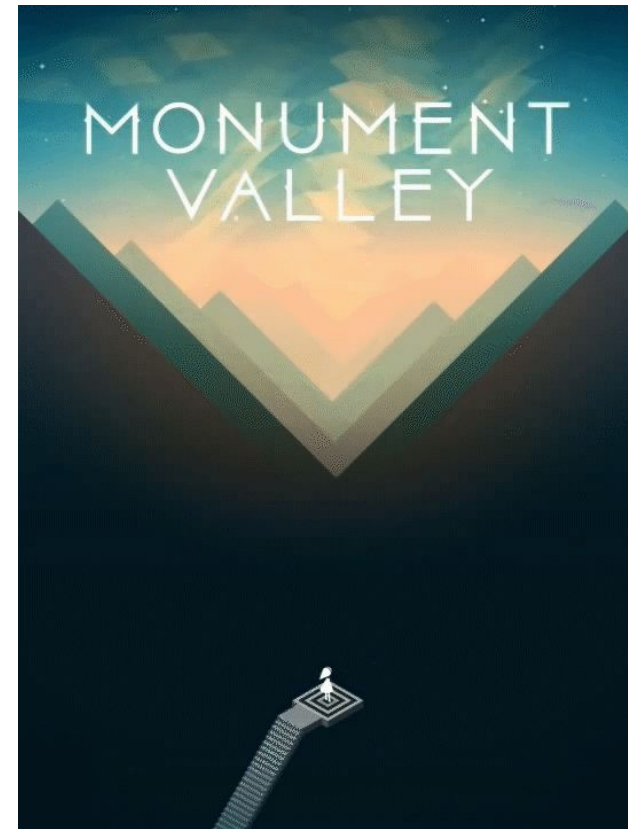




Where did we start?



Inspirations

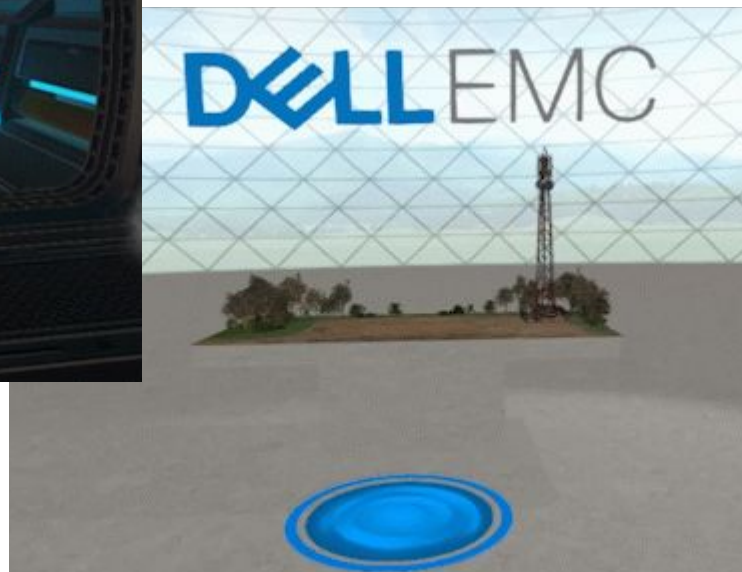
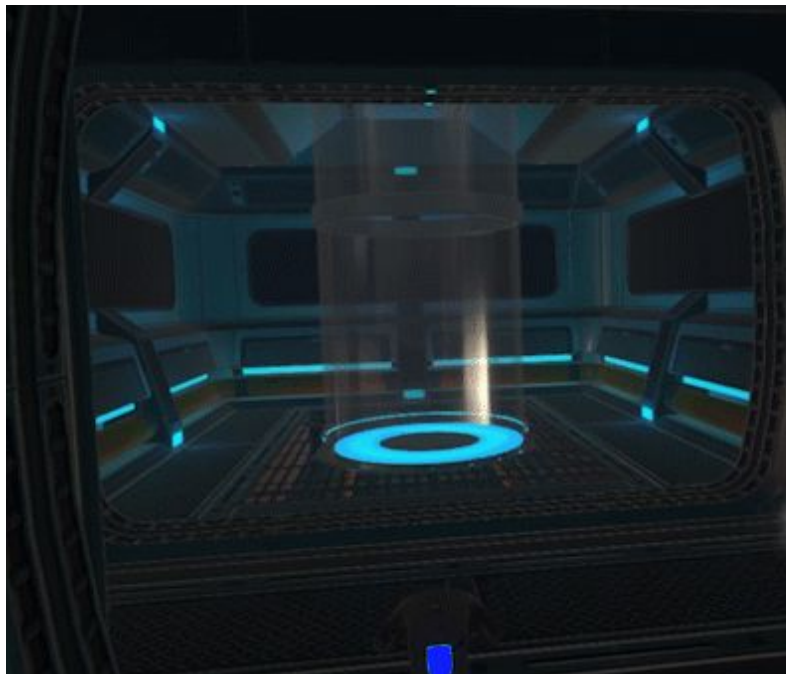


First interaction of the experience

Point and click at the glowing blue circles.

Encourages and teaches our simple teleport locomotion.

No other choice. No wrong answer.



Teaching the user to “point and click” at glowing blue objects

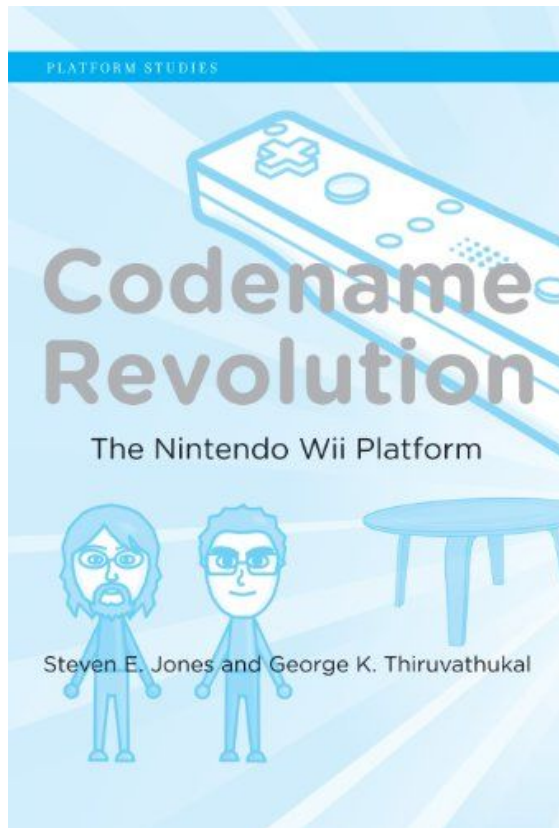


Inspirations

The Wii was user friendly for a “non-gamer” audience so we look to it as a main inspiration.

We’re “trigger-first” in our interactions.

Point and Click and encourages motion and quick satisfying interaction.



GETTING THE CLIENT A HEADSET EARLY IN THE PROCESS



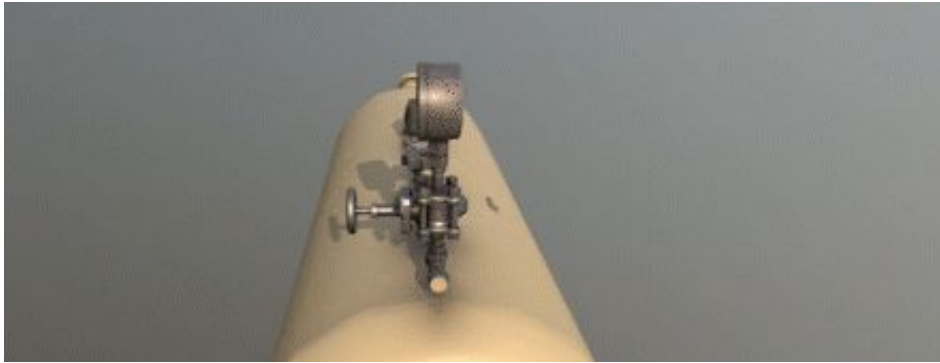
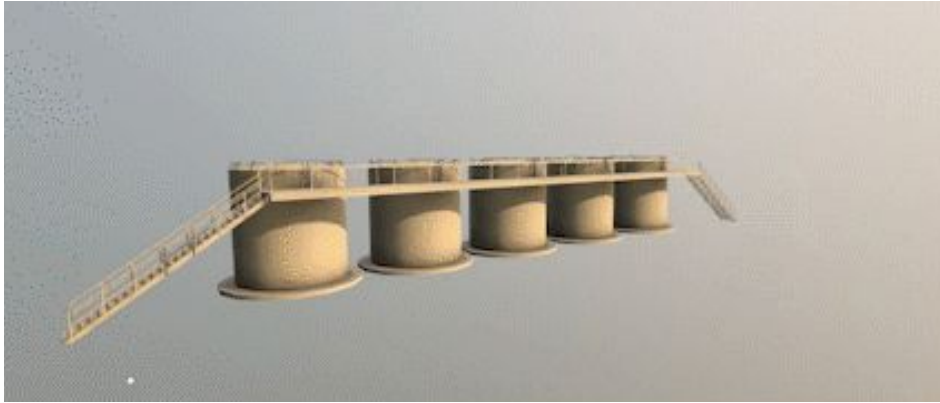
How we put our best foot forward



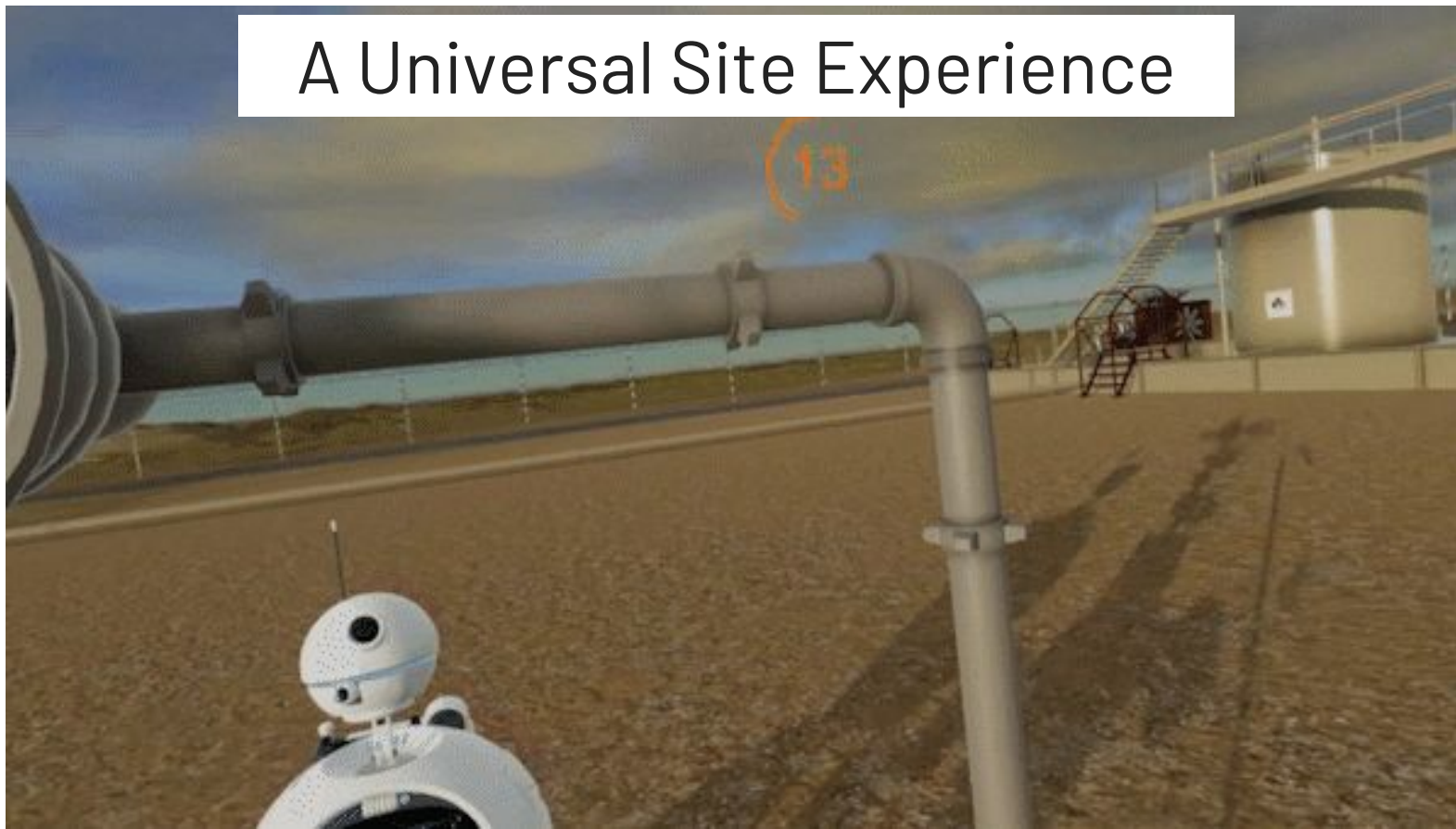
Technical Accuracy



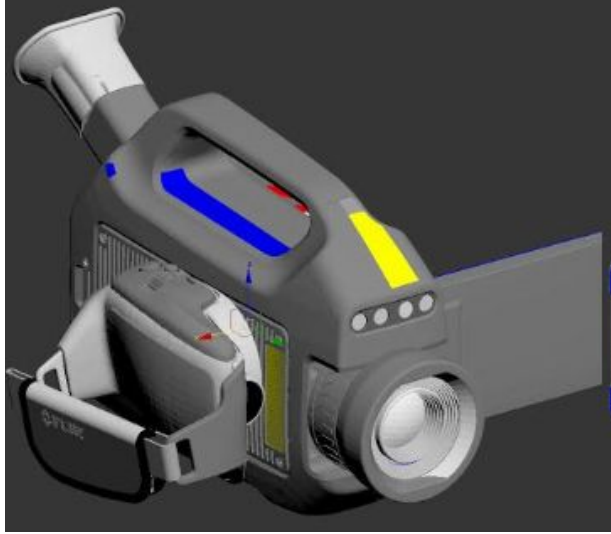
Technical Accuracy

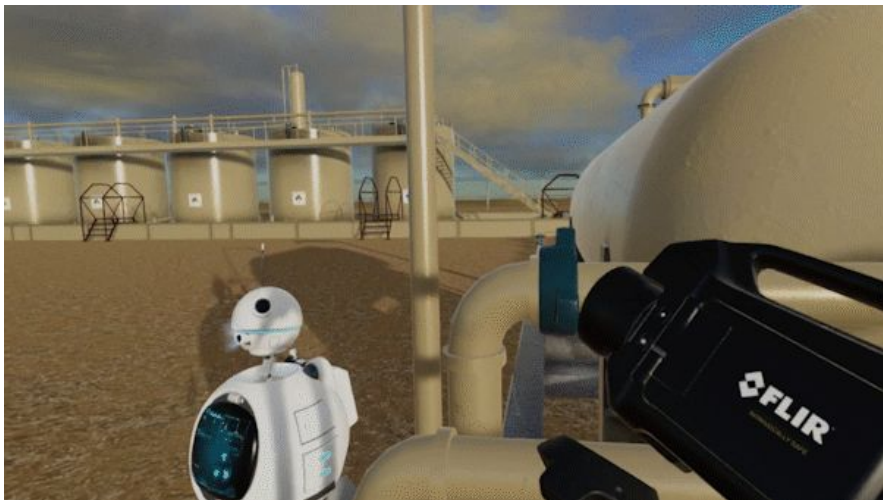


A Universal Site Experience



Familiar & Credible



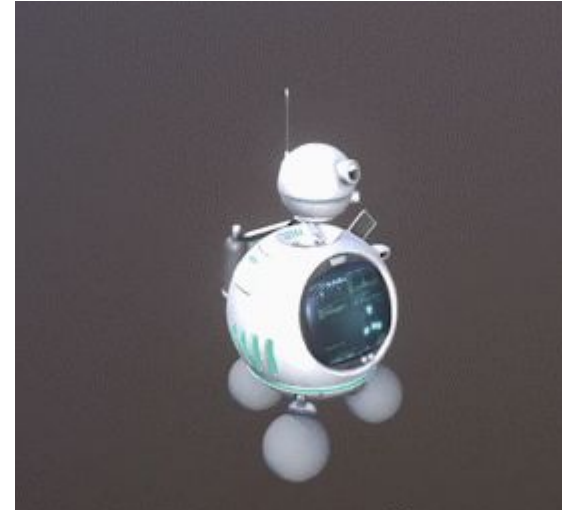
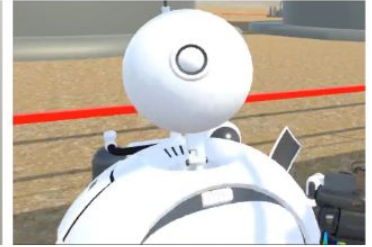
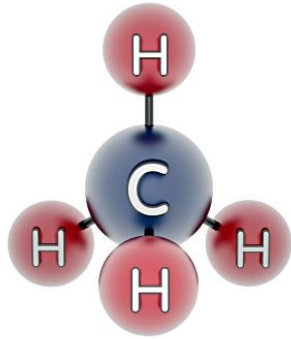
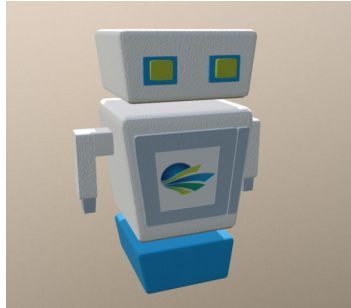


DEVELOPMENT OF BELLA BOT

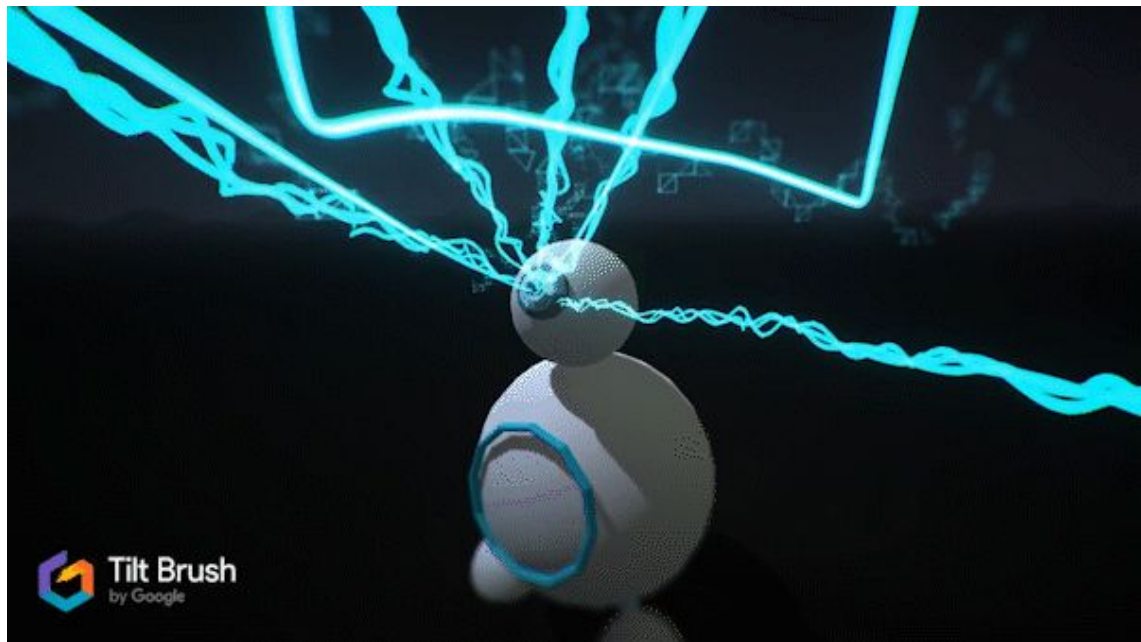
VR can be very isolating for a new user, so Bella was created to be a companion and helpful guide throughout the experience.

Disarm our wary audience.

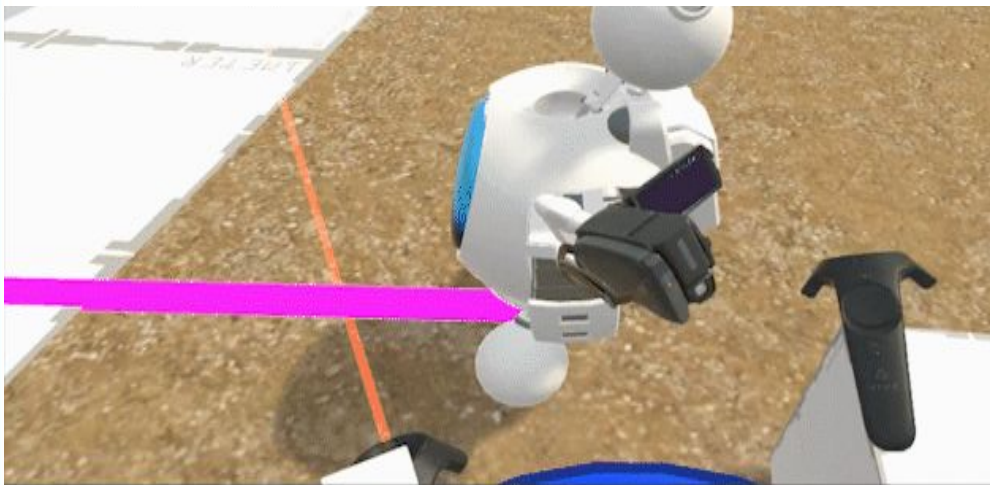
Bella Bot was modeled after a methane molecule as a subtle reinforcement.



- Brought EDF into VR early in the process.
- In person VR reviews and creative sessions.
- Tilt Brush for prototyping.



Rough Cut vs. Grey Box

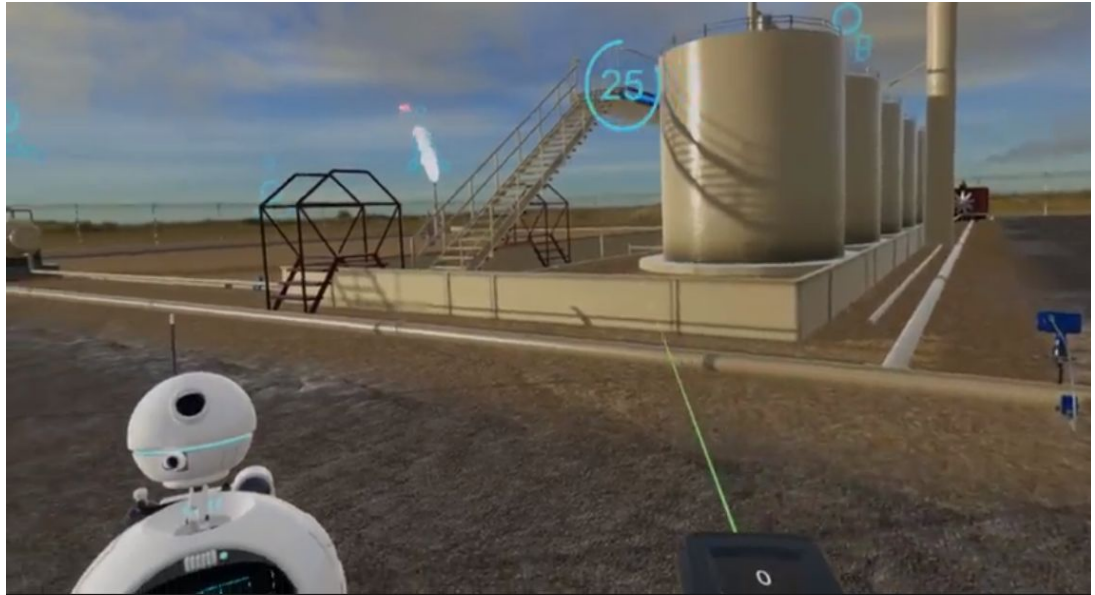


Make it a Ch4llenge

We gamified the experience, users have 3.5 minutes to find 6 leaks.

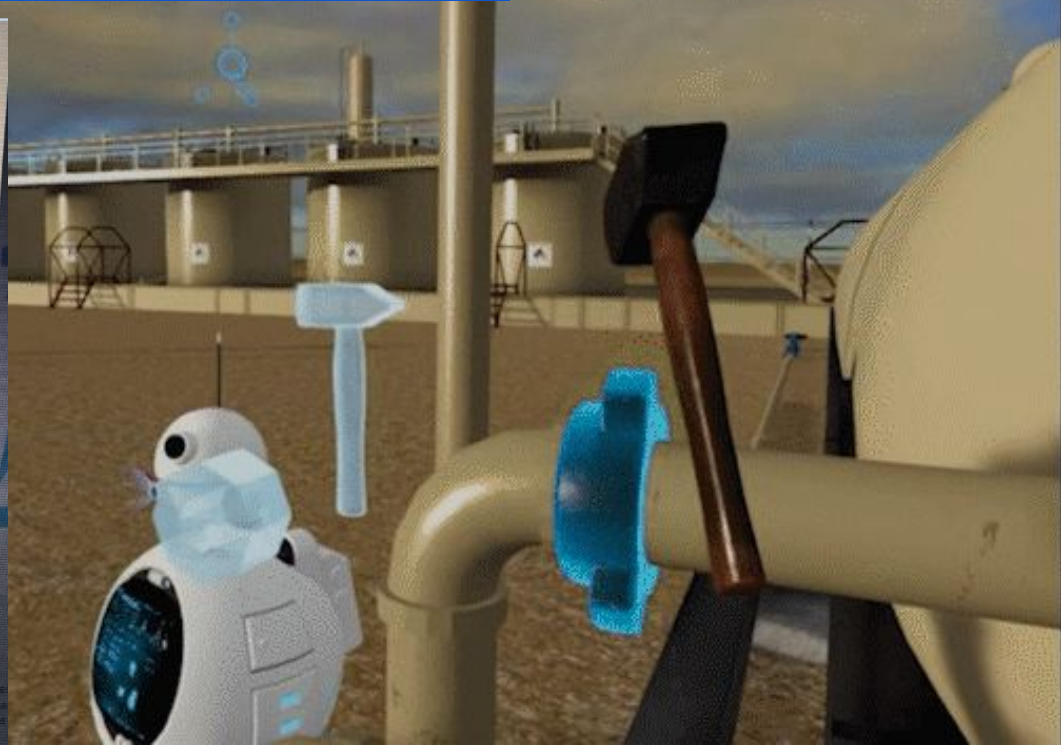
Only three people the whole conference found all 6.

Brought in people who wouldn't have normally tried it.



Make it competitive

Huge props to [@EnvDefenseFund](#) for coming to a major industry conference & investing in a first-rate VR exhibit to promote awareness of the costs of methane leaks & low-cost opportunities to fix. (I found 4 of the 6 leaks, which I'm told ties me w [@AmyAHarder](#))



USER TESTING WITH A NON-VR AUDIENCE



QUESTIONS

RESPONSES

35

Post-Experience Survey

Description (optional)

How was your overall experience?

Long answer text

What was the most memorable part of the experience?

Long answer text

Were there any points that were confusing?

Long answer text

Were there any points in the experience that were frustrating?

Long answer text

Iterations of user experience

Originally gave the user much more control but it was a hindrance to the experience.

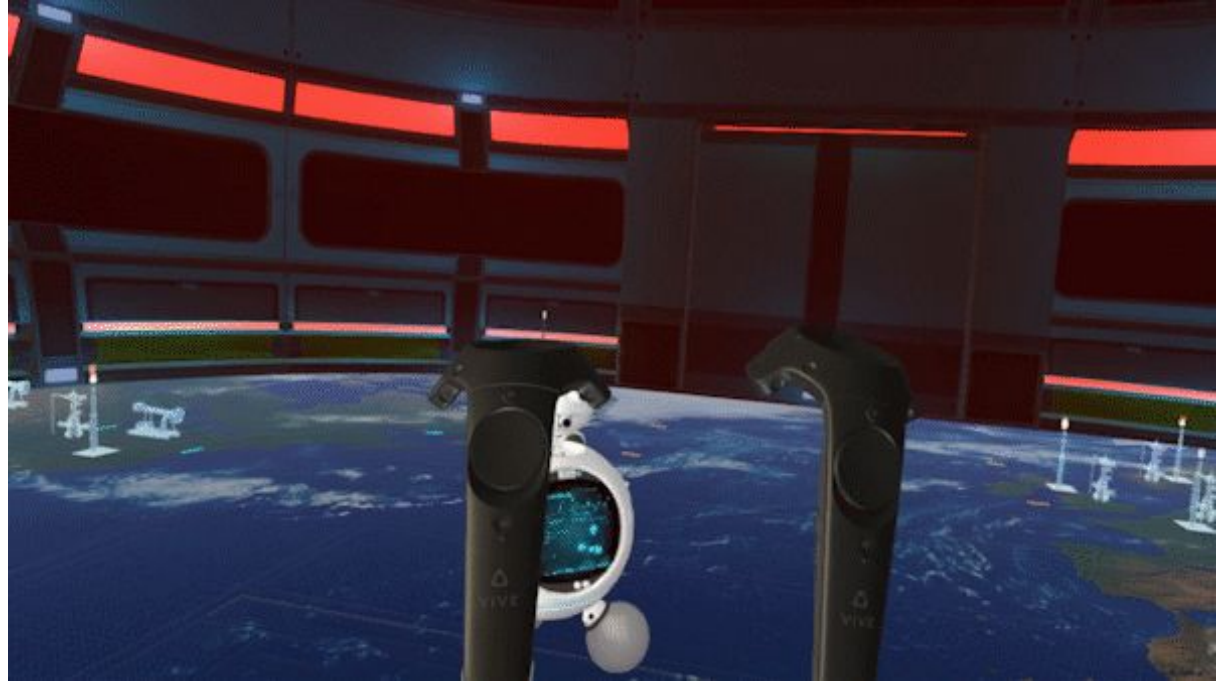
Too Frustrating for a new user.



Iterations of user experience

We landed on changing the users controller to the tool of choice for the particular storytelling beat as we went through.

Remove tutorials where possible.



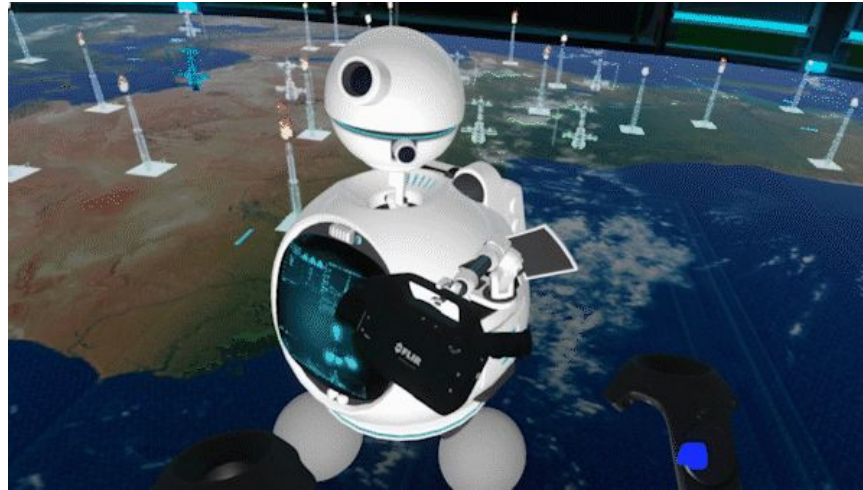
SO WHAT
HAPPENED
WHEN WE
LAUNCHED?



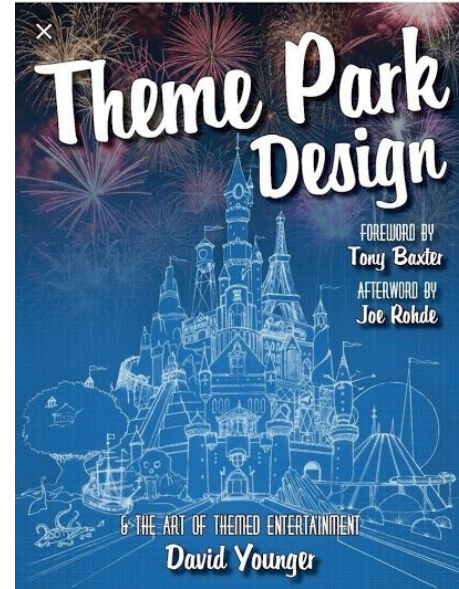
Learnings from WGC



Throughput / Wait
Time



Pre-Show Video



Theme Park Design

Inspiring change in the oil and gas industry

Industry

Media

Policymakers

Regulators

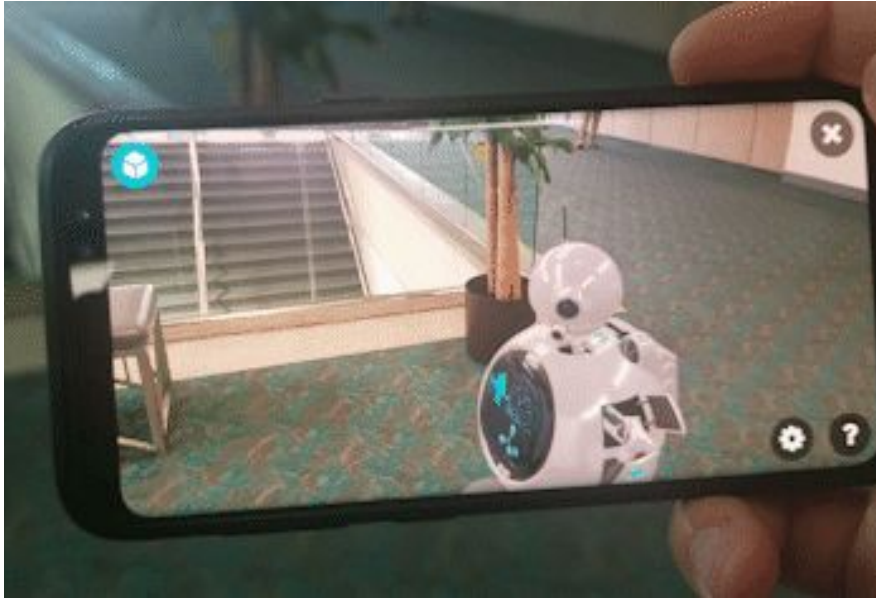
Gastech

EXHIBITION & CONFERENCE

17 - 20 SEPT 2018
BARCELONA, SPAIN



Where is it going next?



Any Questions?



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