ValueR

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Using the unique potentiel of Virtual Reality to create emotional engagement and leverage it to build a 'zero harm' culture.

Team: Team Igor

Members roles and background

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Solution Details

Solution description

Our belief:The successful organisations of the 21st century will be purpose-led and value-driven (not just in mining).

Use the unique potentiel of Virtual Reality to create emotional engagement and leverage it to build a 'zero harm' culture by communicating a set of shared, ethical and human values that reduces the risk of accidents by raising employee engagement and their sense of being valued.

A 5-minute VR 'experience' delivered daily at the start of each shift.

Scenario-based incorporating 'subliminal' health and safety messages.

Measuring employee performance (reaction times, responses) and giving feedback.

A 'Win-Win' solution - Both the company AND its employees see a win.

Solution context

Question: How can we achieve a zero-harm mindset in Quarry Operations in relation to the use of vehicles and their interaction with pedestrians and other vehicles with the current lack of competence at both management and worker level (Irish context presented by Health & Safety Authority of Ireland)

- Igor (Non-national)
- Recently hired as a driver in a mine
- Low paid 'dirty work' in a difficult environment
- Different country = language barrier + cultural misunderstanding
- Lack of engagement
- Sense of not understanding/not belonging
- Leads to detachment/not feeling valued
- Which leads to chronic poor performance
- Which in turn leads to higher risk of accidents

Solution target group

Quarry drivers, English not first language. Low education level.

Solution impact

- Build a zero-harm mind-set
- Create a sense of workplace community
- Make employees feel valued
- Increase engagement and motivation
- Business Impac: A more engaged & motivated workforce = a more productive workforce

Solution tweet text

Use the unique potential of Virtual Reality to create emotional engagement and leverage it to build a 'zero harm' culture by communicating a set of shared ethical values that reduces the risk of accidents by raising employee engagement and their sense of being valued

Solution innovativeness

Incorporate training in the flow of work

Current VR training offerings: How To, Compliance, Tangible skills, etc.

Utilising the unique power of VR: VR delivers big on engagment and emotional response

Our proposed solution: A set of values

Solution transferability

Transferable to any workplace seeking to instill values in its staff

Solution sustainability

The plan is to first of all to develop the VR program which can be translated to familiar environments experienced by physical workers. The content of the program requires additional research and analysis. For example, a training session of the truck driver will require to measure his attention to detail on a road on a cloudy, rainy or sunny day. Various scenarios and situation as well as the sequence of the unforeseen events will help to measure and navigate the subject's responsiveness and focus. Every test needs to be based on previous tests and adjusted accordingly in order to instill a ready- to-react mode in every situation. In other words, to build in an instantaneous response to a stimuli, which in the end will translate to a work place. This instantaneous impulse will help to quickly respond to harmful situations or situations that could possibly lead to danger. It's crucial to use this method regularly and if possible permanently. In this sense the subject will always be ready to expect the unexpected.

Firstly, we would look to validate our idea by talking to some of our target customers in the mining industry.
We would thenincorporate any feedback and rework our idea before looking for a partner in the VR space to help us design and develop a prototype.
Once the prototype is ready, we will contact the customers we surveyed with a view to conducting a pilot test of our idea. It would be presented in a form of a 'serious game'.
When it comes to data protection, it will work similarly to apps etc as no additional information is needed. The client/customer would own the data (whether it's a mining company or someone else in one of those 'high-risk' sectors). The intention is to form a partnership with a VR software company and the solution would be owned by that partnership.
I addition we'd aim to quickly get the concept to a point where we could submit the idea for funding through one of the Local Enterprise Offices or Enterprise Ireland.

Solution team work

Worked very well together