

# VIRTUAL MUSHROOM PICKER



**Full project name:** Virtual Picker – Workforce Training Enhancing Profitability and Employment in the Horticulture Industry

**Lead organisation:** The Costa Group

**Collaborators:** Melbourne Polytechnic, Liminal VR, Food and Fibre Gippsland

## WHAT'S THE WICKED PROBLEM – THE CONTEXT

More than 300 harvesters pick more than eight million mushrooms a week at The Costa Group's sprawling Mernda farm. That means each harvester is picking an average of 27kg an hour. Peter Vu, Costa's state manager, says it takes several months for a newcomer to reach that level – but about half of trainees don't make it through the initial six weeks of training.

That 50 per cent turnover rate is costly both for the company and the trainees who don't make it – but it's hard to pick suitable workers in advance. *"Different people have different strengths, and we can't see that until we see them in action,"* Mr Vu says. *"Some people are not entirely suited to it."*

## WHY DON'T WE ... – THE INNOVATION

The project uses virtual reality to allow much quicker assessment of new trainees and to lift the skills and productivity of workers. Trainees don knuckle controllers and a headset to hone their technique and experience what the work is like without having to set foot in the field. The modules that have been developed to date include gamification elements such as leader boards to encourage participation.

## THE WOW FACTOR – BREAKING THE LANGUAGE BARRIER

The majority of workers at Mernda are first-generation immigrants from Vietnam, China, Malaysia, The Philippines, Myanmar and India. They often have limited English – and this is a key consideration for The Costa Group. *"VR is ideal because it is less reliant on a language,"* Peter Vu says. The technology also allows the possibility of multi-lingual delivery.

## ASK THE EXPERTS – LESSONS LEARNED

- The input of experienced harvesters is proving invaluable as they help make the VR as realistic as possible, according to Michael Toby, corporate affairs manager at Costa. *"They have assisted in clarifying technique and the visual representation of mushroom size, look and feel,"* he says.
- Accurately representing that technique in virtual reality will be vital. *"The key thing we've learned is the need to teach and incorporate the ideal biomechanics of how the hand is used for mushroom harvesting,"* Mr Toby says.
- Having Liminal staff spend time on the Costa farm was a positive influence on the design and build of the VR content.
- Gamification can be a valuable part of the VR experience, but it is important to avoid *"gamification for gamification's sake"*.

## GOING FROM STRENGTH TO STRENGTH – THE NEXT STEPS

Costa has bought the initial hardware and is continuing to test the first training modules, developed in partnership with Liminal VR and Melbourne Polytechnic.

Once the training is finalised, the technology will be situated at the Mernda site, with up to 300 mushroom harvesters expected to participate in the program.

Founded in 2017, the Workforce Training Innovation Fund (WTIF) is a targeted *Skills First* funding stream. WTIF creates opportunities for partnerships between industry and the TAFE and training system and encourages them to explore bold, innovative approaches that challenge existing practices in skills development and training methods.

Ultimately, these new ideas and solutions aim to enhance workplace productivity, particularly in Victorian Government priority sectors. More than \$90 million of funding has been committed to date.

The next round of WTIF funding is now open for applications.

To find out more visit [www.education.vic.gov.au/training/providers/funding/Pages/wtif.aspx](http://www.education.vic.gov.au/training/providers/funding/Pages/wtif.aspx) or email the WTIF team at [wtif@edumail.vic.gov.au](mailto:wtif@edumail.vic.gov.au)