



# New Wine in New Bottles: A VR-Project

Albert Jolink

## 1. Introduction

Business and Management programs have always been the ‘window on reality’: catering to the real needs of executives by stretching the boundaries of traditional education.

This proposal aims to introduce Virtual Reality into the GEMBA of SKEMA and the Business and Management program of the University of Siena. This proposal is to design, execute and implement a VR business case study based on the Salcheto winery in Tuscany.

## 2. Case-based Learning

Using a case-based approach engages students in a discussion of specific scenarios that resemble (or typically are) real-world examples. This method is learner-centered with intense interaction between participants as they build their knowledge and work together as a group to examine the case. With case-based learning, students learn to interact with and manipulate basic foundational knowledge by working with situations resembling specific real-world scenarios and develop skills in analytical thinking and reflective judgment.

A good teaching case has two components: a sharp focus and an interesting story. A teaching case evolves around a vital issue that has to be resolved or a vital decision that has to be made, which is also called the “decision focus” or “action focus”. The style of a teaching case is vivid, realistic, and convincing. It compels students to take the role of the decision maker in the organization, think as if they were him or her, and be analytical and creative. A good teaching case is easy to read but difficult to solve. The clues to resolving the case issue may be in the text (but hidden ) but the solution is most likely not – it is up to students to use the tools and theories they have learned and the information provided in the case to analyze the situation and come up with solutions. A good teaching case often

has many layers – when students dig deeper and deeper into the case, they may be surprised at aspects they did not notice before.

### 3. Immersive Learning and VR

In a world changed by technology, classrooms have adapted to a changing landscape to create new educational experiences. With the emergence of virtual reality (VR) and augmented reality (AR) technologies, the education industry can consider adding more immersive and integrative experiences.

Immersive learning is a contemporary learning style that uses technology to engage your senses that a traditional lecture might not be able to accomplish. There are four basic categories of learning styles that most students fall under: visual, auditory, reading/writing and kinetic. Classic lectures typically engage auditory and written learning styles, with the occasional use of visuals to illustrate a point. Immersive learning can add new elements to the standardized curriculum and engage the senses.

VR is a computer-generated environment that can be experienced from all angles through a special headset that blocks your peripheral vision while projecting video imaging into each eye, making you feel like you are inside the virtual world. VR can provide an effective learning experience in the classroom and allow students to view environments or periods that they otherwise would not be able to see.

There are a number of ways that the education industry can use immersive technologies to help students learn.

- Immersive learning techniques can give students exciting new ways to interact with their environment. VR help students visualize what they are learning and make them feel like they are experiencing it as they learn.

- VR tools can help students who are more visual and kinetic learners get more out of their lectures. VR can also have auditory elements, and you can always have students talk about and write down their experiences to engage students who learn best through listening and reading or writing.

- Most students remember the projects they researched, or lab experiments they participated in. Using VR can also stand out in students' memories and help them retain the information they learned.

- Using VR can allow students to choose what elements of the simulation they focus on and spend the most time on. This experience can help them understand a concept they need more information on or find what field of study they are most interested in.

### 4. The pedagogy: the CAMIL

Researchers have a long history of interest in the distinguishing characteristics of VR that provide unique opportunities for educational use. They identified increased immersion, fidelity, and active learner participation as defining characteristics. In recent years, several papers concerning the process of learning with VR have emerged (e.g., Lee et al., 2010; Makransky & Lilleholt, 2018; Makransky & Petersen, 2019) using the Cognitive Affective Model of Immersive Learning (CAMIL) as a point of departure (Makransky & Petersen, 2021). The CAMIL describes the process of learning with immersive VR and builds on prior VR learning process research as well as established psychological theories. When it comes to learning, the CAMIL states that some of the advantages and disadvantages of VR originate in its two defining features: interactivity and immersion. Interactivity refers to the amount of freedom the user is given to control the learning experience, often through handheld controllers and a virtual body. Immersion can be understood as the objective level of sensory fidelity provided by a VR system (Bowman & McMahan, 2007). For instance, VR provides high levels of visual immersion through head-mounted displays. Both of these features influence a range of affective and cognitive factors that may facilitate or hinder learning (Makransky & Petersen, 2021), but cannot be provided by traditional teaching methods. (Appendix 1 offers an overview of the CAMIL.)

## 5. The Salcheto Case

The Azienda Agricola Salcheto S.r.l. (hereafter Salcheto) has become recognized worldwide for its innovative activities and high-quality wines. Producing about 230,000 bottles/year, in an estate that comprises 65 ha of which 50 ha are vineyards, Salcheto's history has been built around three keywords: entrepreneurial passion, focus on quality and sustainability goals.

As a teaching case, the Salcheto winery checks all the three 'A's: Attractive, Affluent and Accessible. The winery case is a small to medium sized company, with products that students can associate themselves with, is disruptive in its industry and addresses future needs of students, such as sustainability and change. The winery has been studied before (e.g., Pucci et al. (2018) in the academic literature, but never as a teaching case. The existing studies reveal a rich and affluent case with topics ranging from identity creation and branding, stakeholder involvement and co-creation, HR and immigrants, eco-innovations and diffusion... to dramatic consequences of climate change on regionally determined products.

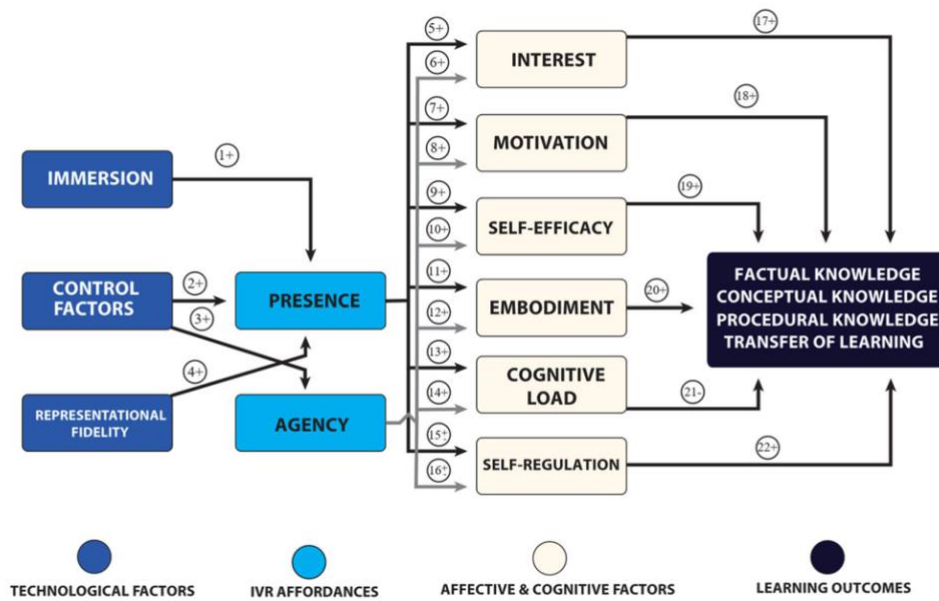
The Salcheto case is not only a rich and interesting case to describe and discuss, but also to visualize and experience. The simplicity of the production process in a complexity of an engaged community process, offers students the opportunity to actively immerse themselves and interact with the environment. With scripted 360-videos the winery will become a vivid yet manageable environment to address topic issues, such as sustainability issues, staffing and migration, stakeholder involvement or climate change. With high-immersive VR applications the winery environment can be recreated virtually to engage is specific interactions associated to the learning objectives, making decision-making and experiencing the consequences a lively event.

## 6. Integration into the educational programs

The VR Project New Wine in New Bottles will be designed to be integrated into the educational programs of the participating institutions. SKEMA Business School has agreed to develop the project to be integrated into its prestigious Global Executive MBA (GEMBA), in which it will serve as a backbone uniting the 4 modules during the 12-month program. The University of Siena has agreed to integrated VR projects into its educational program for Management and Business. It is to be expected that each institution will adds individual accents to the project to better reflect the local learning objectives.

## Appendix 1

### The CAMIL



Source: Makransky & Petersen, 2021