

ELEARNINGNEWS ARTICLE

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Virtual reality and augmented reality: what they are and how they can be used in business training

What is the difference between virtual reality (VR) and augmented reality (AR)? Let's find out how these immersive technologies work and how they can improve the effectiveness of business training.

Virtual reality and augmented reality are two ways of interacting between the real and the virtual world and, although the two terms are often erroneously used as synonyms, they have different characteristics and methods of use. So let's find out what are the differences between virtual reality (VR) and augmented reality (AR) and how these immersive technologies can improve the effectiveness of corporate training.

Virtual reality: what it is

Virtual reality is an entirely simulated environment with which it is possible to interact using special devices that project the wearer into a scenario so realistic as to seem true.

Example: To understand what virtual reality is, take a look at the [VR roller coaster video](#) at SeaWorld in Orlando.

Augmented reality: what it is

Augmented reality is an interactive graphics system that it allows to superimpose on the existing reality virtual contents and animations that enrich or "increase" the experience.

Example: to understand what augmented reality is, think of the popular Pokémon Go game that projects Pokémon in the real world and replaces the digital backgrounds typical of video games with the real environment taken by the smartphone.

Virtual reality and augmented reality: differences

The **difference between virtual reality and augmented reality** is therefore that, in the first case, the projection of a totally artificial world made up entirely of virtual objects is observed on a screen.

In the second case, however, what is taken up is an integration between real images and virtual objects.

Both of these immersive technologies have enormous business potential in very different fields, including that of **corporate training**. In fact, the introduction of these tools makes learning much more engaging and effective, such as to impact the behavior of individuals.

Virtual reality for training

Similarly to what happens with traditional **eLearning**, virtual reality creates a safe environment in which learners can try and exercise their skills. Unlike eLearning, virtual reality gives the feeling of "really being there".

As we saw when we talked about the use of [virtual reality in corporate training](#), this is particularly useful for emotionally intense situations, such as emergency response. Setting up dangerous situations on the screen means allowing collaborators to visualize how the work environment could appear, for example, in an emergency: it is one thing to know how to intervene in the event of a fire, another thing is to do it correctly when visibility is limited or there is a family crying and screaming nearby.

The multi-sensoriality of **virtual reality training** allows to involve vision, hearing and body movement and ensures that the experience lived by the user remains strongly and for a long time impressed, so as to significantly increase the effectiveness of

learning.

The **attention curve** is therefore urged to the point of being raised as it happens with a game, even if it is a "serious game".

Augmented reality for training

Augmented reality improves traditional learning because it allows **digital information to be superimposed on the real world**, enriching what we see and offering useful information for learning.

With augmented reality, therefore, the real world remains at the center of experience, but is "augmented" by the overlap of digital information.

This is particularly useful when we want to break down the barrier between saying (or, in the case of training, explaining it) and doing. For example, imagine the introduction of a new procedure for the maintenance of a machine: thanks to augmented reality, learners will be able to receive indications in real time that highlight the elements on which to intervene and explain step by step the actions to be performed.

In a nutshell, it will be enough to frame the machinery with a compatible device (generally smartphone or tablet) to make the application generate pop-ups and contextualized notifications that **enrich the learner's experience** by providing additional indications and guiding their learning.

Virtual reality and augmented reality training: future scenarios

The virtual reality and augmented reality market is still held back by development costs.

However, forecasts indicate one of the sectors with the highest growth potential for the future of these technologies in **company training**.

When prices drop to the point of making them more accessible and the content produced increases, they will play a fundamental role in the **digital transformation of businesses**.

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