The trend of digitalization and the recent pandemic have evoked the need for new concepts and solutions in learning and professional skill-building. This whitepaper explains in brief what you need to know for your first XR project.

Whitepaper

Discover the new way of learning with XR

VIRTRACON™
Powered by S-iBA Vision

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Whitepaper

The power and benefits of XR based learning and skill-building

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Virtual Reality ... just a gimmick for gamers?

To give the answer right away: no, it is on its way in many applications.

VR is a rapidly growing technology that has already changed the way we work and learn in many areas. Admittedly, today's headsets are not yet perfect. However, this is already changing, and new goggles are coming onto the market that look cool and are comfortable to wear. And what's inside these devices is remarkable and makes the heart of developers and users beat faster.

XR/AR/MR/VR - what fits best my needs?

- **XR** stands for extended reality and refers to all real and virtual environments generated by a computer or wearable device.
- **AR** stands for augmented reality and lets the user see the real object or environment, with information projected onto the display.
- **MR** stands for mixed reality and is an enhanced version of augmented reality.
- **VR** stands for virtual reality and sets the user into an artificial virtual world with a 360° view.

Image www.onlinetechupdates.com

The power of Augmented Reality

Augmented reality offers an interactive experience that combines the real world and computer-generated content. AR uses 3D format that requires a headset (goggles). With the 3D format, the user is immersed in an environment, which thanks to the 360° view can provide an experience that is not inferior to a real one.

The performance of the headsets is impressive and allows images, videos and complex objects to be displayed in three dimensions at the highest resolution. Complex applications such as in sophisticated medical education to train surgeries require a high-performance computer connected to the headset. The investments are quite big and such solutions are not suitable for rollouts with many users. For most other AR and VR

applications, a stand-alone headset is sufficient. It can be used autonomously and offers all required functionalities.

AR goggles are particularly well suited for learning and training of manual tasks. The user sees the object, for example a machine, through the transparent front screen of the headset, and information, notes or instructions are projected onto the front screen by means of software, telling the user what to do and how. AR works like a head-up display used in cars.

Image: www.isa.org

The power of Virtual Reality – discover a new world

Compared to AR, the VR technology creates a self-contained space and therefore serves other purposes. The application areas are manifold: tourism, art, culture, hotel industry, architecture, shopping, entertainment and many more. Originally gaming has been the beginning of this development.

Matthew Ball, an American investor and former head of Amazon's film production division and publisher of the book "The Metaverse – And How It Will Revolutionize Everything" answered in a recent Neue Zuricher Zeitung interview the question: "Which application possibilities of the Metaverse are you particularly looking forward to? Education. It is incredibly important for society and the economy...."

A prominent example is Accenture which has launched a global VR project for employee education and onboarding. No doubt, others will follow and may apply VR technology to challenging HR topics like developing interpersonal behavioral and communication skills.

The fact that approximately 98% of all executives and decision makers have never used VR goggles and are often skeptical about it, explains the rather slow pace at which companies are adopting and using this technology.

Without any doubt this technology is here to stay and like Matthew Ball explains in his book ... It Will Revolutionize Everything.

Virtual Reality ... the future of learning?

The opportunities, advantages and benefits of VR in the area of Learning & Development have been analyzed and described in detail by leading consulting firms.

The PwC study from June 2021 <u>How Virtual Reality is redefining soft skill training</u> has produced impressive results. According to the study, participants learned **4x faster** and with more focus, had a **3.75x better understanding** of the learning content and were **275% more confident** and willing to apply what they had learned. This compared to traditional learning approaches.

The world of learning is unlikely to become anything but VR. Combined with short boot camps led by a trainer, learning programs can be implemented that deliver a significantly higher return on learning and more fun.

My first VR project ... how to select the right partner?

The international VR scene has grown considerably and is quite fragmented. Today we can see three main providers:

Software companies: quite a number of them master the technology but have little or no learning content and didactic experience. If you have your own learning content and a clear idea of how it needs to be delivered but you have no internal resources nor the programming capabilities to produce such VR learning modules, this is a good choice.

Tutorial solutions providers: companies with which the customer can create their own training modules relatively easily and without programming. If you like to use a standardized tool with many assets and features and you have your own learning content, a solid expertise of the didactic approach and internal developer resources, this maybe be a good option.

Training companies: only very few have started to use VR and are offering turnkey VR training modules. They are providing holistic curriculums that combine VR technology with learning content and didactic and methodology expertise. Often, these companies also offer to support the roll-out. These providers are the best choice if you are short on resources, and you need best practice learning content. With this approach you can focus on the co-creation of your training curriculums and outsource all other tasks like VR design, implementation, support and roll-out.

It is advisable to be clear at the beginning of your first VR training project what kind of partner you need.
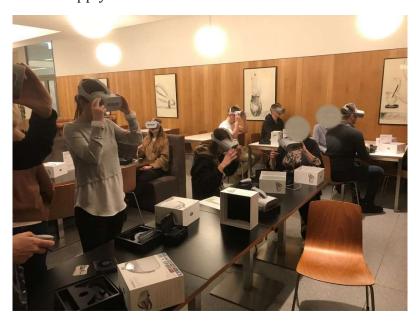
4 tips for a successful VR training project

1. Evaluate which kind of partner and which XR technology is best suited for your goals and purposes.
2. Seeing is believing - ask for a demo or even better do a small test project to experience the possible solution in vivo.
3. Even in VR training, the highest possible return on learning is not achieved with the learning content alone. The key is methodology and didactics.
This is especially true for soft skill development. We recommend evaluating the training experiences and competencies of the potential partner.
4. Digital Learning must be motivating, highly interactive, entertaining and fun. Therefore, it is essential to define specific criteria for the design of VR learning modules.

Our suggestion:

SEE - HEAR - OBSERVE - DO - CONCLUDE – ACT

This means:

- highest possible interactivity
- active involvement of the learner
- verbal dialogues to stimulate self-reflection
- Use of media such as videos, images, visualization aid, etc.
- Concrete exercises and role plays for the learner
- Learning module summary, feedback and handout
- Motivation to apply what has been learned

VIRTRACON™ - the VR Learning Experience Concept

VIRTRACON™ is a VR-based Learning Experience Concept that enables autonomous and self-directed learning independent of location, time and other people. The app is complemented by a library of highly interactive and engaging VR learning modules using voice recognition for the development of soft and hard skills.

Typical applications are on-boarding of new employees and the development of required skills to support changes in corporate culture, leading people and how a company sells its services and products. Combined with online and in-person bootcamps the customer can maximize the impact of a training program and the Return on Learning.

Offering innovative and new concepts for skill-building attracts young talents and increase the attractiveness of a company as preferred place to work. In addition, companies enjoy lots of benefits such as higher productivity because of less off-the-job time for training, less cost and investment and a growing employee engagement fostered by an ongoing learning culture provided with this approach.

Get a first impression: https://vimeo.com/681484366

For more information and a free demo please connect with us.

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