



Exchange of good practices in OSH

Healthy Workplaces Campaign Partner event

Brussels, 13-14 June 2022

Boehringer Ingelheim in brief



- Family-owned pharmaceutical company
- Founded 1885 in Ingelheim, Germany
- Focus on Human Pharma, Animal Health and Biopharmaceutical Contract Manufacturing
- More than 52,000 employees worldwide
- R&D expenses of around 4.1 billion EUR
- 26 R&D sites worldwide for Human Pharma and Animal Health
- Net sales of 20.6 billion EUR
- 180 affiliated companies worldwide
- Investment in tangible assets: 968 million EUR

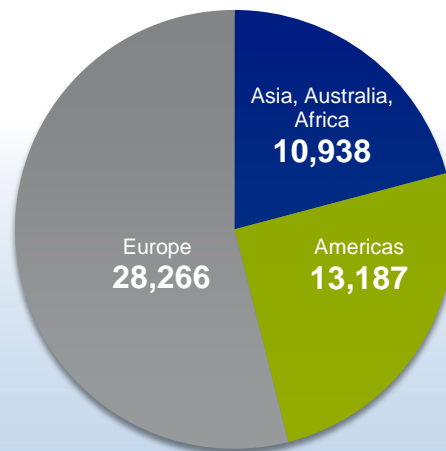
Our people, at a glance



52,391

Ø number of employees
worldwide, 2021

by region



by function



What We Do

“We see ourselves as the patient’s partner, providing innovative medications for better health.”

- Investments in research and development in 2020: 20,0 % of the revenues (more than 4.1 Billion €)
- Our corporate vision: Value through innovation
- Main areas of research:
 - Cardiometabolic diseases
 - Central nervous system diseases
 - Immunology
 - Oncology
 - Respiratory Diseases
 - Retinal Health



© Boehringer Ingelheim

What We want, too...

From our EHS-Policy

...“we protect our employees, facilities, and the environment from harmful influences” always striving to provide high quality, innovative therapies in a sustainable manner”



© Boehringer Ingelheim

To achieve this a lot of training is key. This should not be boring but entertaining and interactive

“Virtual Reality as Tool for Safety Trainings”

Example Lab Safety



© Boehringer Ingelheim

www.healthy-workplaces.eu

My example



© 3spin

How to establish a VR Training

Step 1: Basic setup

- Choose your type of training, a title and a description. Create basic scenes and name them → Develop your individual playbook
- Commercially available systems include an easy-to use "wizard" guides you through setup process



How to establish a VR Training

Step 2 Add Assets

- Existing images, videos, audio files and 3D models get added. The functionalities should offer the possibility to do this with just a few clicks.
- Many 3D models can be purchased and cost-effectively imported



How to establish a VR Training

Step 3 Create Interactivity

- "Triggers" by the user such as clicking or looking can be assigned to each asset.
- Actions get activated such as changing a scene, playing a sound, or showing an image



How to establish a VR Training

Step 4 Place training objects

- The pre-configured assets can then be placed in an 360° image / 3D environment (VR) or alternatively in the real world (AR).
- Previews should allow you to quickly test the draft training as a learner.



How to establish a VR Training

Step 5 Manage users and distribute the training

- Users get created
- Training gets published
- Decision is made who should be trained



Advantages of Virtual reality (VR)

1. Learning is done best by experiencing
2. Cognitive benefits
3. Gamification improves motivation
4. Scalability & Cost-effectiveness
5. Detailed analysis & quick feedback
6. Safety!!! Controlled exposure to potentially stressful situations

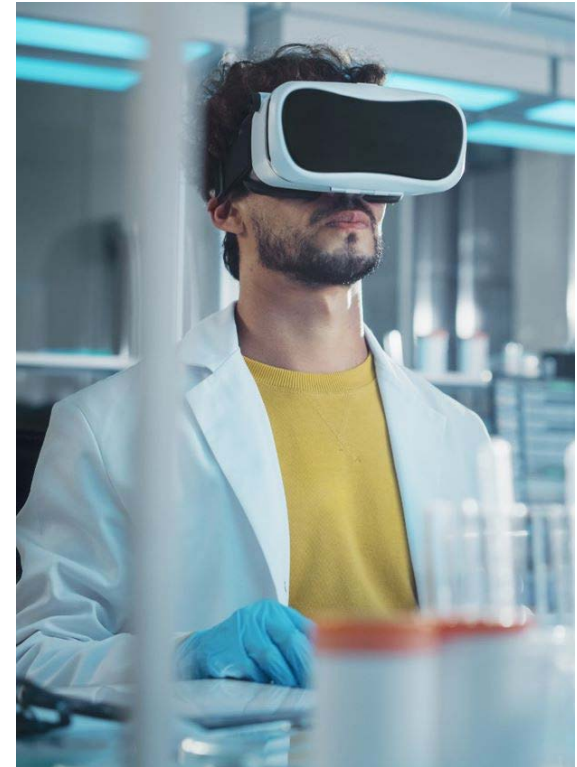


© Boehringer Ingelheim

[The Pros & Cons of Virtual Reality in L&D | Valamis](#)

Disadvantages of Virtual reality (VR)

1. Illusions might be broken
2. Senses can experience conflict
3. Transformation of behaviors
4. Ergonomic complexity
5. Accessibility
6. Hygiene issues



[The Pros & Cons of Virtual Reality in L&D | Valamis](#)

© Boehringer Ingelheim

Conclusions

- Success is not automatic
→but trainings may produce great results
- Understanding difference between VR and with conventional media
→ recognize differences and consequences
- Active learning and the memorization of personal experiences
→ Head-mounted displays offer experience being immersed in simulated task environment
- Learning outcome should be measured differently
- Broader and more profound impact than traditional media
→Ethical complexities related to the physiological, cognitive, behavioral, and social dynamics effects.
- Workforce development needs comprehensive understanding of various aspects of technology and related human factors



© Boehringer Ingelheim

[The Pros & Cons of Virtual Reality in L&D | Valamis](#)

Thank you for your kind attention



© Boehringer Ingelheim