Module F

Introduction to 25 Best Practice Examples

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VRinSight Training Programme & Curriculum

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- Module A: Outcomes of European survey of SME and Higher Education institutes
- Module B: Virtual Reality for Business and SMEs
- Module C: A comparison of VR developments around the globe
- Module D: Pedagogical considerations in Virtual Reality Learning
- Module E : Step by Step Guideline to good VR practice
- **Module F : Introduction to the 25 VR applications of the *VRinSight Showcase***
  - **Introduction to Best Practice Examples (20mins)**
  - **Testing 25 Best Practice apps (30mins)**
  - **Reflection in small groups (20mins)**
  - **Discussion (20mins)**

All Curriculum Modules and the European Survey report are available in their entirety at the project homepage www.vrinsight.org

Assignment before the lecture

Install the App of your selection for evaluation

Familiarize yourself with the 25 Best Practice Applications

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The aim of 25 Best Practice Applications?

- Quick overview of 25 applications to demonstrate how VR technology can enhance Higher Business Management Education
- Provide information of how to evaluate VR apps

AND MOST IMPORTANTLY:

- Providing information of **how to apply the lessons learned** (i.e., what is the *logic/value/novelty* behind each of the Apps)

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Evaluation of 25 Best Practice Applications

Applications were evaluated based on six factors that were considered as important:

1. Applications technical framework
2. Purpose and target group
3. Basic features
4. Prior knowledge needed
5. Learning outcomes
6. HEI added value

Primary focus in business management education, secondary focus on higher education in general

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1. The technical framework

- What platforms the application supports: Windows MR, Oculus, Vive, etc.
- Possible multiplatform (PC/Mac) or mobile support (iOS, Android) is mentioned (e.g. Mozilla Hubs for education)
- The support for standalone devices was highlighted due to decreased costs of use and increased usability (e.g., Altspace VR for education)

Source: https://tech.fb.com/the-story-behind-oculus-insight-technology/

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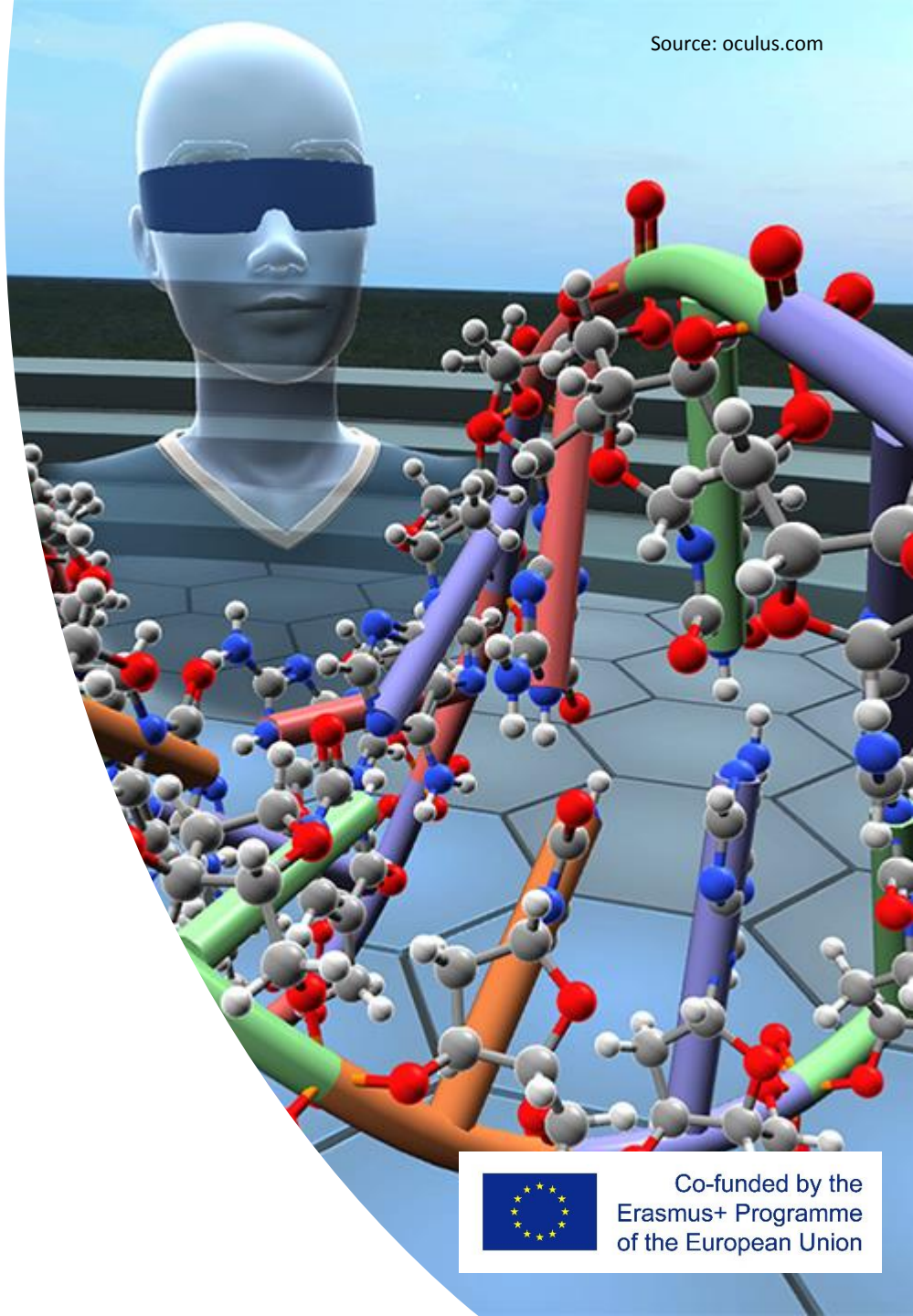
2. Purpose and target group

- A brief description of the applications purpose and main use cases, such as some specific educational simulations (Nanome), training and education in general (ENGAGE), etc.
- Main target group (such as educators, trainers, or virtual teams)



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3. Basic Features

The description of applications basic features (i.e. what specific actions the application enables)

Some apps enable *a specific use case* (e.g. Presentation Simulator for education and business, or Labster (education)

Others have *many different features for different means of use* (E.g., Edorble: multi-user environment, avatar creation and customization, a possibility to download 3D content, support for 2D presentations/media streaming/session scheduling).

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4. Prior knowledge

Knowledge that is essential when using the application

Some apps require only **basic VR skills** (being able to set up the system, use controllers, etc.) (E.g., Job Simulator)

Some applications require more **advanced VR skills** (E.g., specific VR applications for business, such as 365 Dynamics Layout)

Source: oculus.com

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5. Learning outcomes

Basic learning outcomes such as creating an avatar, customizing an avatar, navigating in a virtual space and interacting with virtual objects

Advanced learning outcomes, such as importing or creating 3D content or scheduling/hosting an event in VR

Skills, such as improved communication skills (Presentation Simulator, or Social Virtual Reality (SVR) applications),

Knowledge, such as geography (e.g., Google Earth for education)

Competences (e.g., being able to set up a social event in Altspace VR)

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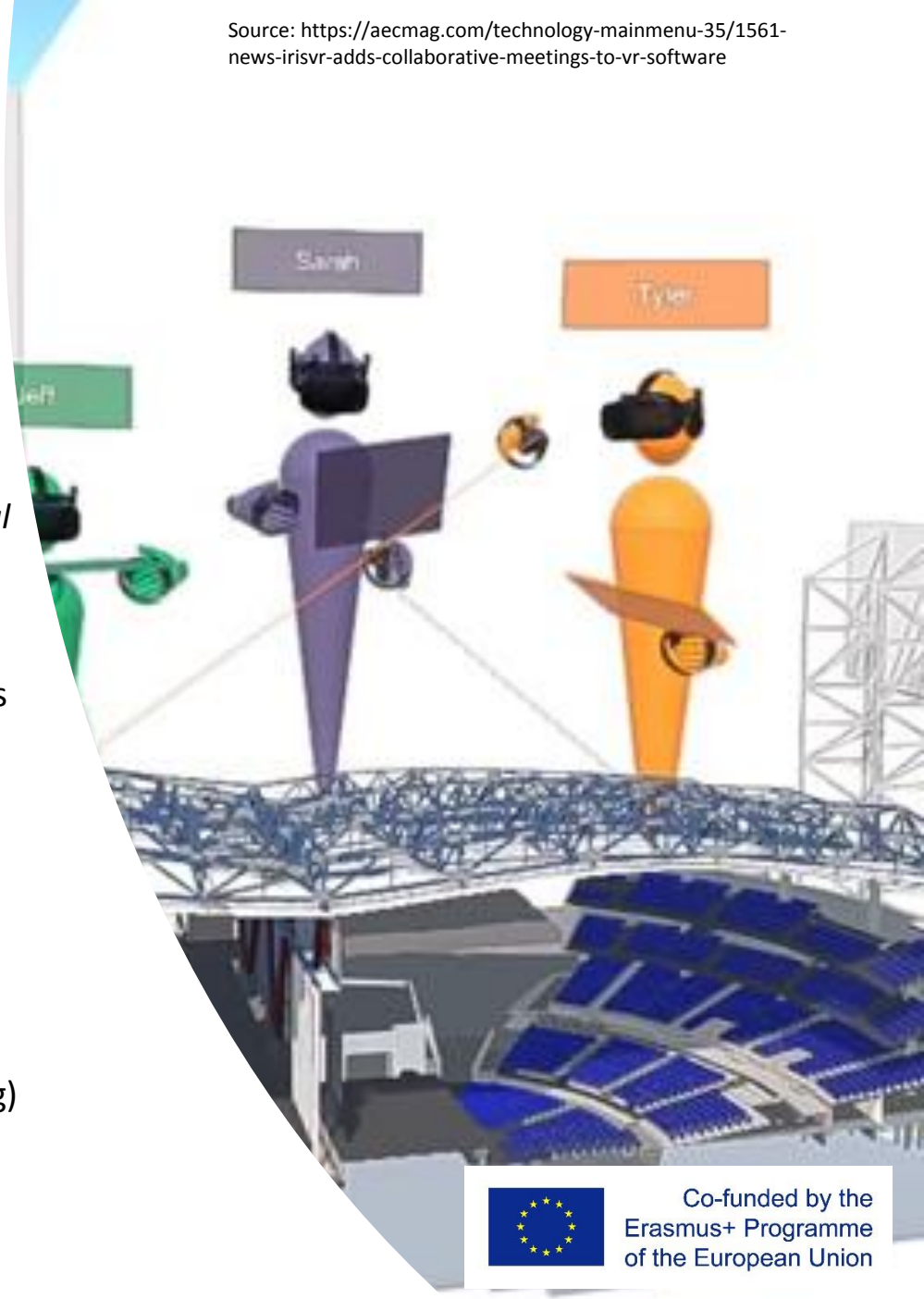
6. HEI/SME added value

A description of factors that are considered *beneficial in context of HE and business management*

For example, Social Virtual Reality, such as Nvidia Holodeck, applications could be valuable for business due to:

- E.g., Avatar-based interaction that may improve shared focus and enhance problem-solving capabilities in online group activities
- E.g., Content creation tools that may provide value for HE institutions in terms of being able to customize their very own learning content
- E.g., Videoconferencing enables the connection outside VR / real facial information (trust building)
- E.g., high amounts of engagement and social immersion with geographically dispersed stakeholders
- E.g., User-Centered Design or other forms of remote collaboration

Source: https://aecmag.com/technology-mainmenu-35/1561-news-irisvr-adds-collaborative-meetings-to-vr-software



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Interactive session: Testing The Apps

- Testing the Applications (pairs/small groups) (30mins)
  - Apps for standalone (e.g., Oculus Quest) / tethered VR (E.g., Valve Index)
  - Choose one **already installed** (!) example of 25 Best Practice Application s
  - Try out the App (take your time - hurrying breaks the immersion!)
  - In the meantime: check the App description / links / app website
- Reflection (20mins)
  - What different *use cases* can you find (SME/HEI perspective)?
  - What *value* does the App bring (SME/HEI perspective)?
    - E.g., making something *more effective*?
    - E.g., enabling something *completely new*?
- Discussion and summarizing the findings (20min)

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Learning diary (2-3 pages)

How could your selected App be modified to be more effective, or to fulfill the needs of a completely new use case? In your analysis, keep the basic logic of the app.

- E.g., AltspaceVR enables virtual meetings in a shared space. However, how could avatar-based interaction be improved to enhance the effectiveness of virtual teams?

Grading

Scale from 1-5*

0 - failed to understand the topic, no reflection (course personnel will contact you for extra task)

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1 - little understanding and reflection

3 – understood the topic, good reflection, application of lens to derive new insights for understanding the technology limited

5 - understood the topic, good reflection, application of lens to derive new insights for understanding the technology

Source: https://www.theverge.com/2020/2/27/21155707/google-earth-firefox-edge-opera-support-webassembly-code-update-web-release

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