selected video: Video 2: MineXR: Mining Personalized Extended Reality Interfaces

1. Task 1

• Assumptions on audience and justification

The target audience of this video is most likely researchers and designers in the XR field. At the beginning of the video (00:20), the speaker states "The goal of our work is to provide a better understanding and grounding for adaptive extended reality interface research and design," indicating that their work is intended for researchers and designers. At the end of the video (14:46), the speaker says "We hope this fosters more research and discussion towards the future of adaptive personalised XR interfaces," showing that the video aims to promote related research and discussion. Furthermore, the authors assume that the audience has background knowledge in the XR field. On one hand, the authors use many specialized terms, as shown at 02:30 in the video, such as "widget" and "layout." On the other, when presenting their arguments, the authors use relatively complex charts, such as the two bar graphs shown at 07:43 and 07:49. These evidences sufficiently demonstrate that the authors assume their audience consists of XR field researchers and designers who possess relevant background knowledge.

• Audience's expectation

The audience is likely very interested in understanding the role and functionality of MineXR technology. Specifically, the authors mention two major challenges (1:57) that researchers currently face when designing XR interfaces. The first challenge is "what functionalities do users want to use in XR in different contexts," and the second is "how should XR interfaces look to support these functionalities in different contexts." As the audience consists of XR field researchers, they would very likely be anticipating MineXR's unique contribution to addressing these two major challenges.

• Author's aim

As clearly stated at 00:20 in the video, the author's goal is "to provide a better understanding and grounding for adaptive extended reality interface research and design." Therefore, we can

reasonably infer that the author aims to convince the audience of MineXR's significant role in XR interface research and design, specifically in addressing two major challenges in current XR interface design (01:57) – "what functionalities do users want to use in XR in different contexts" and "how should XR interfaces look to support these functionalities in different contexts".

• Emotions

First, the author sparks curiosity by introducing two significant challenges (01:57), prompting the audience to wonder how MineXR can address them. Next, excitement builds as the author gradually unveils MineXR's workflow, showcasing its functionalities step by step – data collection tool (03:04), data analysis tool (04:40), and providing an annotated dataset (05:53). This is followed by a sense of conviction, as the author employs various charts (07:43, 07:49) and numerical data (12:17) to reinforce the narrative's credibility through quantitative methods. Finally, the author instills confidence and anticipation by looking toward the future (14:08), briefly introducing future avenues for personalized XR interfaces and offering the audience room to imagine the possibilities.

2. Task 2

Selected section of video two: 00:00-03:00

Time	Content (Summarise what the video is about in each beat, up to 30 words per beat)	Visual (Describe visual elements represented on the screen in each beat, up to 50 words per beat)	Justification (Relative to the audience, justify authors' decisions to include content and visuals identified in each beat, 50 words per beat)
00:00-00:17	Introduction to author and research team.	Titles of project ,photos of members and logos of institutes.	Using text and real photos to inform audience directly of the authors' information.
00:18-00:25	Goal of the work	Title and text about the goal	Using texts to clearly inform audience of the goal, so that audience can gain an insight of what they can expect of the video.
00:26-00:41	MineXR contributions	Texts of specific contributions, pictures of different usage scenarios and a video that provides a real demonstration of how to use it	Provide a more detailed explanation of MineXR's features to further pique curiosity. The use of real videos and images enhances the credibility of this technology, demonstrating that it is real and genuinely feasible.
00:42-01:31	Comparison between screen-based interface and XR interface 3	Title of theme, two images representing the two different types of interfaces and texts (red font) explaining their features	Briefly introduce the development of interface design to provide viewers with background information and set the stage for the following discussion. The images vividly illustrate the differences between the two interfaces, while the red text draws viewers' attention more effectively.

01:32-01:57	The design concept of the current XR interface.	Title of section , images of two core design concepts with texts describing them.	As a transition beat, it connects traditional interfaces and introduces the discussion on current challenges. The images clearly illustrate the core concepts of XR interface design, making it easy for viewers to understand at a glance.
01:58-02:12	Challenges in current XR desgn	Title of section, texts explaining what the two challenges are and images showing some scenarios using XR	It summarizes the two main challenges in current research and highlights this conclusion with concise text, capturing the audience's attention and sparking their thinking.
02:13-02:29	MineXR as solution to challenges	Texts explaining the functionalities of MineXR, and images representing its features	Building on the previous challenges, text and images clearly and vividly convey that the solution lies in MineXR, easing the audience's confusion, providing clarity, and sparking excitement.
02:30-03:00	Explanation of terminology	Title of section. Texts of terms, definitions and examples. Images of specific 4 examples. These elements together compose a table.	Before introducing the main topic of MineXR's usage process, key terms are explained in advance to help the audience follow the author's reasoning and better understand the mechanisms and principles. Images serve as examples, allowing viewers to grasp these terms more intuitively.

3. Task 3

• Evaluation:

Overall, the video is complete in content and has a relatively coherent logical structure. The general flow is as follows: It first summarizes the two major contributions of MineXR (00:26). By introducing the challenges in current XR design (01:58), it transitions into the first contribution—MineXR's ability for data collection and analysis (02:13). The second contribution, which involves the data collection methods and analysis results, is then presented (05:50). These findings directly address the initial challenges. In the conclusion, the author summarizes the content and discusses the future of XR interfaces (12:42). This structure is clear and easy to follow.

Regarding narrative, the author uses some technical terms (02:30) but provides prior definitions. The academic language is somewhat complex, but given the target audience—researchers in the same field—it remains appropriate.

In visuals, a large amount of text is used to explain concepts, often accompanied by related images. However, the lack of dynamic visual elements makes the video somewhat monotonous and less convincing, potentially raising doubts about MineXR's feasibility. Given the audience's technical background, this is still within an acceptable range. Some animations demonstrate MineXR's usage scenarios, but they lack audio and captions, resembling silent films that require interpretation. Additionally, the absence of user experience sharing reduces the perceived authenticity. The video transitions rely solely on PDFs, making it feel like a PowerPoint presentation—clear but lacking creativity. However, the use of numerical data and two complex charts enhances its credibility.

• Issues and suggestions:

At 00:42, the video introduces the differences between traditional and XR interfaces as background information for MineXR. However, considering the audience's expertise, this section may be unnecessary and does not contribute much to the main argument, so could be abandoned.

At 02:30, the definitions of key terms could be placed earlier in

the video to maintain narrative coherence and improve comprehension, instead of interrupting the flow.

At 02:13, MineXR's two features are introduced abruptly, which may cause confusion with the previously mentioned two contributions. The author should clarify the relationship between them to enhance logical consistency.

At 01:58, the images used are unrelated to the content of this beat and serve as an unnecessary distraction for audience. It would be better to replace them with visuals that illustrate the two challenges.

During the discussion on MineXR's future (12:42), the author only presents past and current interface examples, which fail to evoke excitement and are ineffective. Using more futuristic and conceptual visuals could better convey MineXR's development potential.

Finally, excessive text throughout the video often makes it difficult for viewers to read before moving to the next beat (e.g., 13:55 in the takeaways). The lack of dynamic elements also results in high information density, making it overwhelming. Adding animations and smoother transitions could help with pacing. Therefore, including user experience insights which is mentioned above would better enhance credibility.