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2/24/22

The Impact of VR and AR on technical communication

Objective:

The goal of this study is to examine how the increased use of VR and AR impacts communication in a technical setting.

Background:

Virtual Reality (VR) and Augmented Reality (AR) are two emerging technologies that have gained significant attention in recent years. VR technology enables users to be completely immersed in a computer-generated environment, while AR technology allows users to view the real world with additional digital information overlaid on it. These technologies have the capacity to revolutionize many fields, including education, entertainment, and healthcare, to name a few.

One area that also has the capacity to be impacted by VR and AR technology is technical communication. Technical communication is the process of conveying technical information to a specific audience, usually in industries such as engineering, science, and medicine. Technical communication plays a critical role in these industries, as it helps ensure that information is effectively communicated, preventing errors, and increasing efficiency.

The use of VR and AR technology in technical communication has the potential to significantly improve communication and comprehension of technical information. These technologies can provide users with immersive experiences that allow them to visualize complex concepts and procedures in three-dimensional space. VR and AR can also enable users to interact with digital models and simulations, providing a hands-on approach to learning.

Moreover, VR and AR technology can also enhance remote collaboration and training. With the rise of remote work and distance learning, the ability to collaborate and learn virtually has become increasingly important. VR and AR can help bridge the gap between physical and virtual spaces, enabling remote collaboration and training that is just as effective as in-person communication.

Given the potential benefits of VR and AR in technical communication, it is important to understand how these technologies can impact the field. This research proposal aims to investigate the impact of VR and AR on technical communication, exploring the potential benefits and challenges associated with the use of these technologies. The research will involve a review of relevant literature, case studies, and surveys to identify the most effective ways to integrate VR and AR into technical communication practices. Ultimately, the findings of this research can inform the development of best practices and guidelines for the use of VR and AR in technical communication, benefiting industries that rely heavily on technical communication for success.

Research Methods:

The research project on the impact of VR and AR on technical communication will be completed through several steps. The first step is to conduct a thorough literature review to gather relevant research articles, conference papers, books, and other publications related to VR and AR in technical communication. This will be followed by case studies of companies and organizations that have successfully implemented these technologies to gain practical insights into their use in technical communication. Surveys will be conducted to gather data on the perceptions and attitudes of technical communicators towards VR and AR. Interviews will also be conducted with technical communicators who have experience using VR and AR in their

work to gain an in-depth understanding of their experiences. The data collected from the literature review, case studies, surveys, and interviews will be analyzed to identify common themes, trends, and challenges associated with the use of VR and AR in technical communication. Based on the data analysis, findings and recommendations will be developed, providing guidance for the effective use of VR and AR in technical communication.

The timeline for completing this project is designed to complete the literature review, surveys, and case studies in the first three months, followed by interviews and data analysis in the last month. By the end of August, the findings and recommendations will be developed, benefiting industries that rely heavily on technical communication for success.

Expected Outcome:

The research report will provide a comprehensive summary of the research project, including the literature review, case studies, surveys, and interviews. It will also include the findings and recommendations, providing guidance for the effective use of VR and AR in technical communication. The academic article will be submitted to a relevant scholarly journal, providing the opportunity to share the research findings with a wider academic audience. Finally, the poster presentation will be used to present the research findings to the UCF community and others interested in the topic.

The products of this research will provide valuable new knowledge, understanding, and insight into the impact of VR and AR on technical communication. The research will contribute to the field by providing practical insights into the benefits and challenges associated with the use of these technologies in technical communication. It will also identify research gaps and opportunities for future research in this area.

The UCF community will benefit from this research by gaining a better understanding of the impact of VR and AR on technical communication. This knowledge will be useful for students, faculty, and staff in technical communication programs, as well as professionals in industries that rely heavily on technical communication. The findings and recommendations will provide practical guidance for the effective use of VR and AR in technical communication, benefiting both the UCF community and the wider industry. Additionally, this research will contribute to UCF's reputation as a research-focused institution, highlighting the university's commitment to producing high-quality research that addresses real-world problems.

Preliminary Work and Experience:

Prior to the project, research has been conducted into the fields of AR / VR to see how they have modified other parts of our lives, and ways in which they may impact the technical field.

IRB/IACUC statement: N/A

Budget: $0

Works Cited:

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