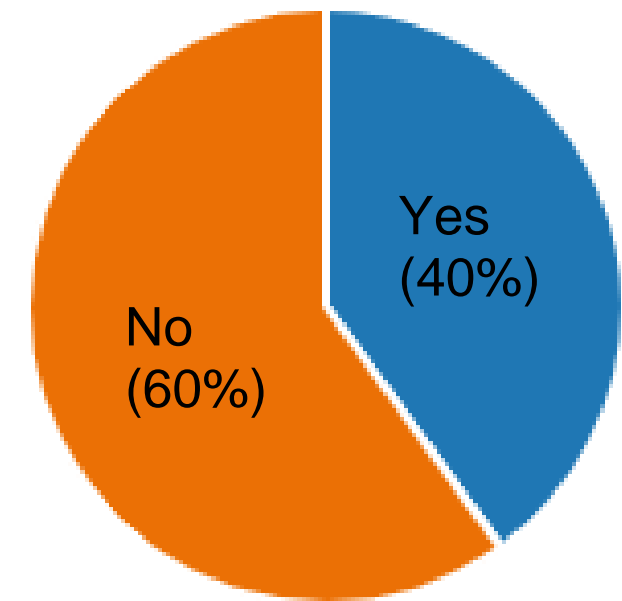
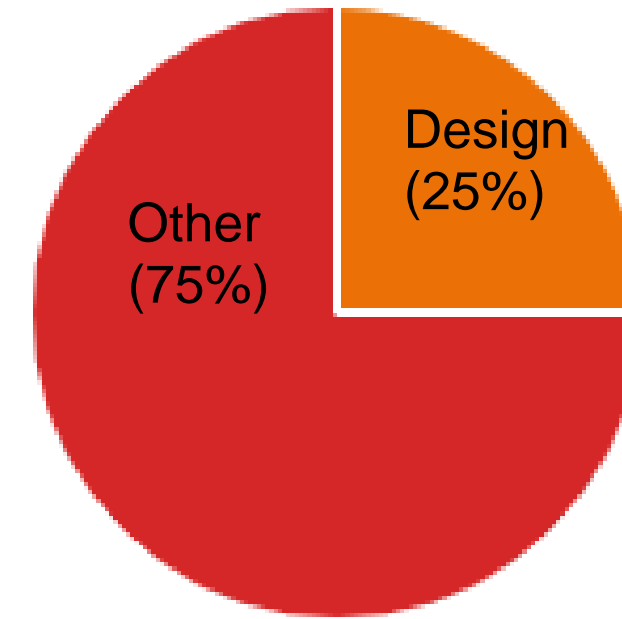


Survey Questions

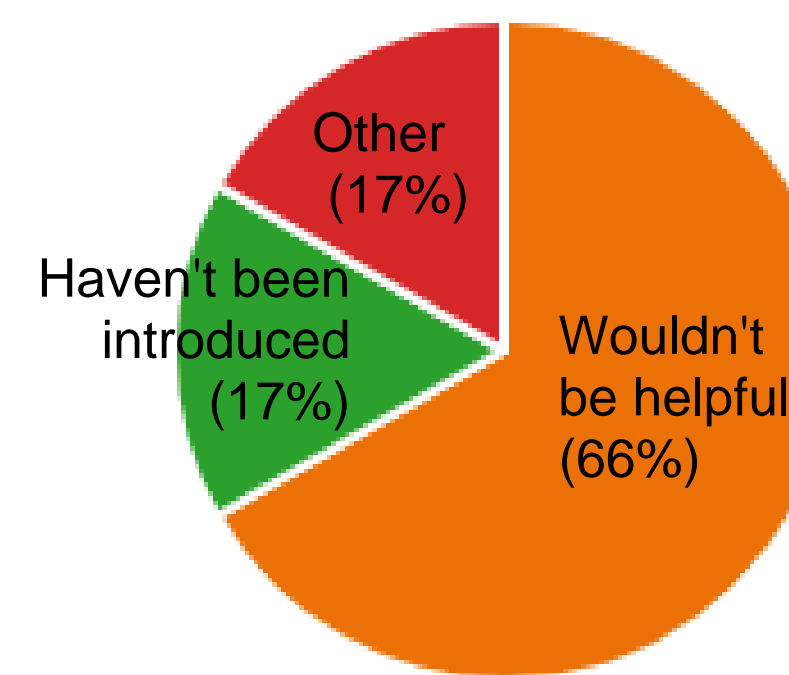
•Has your company ever used virtual reality to assist your company?



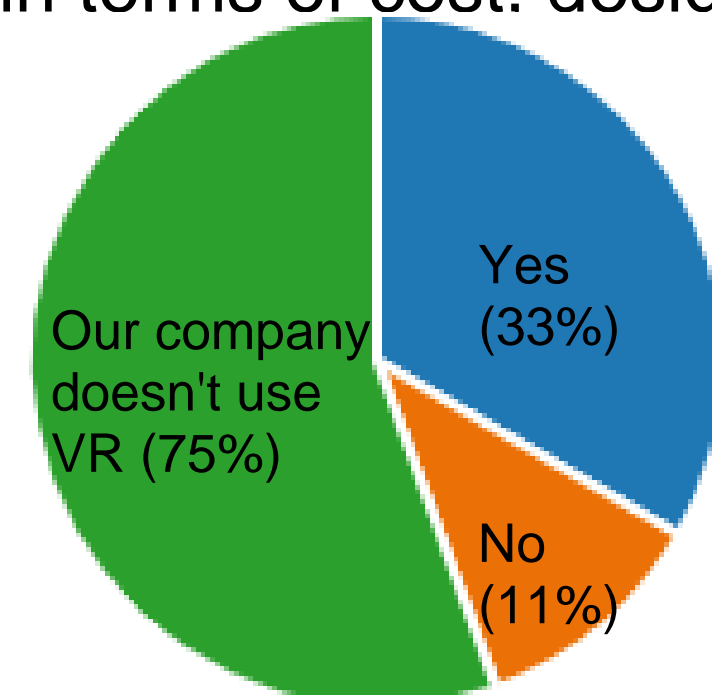
•If yes, how did you use VR to help your company?



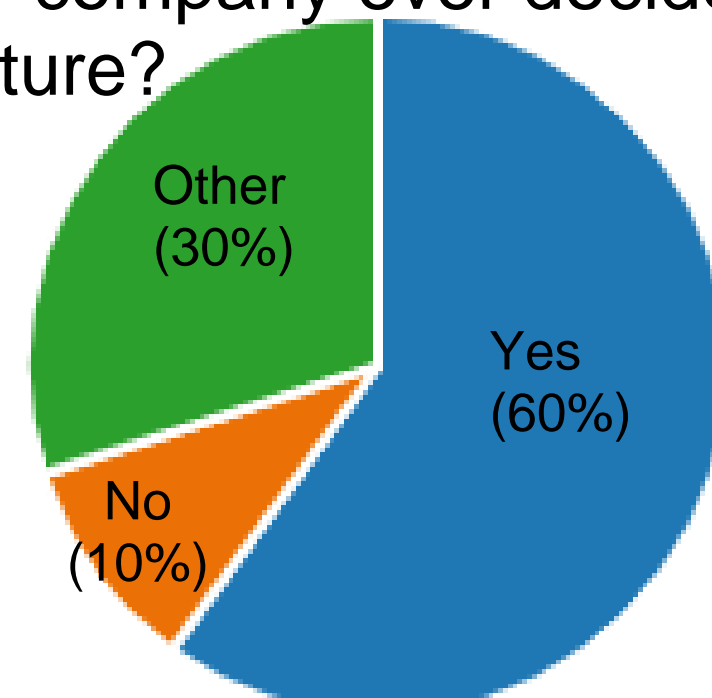
•If no, why has your company never used VR?



•Did the use of VR end up helping your company? (in terms of cost, design, safety, etc.)



•Would your company ever decide to use VR in the future?



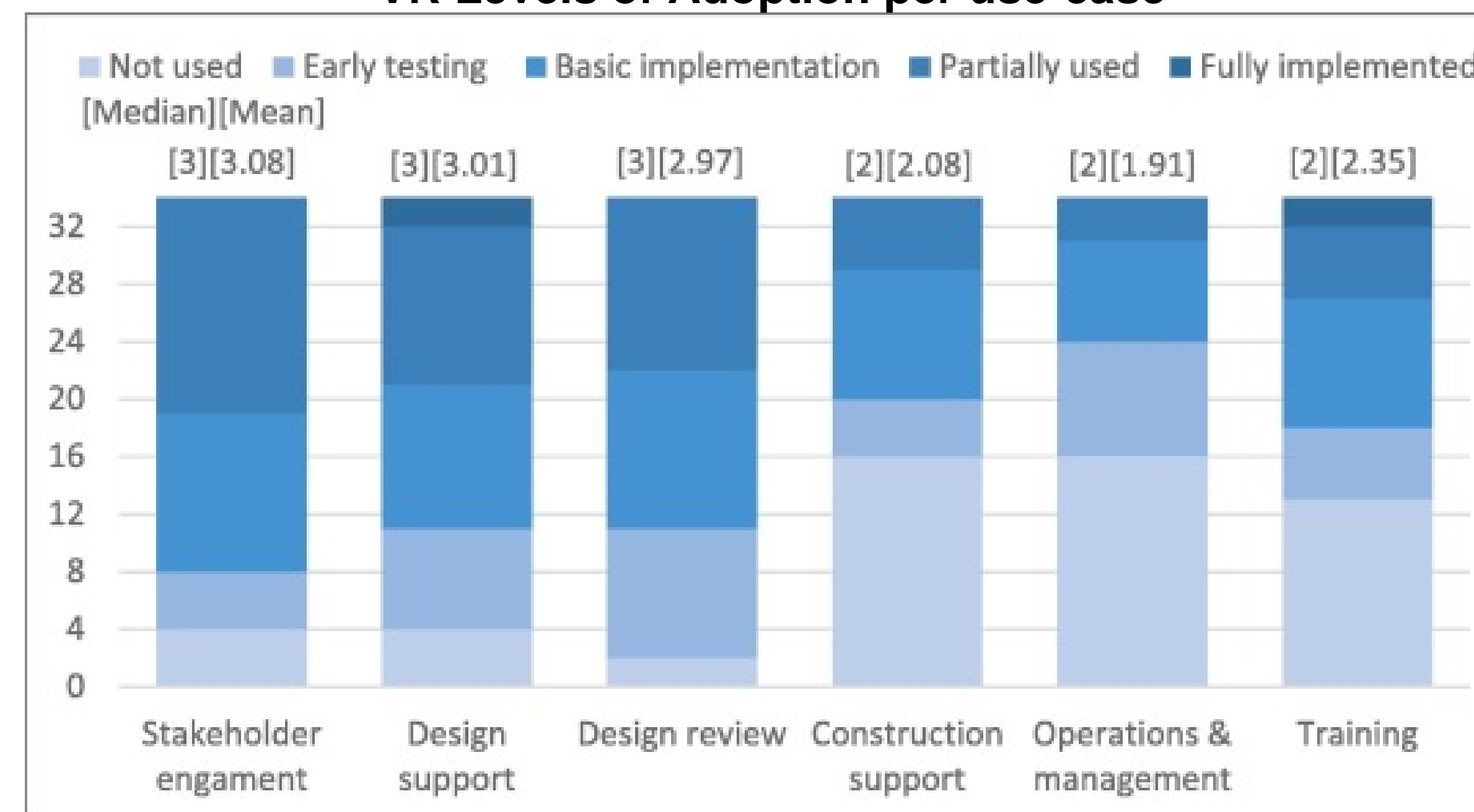
The Integration of Virtual Reality in the Commercial Construction Industry

Virtual Reality has recently been spreading throughout the commercial construction industry. Different companies have different uses for virtual reality; however, it can provide assistance in numerous ways.

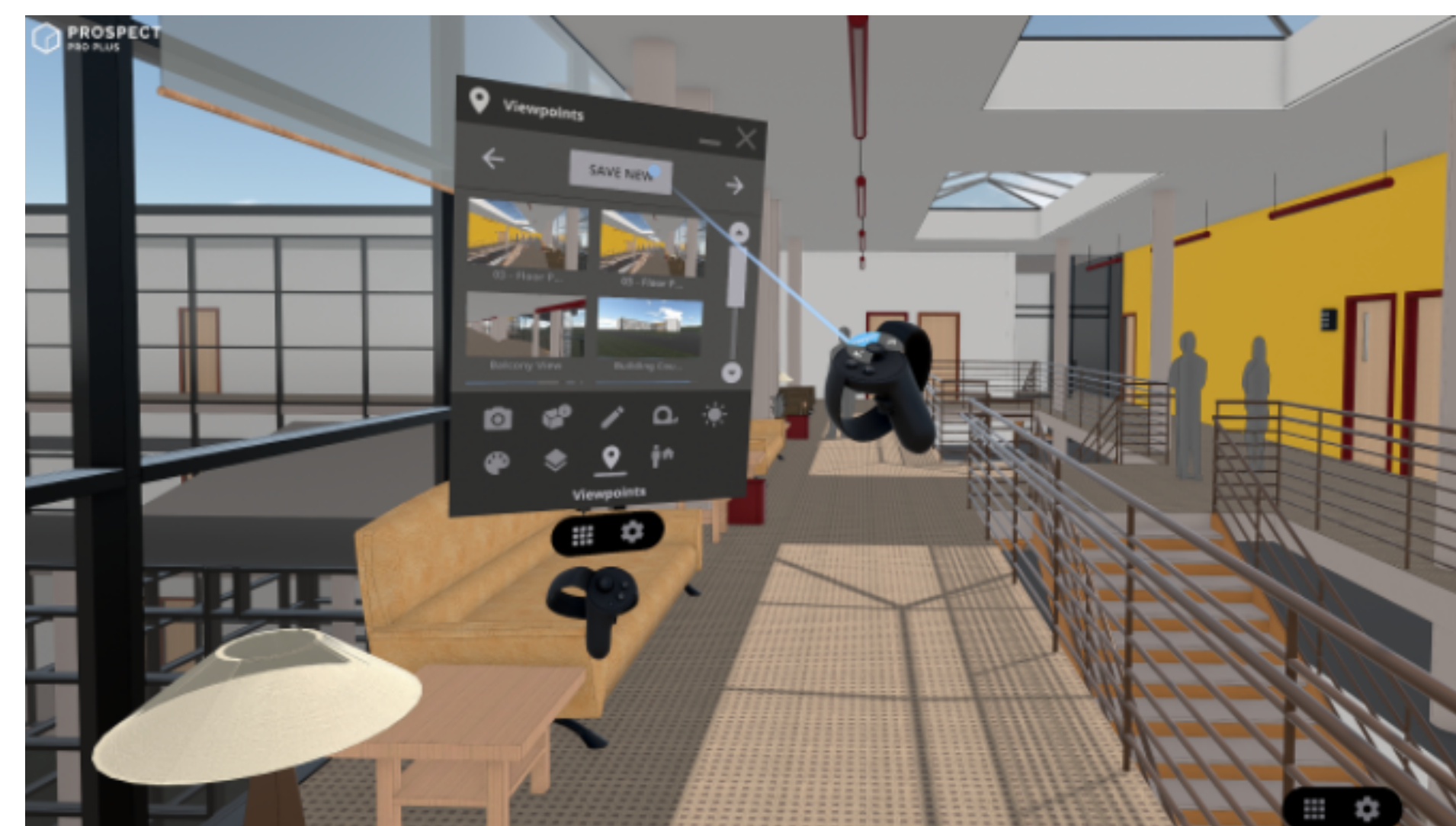
Some of its capabilities are safety training, helping spot ADA issues, logistics planning, and virtual walkthroughs. Many construction companies were starting to utilize virtual reality's advantages, until COVID-19 hit. The recent outbreak of COVID slowed down construction in general as well as the need or use of virtual reality. Now, some companies are worried about the cost and health risks that virtual reality headsets might bring; however other companies are optimistic about the future of virtual reality.

This report explores the different advantages and disadvantages of implementing virtual reality into a commercial construction company. Interviews and surveys have been conducted to further the research on this matter. Ultimately, it was determined that VR is case and company specific. Not all commercial construction companies need VR, although some can benefit greatly from it.

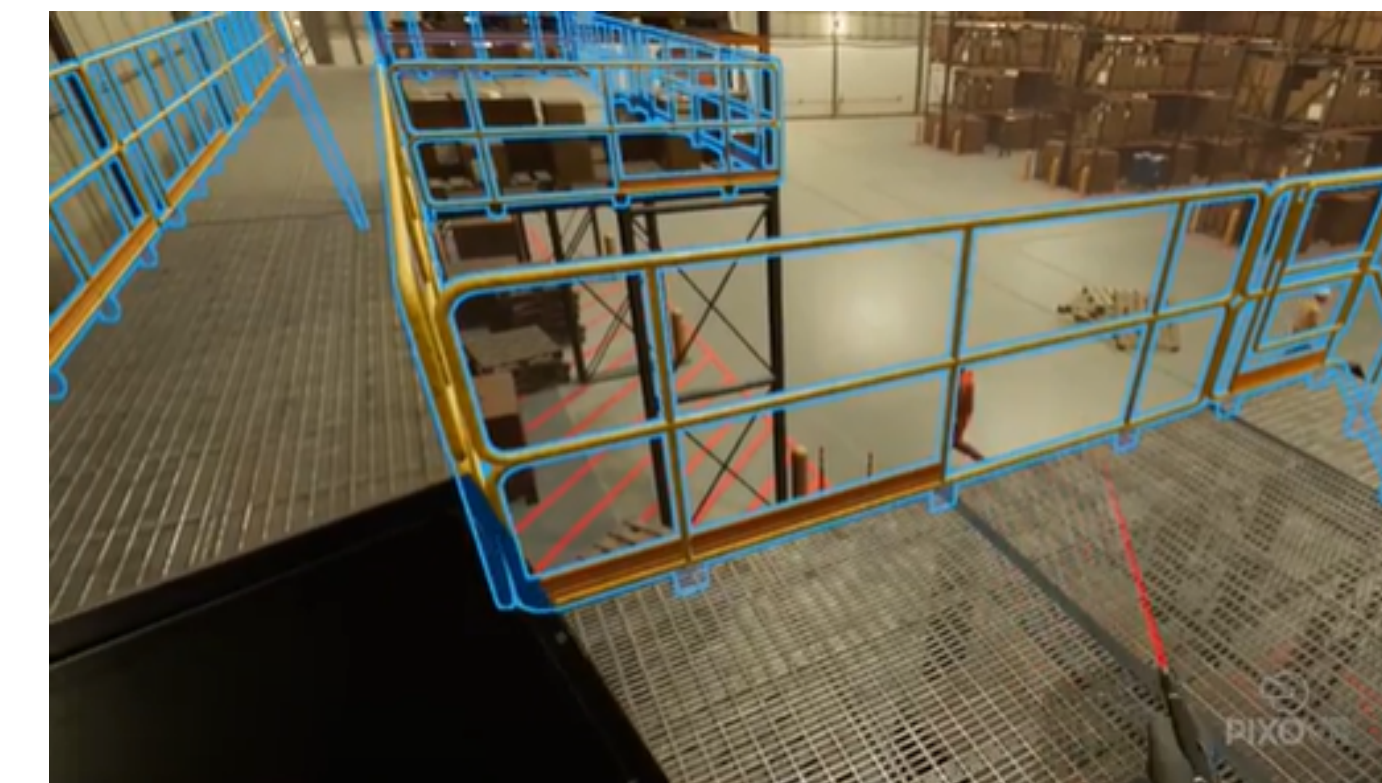
VR Levels of Adoption per use-case



<https://www.sciencedirect.com/science/article/pii/S1474034620300914>



<https://blog.irisvr.com/architectural-vr-walkthrough>



<https://pixovr.com/product/hazard-recognition/>



<https://www.oculus.com/quest-2/>

Methodology

•Conducted a quantitative survey focusing on construction company's use of VR

•Conducted interviews with architectural firms, companies that use VR, and companies that sell VR products

•Previous case studies on virtual reality were found and analyzed

Need and Significance

•This study will benefit construction companies deciding whether or not to use virtual reality in their company

•Each aspect of virtual reality will be analyzed, training, design, etc., to see the benefits and disadvantages of implementing this technology

•The research will provide insight on whether or not virtual reality is a viable option for commercial construction companies

Interview Questions

•When did your company first start using VR and for what purpose? Do you still use VR today for that same purpose?

•Did you have any obstacles in implementing VR into your company?

•Do you think that VR has helped or hurt your company more? Was it a useful tool or was it not as useful as you were expecting? Why?

•Has covid affected the use of VR in your company?

Companies Interviewed:

