Our Future with Augmented Reality

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Purpose

- Augmented reality is a technology that is not currently being used to its full potential
- Show people and companies what augmented reality could be used for
- Investigate how augmented reality can help industrial processes become more efficient

Abstract

Augmented reality is a relatively new technology that can completely alter how people live their lives. In the past augmented reality has been used for phone games, but the future uses are far greater. Many large companies have begun planning uses for augmented reality systems.

Augmented reality can be used for workers to get quick, accessible and hands-free information. Workers could also get hands free assistance from remote experts in their field. This research will show current and future uses of augmented reality in many industries.

Objective

Create a functional proof of concept for augmented reality by:

- Displaying live sensor data in augmented reality
- Streaming AR feed to remote users

Methods

1. Connect sensor to Raspberry Pi to collect data
2. Save data to AWS continually
3. Connect AWS to DAQRI's TAG application
4. Create a TAG that shows data in augmented reality
5. Use DAQRI's SHOW application to communicate with remote experts
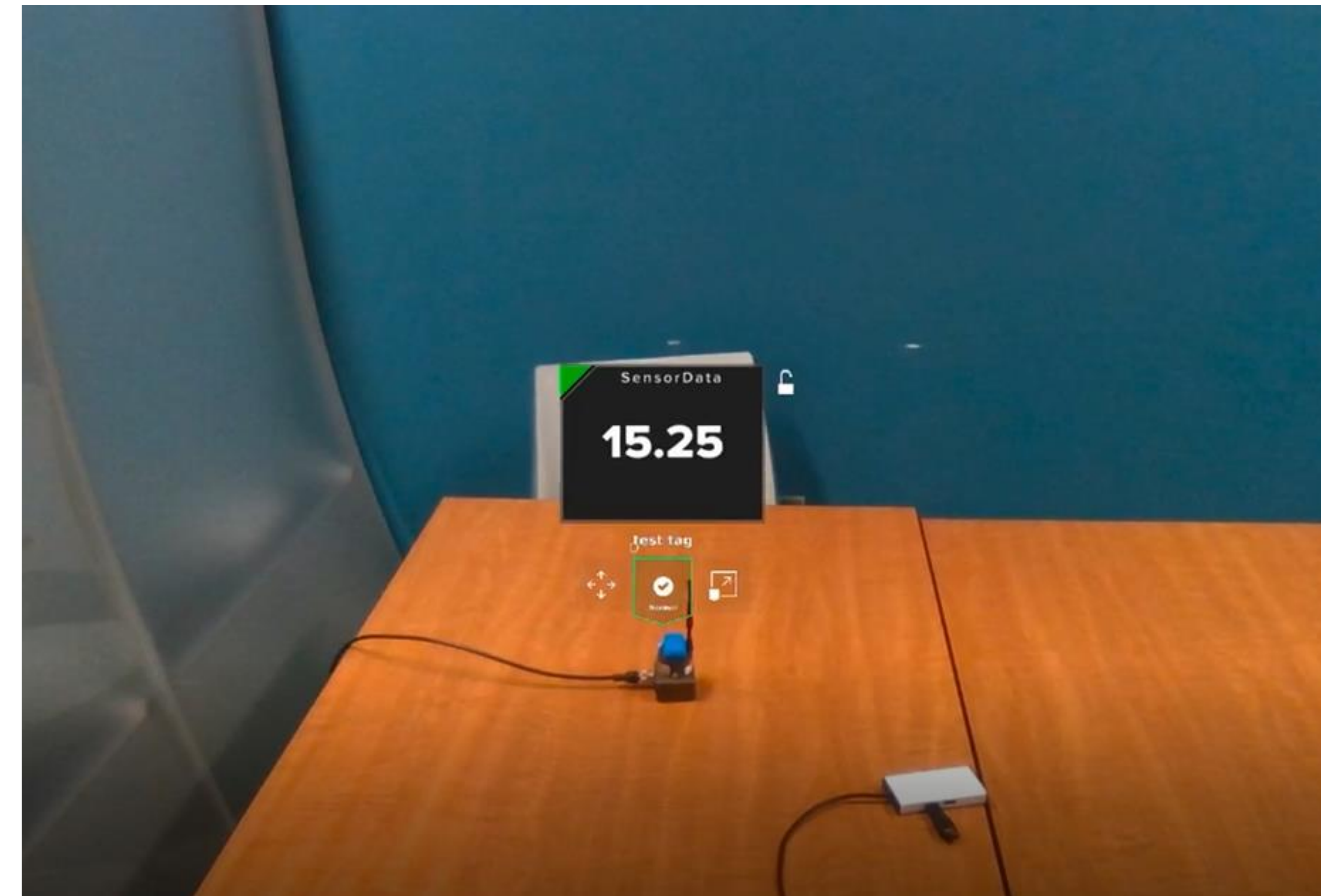

Figure 1. Team using DAQRI TAG application

Industry Uses

- Remote Expert Communication
- Process and Quality Improvement
- Professional and Industrial Training
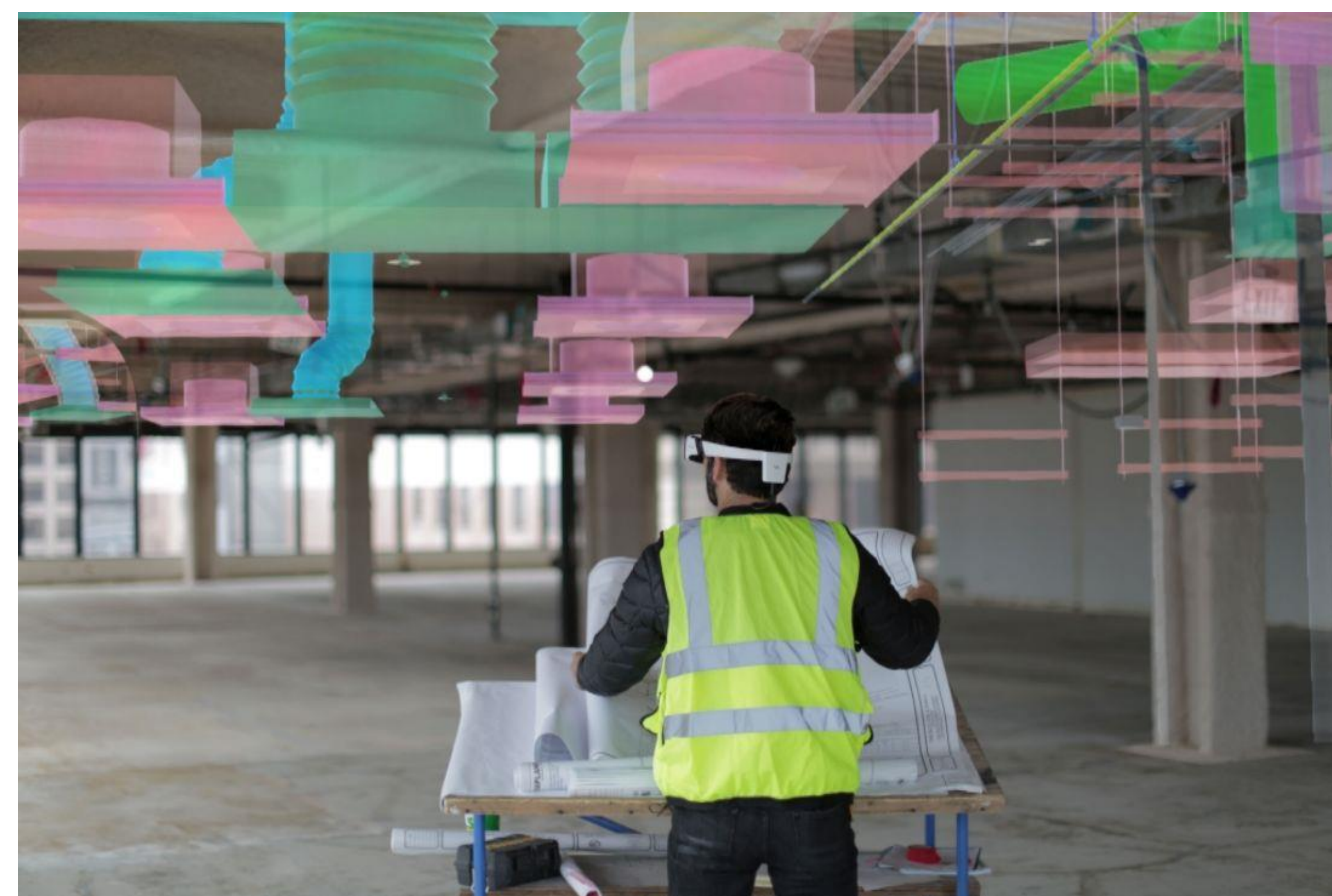- Constant Data and Information
- Prototyping and Visual Blueprints

Figure 2. Modeling and Visual Blueprint with DAQRI glasses

Conclusions

- More companies should invest planning time and resources into augmented reality
- Augmented reality has the ability to make business and industry processes much more efficient and organized
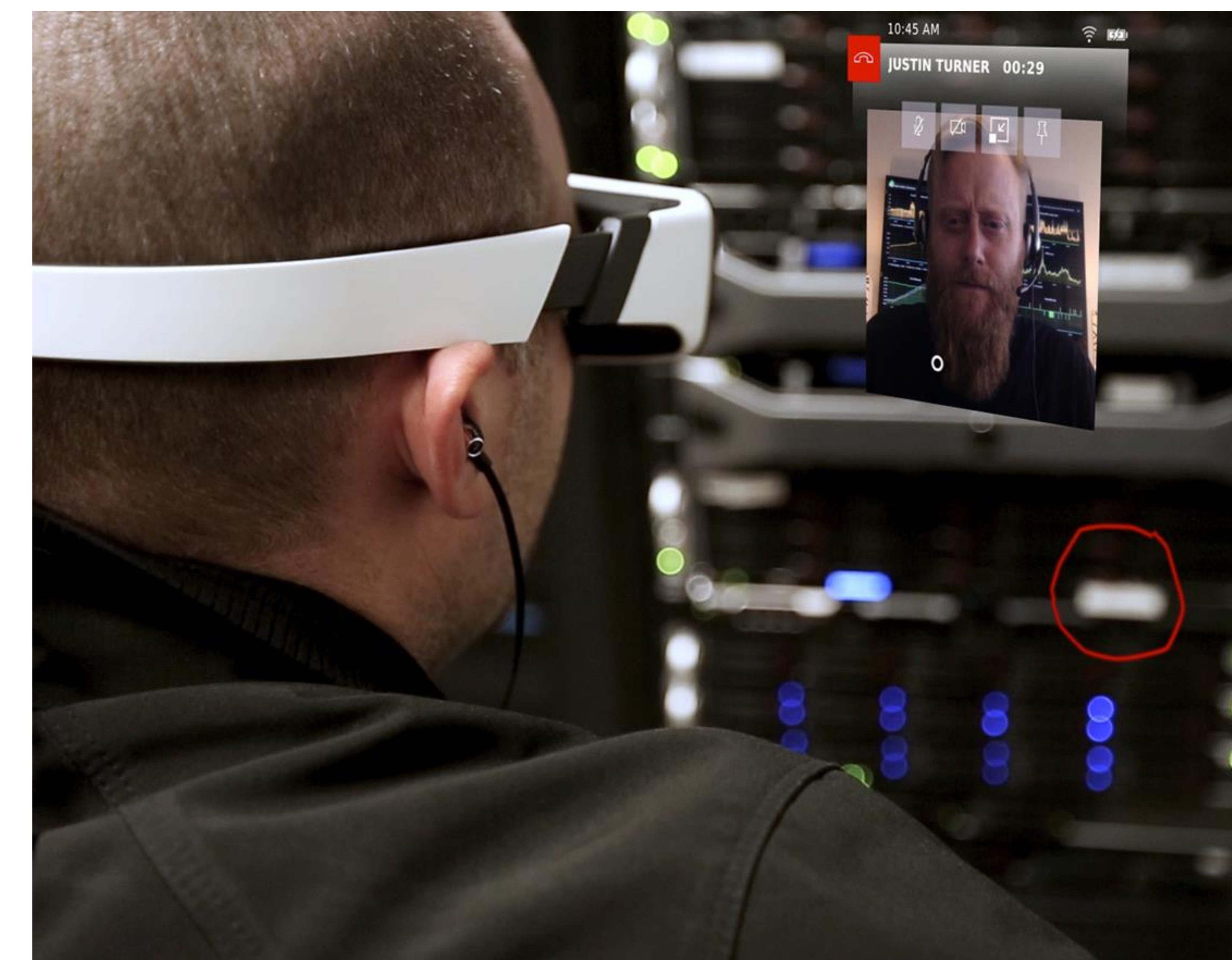- Companies should evaluate how to implement augmented reality into their processes.

Figure 3. Remote Expert with DAQRI smart glasses

Future Work

Future research can be done on different types of hardware and software. In addition, more research should go in to how companies could benefit financially from using augmented reality technology.

References

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