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AR and VR in Enterprises

Don't Limit Yourself!!!

Start Now! Research, Implement, and Learn.

Current Users of AR and VR

- Gaming Community
- Media/Communications
- ♦ Medicine
- ♦ Heritage
- ♦ Training (i.e. fire department, retail, tactile training)
- Marketing
- ♦ Retailers
- ♦ Sports
- ♦ Education



Interesting Use Cases

Mob Programming	Programming Assistant	Business Cards	Virtual Assistant	Collaborative Workspace/Prod uctivity	Work from Anywhere
Data Visualization: Budgeting, Amounts, Blockchain	Training: Unconscious Bias, Contracts, How to scenarios, role playing exercises	Virtual Experience for clients: Using AI, Machine Learning, Emotion Technologies to assist customers	Security	Agile Process: Stand-ups, Sprint Planning, Retrospectives, manipulation of architecture and tickets, faking co- location.	Meetings Virtual social space, Wayfinder, Scheduler,







BUT...

- ♦ ROI?
- ♦ Security?
- ♦ Technology/Software is not good enough
- ♦ Headsets are hard to wear
- ♦ I feel like I'm blindfolded
- ♦ Social Acceptability
- ♦ Not enough use cases
- ♦ I don't the technology is worth it
- ♦ I don't see the benefit/how this is different than what is being done already



Benefits

- ♦ Not limited by a 2D screen
- ♦ Workflows that Make Sense/Personalized
- Spatial Awareness
- Increased Productivity
- Enhanced Communication
- ♦ Real Time Collaboration
- Shared Space for Distributed Teams
- Less Time in Meetings
- Consumer Tech Moving Forward
- ♦ Better Understanding of Data/Concepts
- Effective Training and Education
- More Information Retained



Fixed Costs	One Off Costs	Relative Costs	Total Costs
Developers	Headsets (AR hi-end: \$1,000-2000. VR high end: \$399-800, Medium: \$199-399, Lo: 10-100 + phone)	Server	VR: \$10,000-60,000 For a high performance MMORPG costs are upwards of \$100,000
Designers		Time (100-800) hours dependent on complexity + support and testing	AR: For a simple applications at least \$50,000 for an app like Pokemon Go upwards of \$1 million
Testing			
Support			
Subscriptions to Software (Vuforia, Unity, etc)			

What is Needed to Start Developing/Using?

- ♦ 3D models
- ♦ Server
- Platform to host applications
- Software to develop (Unity, Vuforia, ARCore, ARKit, etc)
- Location Based, Image Tracking, Environment Scanning, SLAM(Simultaneous Location and Mapping)
- ♦ Headsets? Mobile? Standalone?
- ♦ AI, Machine Learning, Emotive Tech
- ♦ DESIGN!!!

Don't Limit Yourself!!

The Time to Start is Now.

Start Researching, Developing, Testing, Implementing, and Learning.

Sources

Current Users of VR:

https://www.flickr.com/photos/saulalbert/36063786755

Use Cases:

https://roundupreads.jsc.nasa.gov/pages.ashx/203/Faking

https://pixnio.com/computer-arts/photomontage/artificial-intelligence-virtual-reality-programming-virtual-informatics-creativity

Benefits:

https://www.pexels.com/photo/grayscale-photography-of-woman-wearing-virtual-reality-headset-1573857/