Realizing the Untapped Potential of VR/AR for Libraries

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Realizing the Untapped Potential of VR/AR for Libraries

A RUSA Webinar
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A Bit About Me

- Senior Program Manager at the University of Michigan Library
- Previous experience at small academic, corporate, and special libraries
- Edited books focused on library technology
  - Top Technologies Every Librarian Needs to Know (2014)
  - Exploring Discovery (2016)
  - New Top Technologies Every Librarian Needs to Know (2019)
- Editor of *Information Technology and Libraries*
Beyond Reality: Augmented, Virtual, and Mixed Reality in the Library

Case studies about “Realities” in the Library

Plus a chapter on U.S. legal considerations

Topics today

- What libraries are doing today
- What we should keep in mind
DEFINITIONS
Definition: Reality

REALITY

The real-world services, tools, items, and interactions that humanity has grown up understanding, living in, and working with.
Definition: Augmented Reality (AR)

AUGMENTED REALITY

An enhanced version of reality created by the use of technology to overlay digital information on an image of something being viewed through a device (such as a smartphone camera)

EXAMPLES

Heads-up displays in cars, Pokémon Go, Layar, Google & Apple Translate tools

https://www.merriam-webster.com/dictionary/augmented%20reality
Definition: Virtual Reality (VR)

VIRTUAL REALITY

An artificial environment which is experienced through sensory stimuli (such as sights and sounds) provided by a computer and in which one's actions partially determine what happens in the environment.

EXAMPLES

$$$ Oculus (Rift or Quest), HTC Vive, Sony Playstation VR
￠￠ Google Cardboard
The continuum of experience that extends from slightly augmented experiences to something completely virtual.

Based on [http://www.teachingthroughmuves.info/](http://www.teachingthroughmuves.info/) by Giovanni Vincenti
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STARTING POINTS
Provide the Experience — Entry Level

Headset:
Google Cardboard & a smartphone

Content from lots of sources

I like the *NY Times* VR experiences, but there are many.

Put your library’s local history into the community

Have a historical image collection? Geotag it so that users can see what the street looked like “back then”

Add information about historical figures to places they lived, worked


Provide the Experience — High End

Headset: HTC Vive, Oculus Rift, etc.
Dedicated space (6’ x 5’)
Dedicated hardware

Virtual Meeting Space — We’re Suddenly There

Anybody recognize this virtual world?

Way for library patrons to meet virtually -- job interviews, education

So many social norms for the majority of us to figure out

https://upload.wikimedia.org/wikipedia/commons/c/c6/Second_Life_11th_Birthday_Live_Drax_Files_Radio_Hour.jpg
HyacintheLuynes [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]
CONSIDERATIONS
Practical Considerations

Budget

Space -- we will be back together one day

Training (library staff & library users)

Security

Staying up to date

VR can make some users motion sick; hasn’t been completely solved
Social Considerations

Augmented, Virtual, Mixed Reality - this is all new

Digital divide could grow even greater

Common sense a great guide
Legal Considerations

A great deal about intellectual property law and virtual reality not yet decided (legally)

Many parallels to 2D image and print world

Who owns rights to one’s digital avatar, digital creations?

What can be included in a created virtual space?

How do legal considerations change if the library is “publisher”?

DYSTOPIA or UTOPIA
Dystopian or Utopian?

We’ve seen movie examples of virtual reality used for better and/or worse.

- *The Matrix*
- *Avatar*
- *Ready Player One*

As a species, we excel at taking technologies to extremes

Anything good (or bad) we do in the real world WILL happen in the virtual

People are people: any challenges you might have with library users in the real world will have a virtual
Extended Reality Is Here — It’s Just Not Evenly Distributed. Yet.

However it shapes up, augmented & virtual reality are that: reality

A lot to figure out

But so many opportunities to take part and expand the library’s presence

With apologies to William Gibson for being the umpteenth person to misquote him.