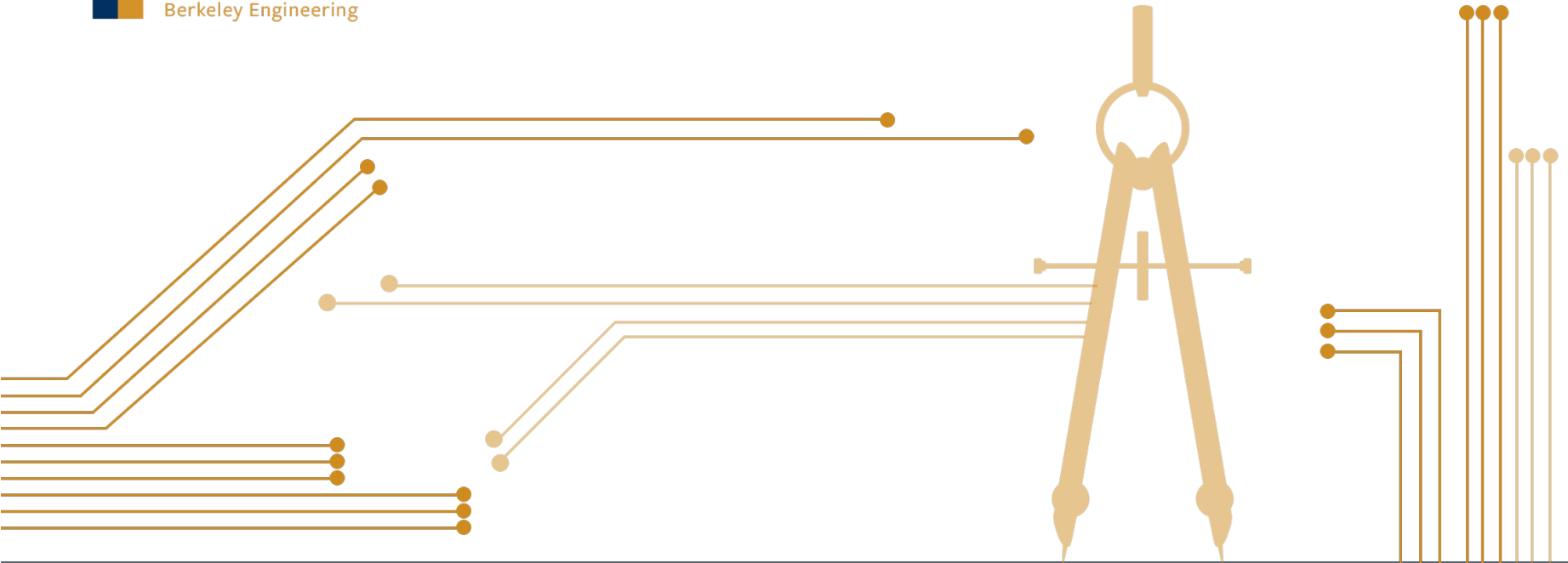




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TV in VR

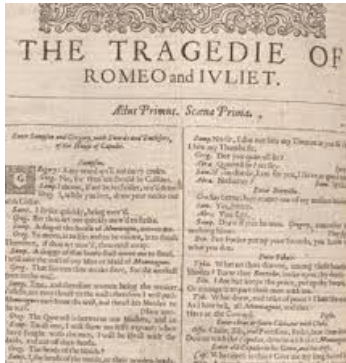
Changho Choi, Peter Langner, Praveen Reddy, Satender Saroha,
Sunil Srinivasan, Naveen Suryavamsh

This work was created in an open classroom environment as part of a program within the Sutardja Center for Entrepreneurship & Technology and led by Prof. Ikhlaq Sidhu at UC Berkeley. There should be no proprietary information contained in this paper. No information contained in this paper is intended to affect or influence public relations with any firm affiliated with any of the authors. The views represented are those of the authors alone and do not reflect those of the University of California Berkeley.

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Storytelling Evolution

Plain Text



Pictures



Video - Cinema



Video - On Demand

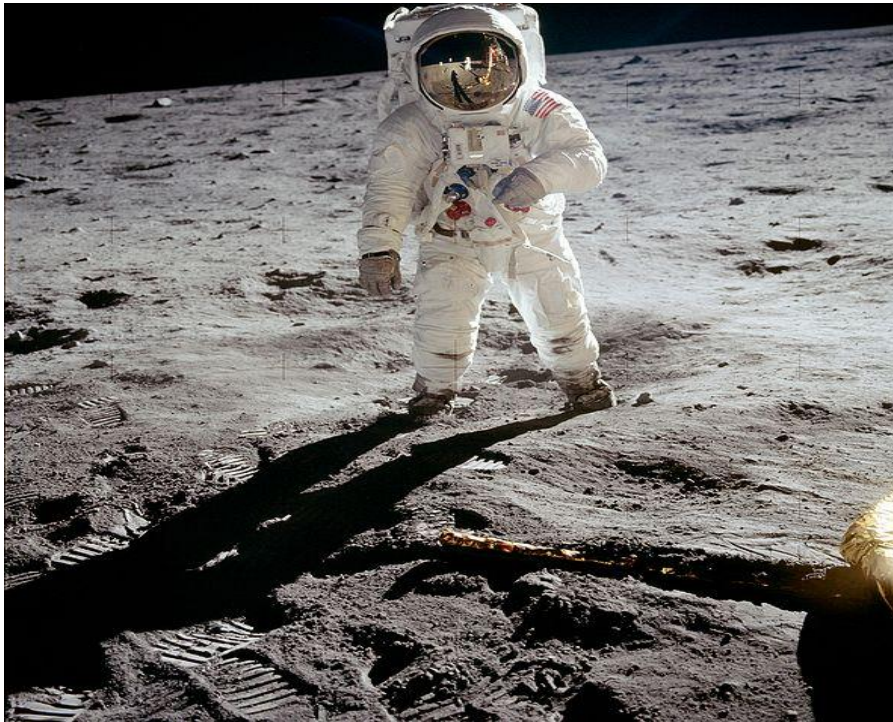


Virtual reality is the next step in the evolution of storytelling

Seminal events in history

Moon landing

- Culmination of grand vision and technological breakthrough that captured the public's imagination



How did people experience it as it happened ?



Experience limited to 2nd hand narration of events or limited accounts of the event

How did people experience Super Bowl 49 ?

- 115 million people watched Super bowl 49 on NBC



- 395,000 Tweets Per Minute (TPM)
- Super Bowl XLIX which engaged 1.36 million people per minute on Facebook



Emmitt Smith ✓
@EmmittSmith22

[Follow](#)

That was the worst play call I've seen in the history of football.



7:05 PM - 1 Feb 2015

↩️ ↻️ 37,680 ❤️ 31,488



Pat McAfee ✓
@PatMcAfeeShow

[Follow](#)

Marshawn Lynch is all like... "What am I here for?"
#SuperBowl49

7:00 PM - 1 Feb 2015

↩️ ↻️ 1,847 ❤️ 1,842

- Technology is continuously enabling how we experience events
- Virtual reality will be the next frontier

Why VR ?

- Immersive experience from inside
- Not just an observer from outside the story
- You are part of the story



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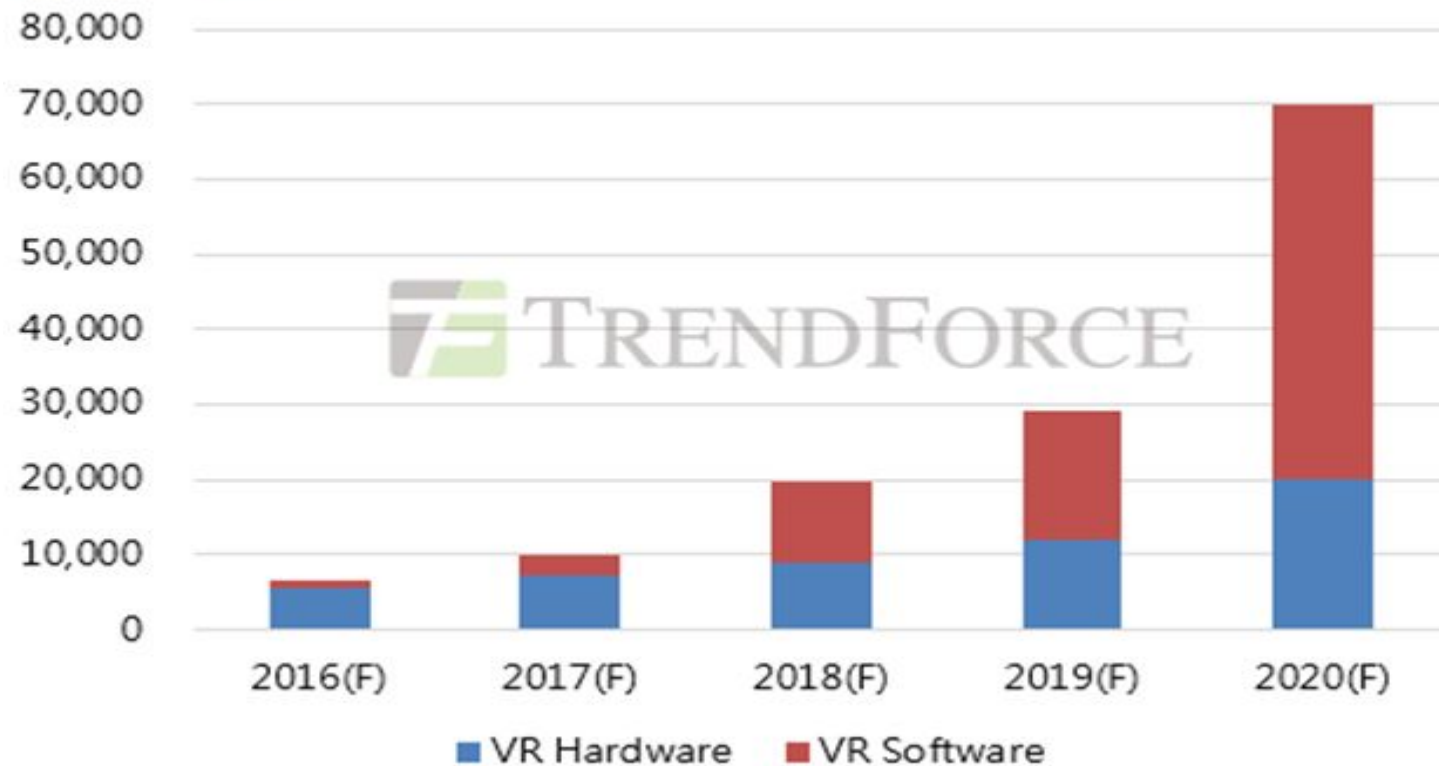
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Market opportunity

Figure: Global VR Market Value, 2016~2020

Unit: US\$ Million



Source: TrendForce, Dec., 2015

VR evolution



- Stereoscope invented, enables 3D with depth perception
- First VR HMD by Ivan Sutherland
- SEGA announced virtual headset for game arcades
- Nintendo released virtual Boy, a vr style
- Oculus Rift dev team raises 2.4 million on
- Facebook buys Oculus Rift. • Google
- Oculust Rift launched to public • HTC Vive
- AR/VR full scale • Teleportati on.



Why now - what is different this time ?

- **Computing power**
- **Latency**
- **Resolution**
- **Head Tracking**
- **Price Point**
- **Content EcoSystems**

VR applications

2016

Games

- Sony Playstation
- Oculus
- HTC Steam



Training

- www.strivrlabs.com



Entertainment/Theme park

- Sixflags



3 Years

Advertisement



Tourism

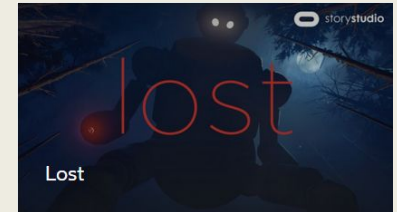


Entertainment/Sports



5 Years

Movie



Healthcare



Case study 1: Gaming Industry

Sony: PlayStation VR

- Console
- Head Mounted Display
- Game titles

Disrupt/Partner

- Nintendo Wii
- Traditional gaming like EA



Case study 2: Sports and Entertainment

NextVR

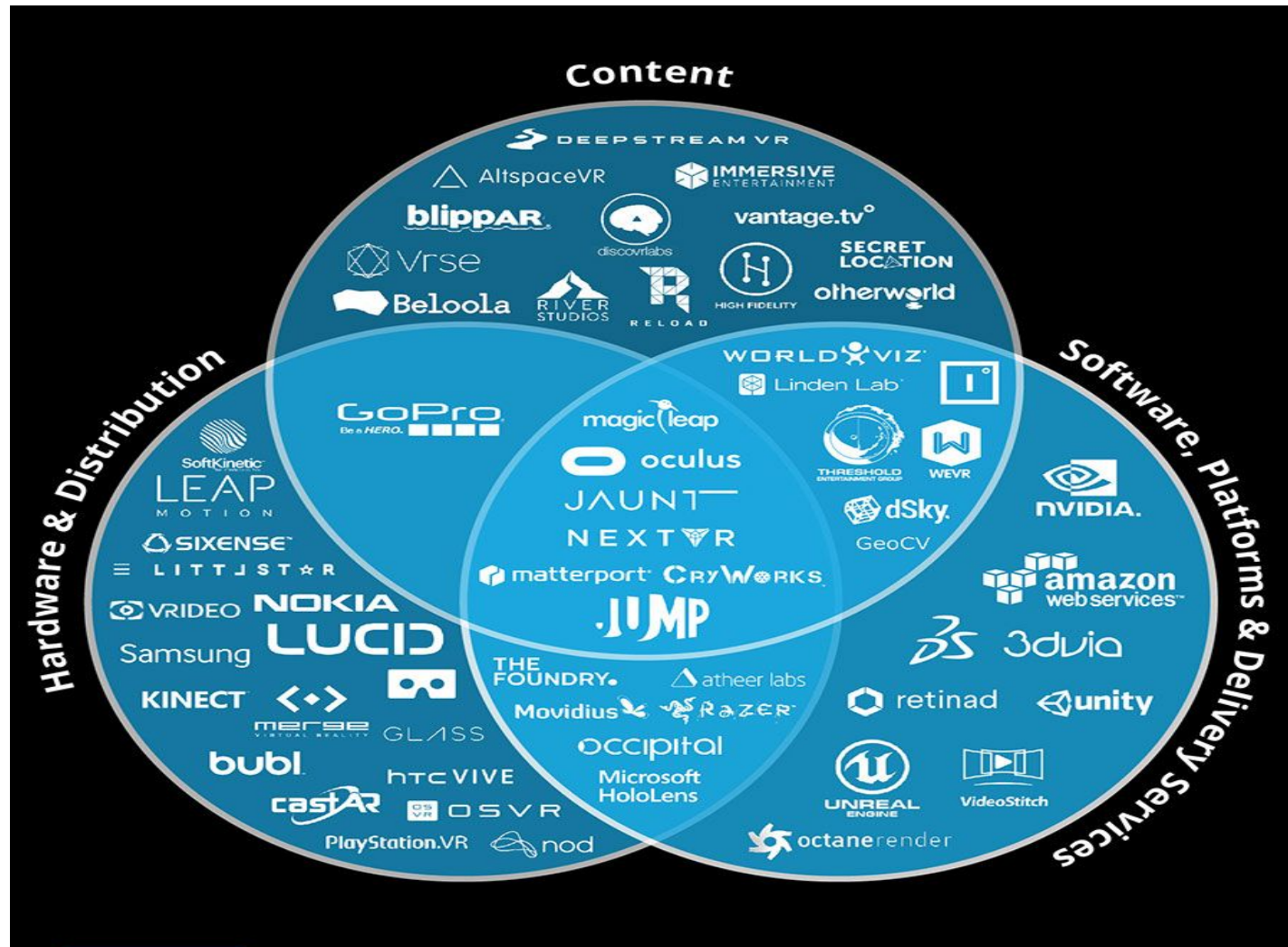
- Live Sporting Events
- Own Camera Capture
- Delivery

Disrupts/Partners

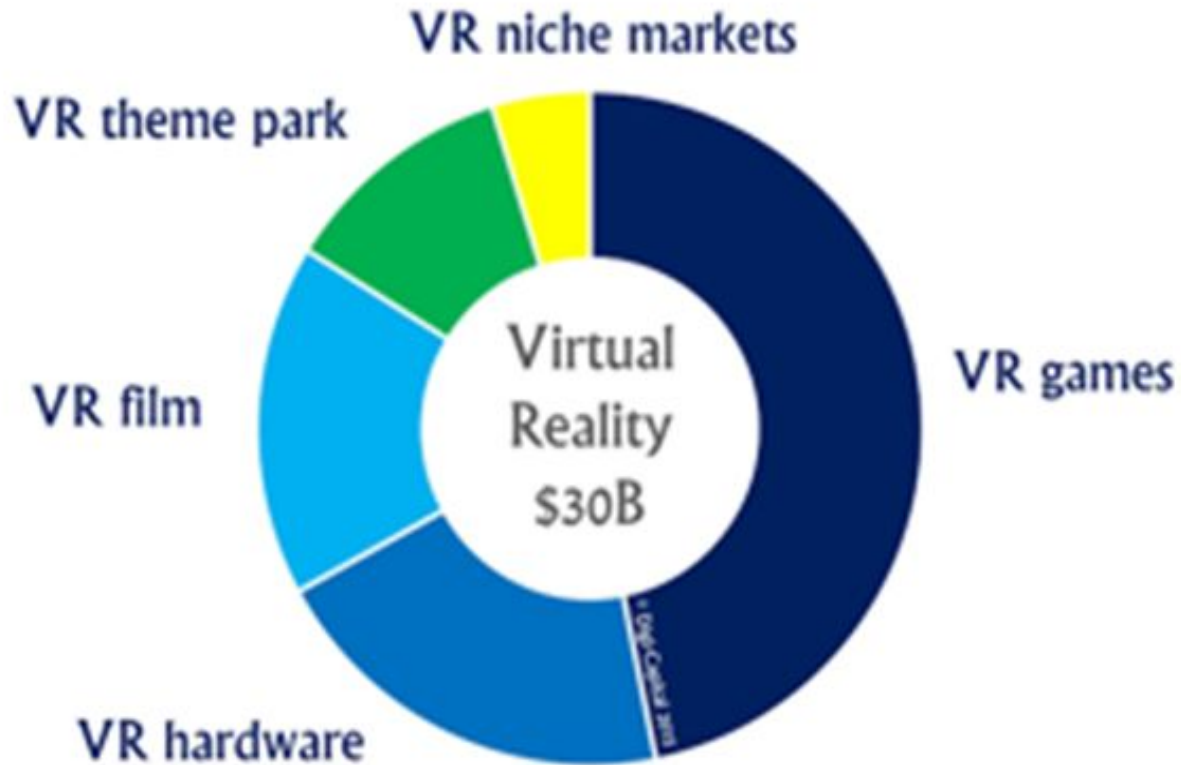
- TV Broadcast Studios
 - Fox Labs (partner)
- ESPN, CBS, NBC ready for disruption



VR EcoSystem

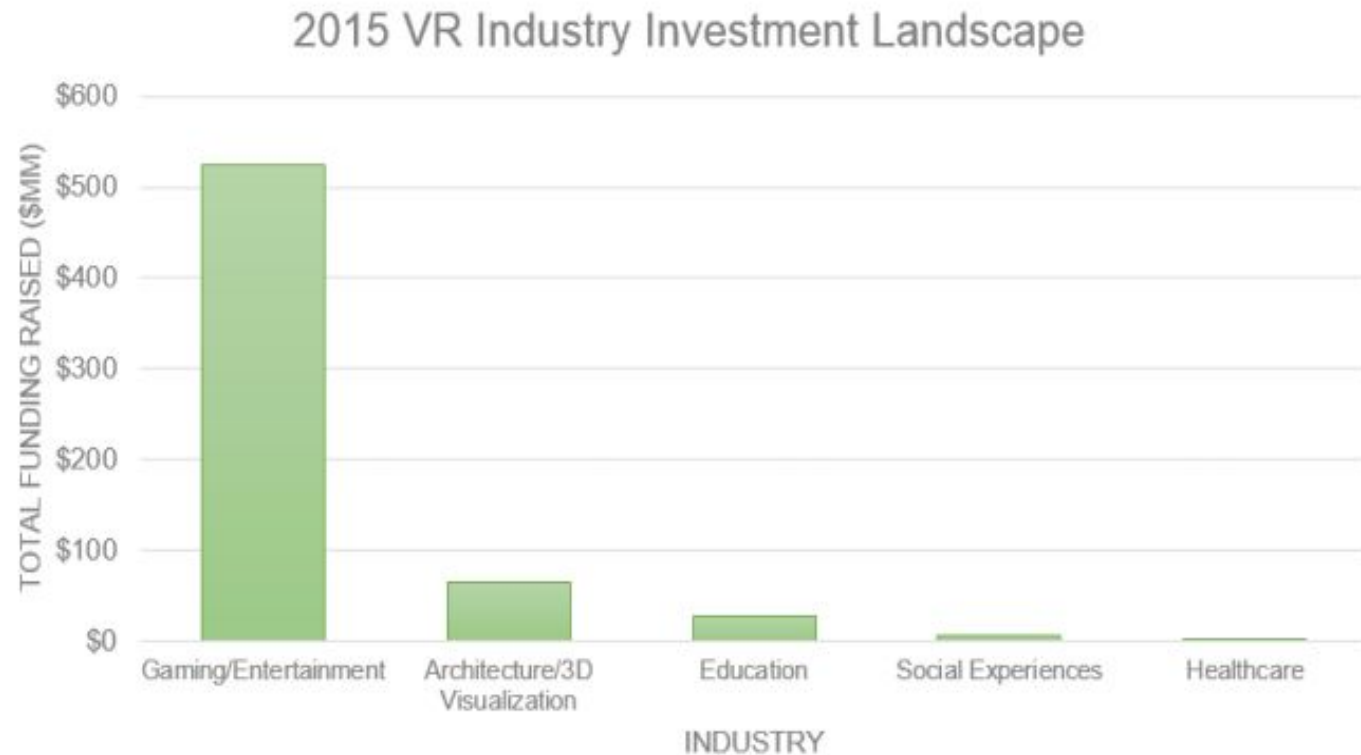


Where is the money ?



Forecast market size \$30B by 2020
Source: Digi-Capital

2015 VR Investment Landscape



Source: Greenlight VR estimates

Changes and Challenges - Mark's minions

- Motion sickness by image latencies
- Wearable Hardware
- Society:
 - next gen growing up
 - social skills, conventions
 - global connections:
 - friends, interactions
 - Immersive news - NYTimes VR
 - addiction: don't like reality, create your own



Conclusion - VR experience



https://milkvr.com/view/WCBx_30Oah8