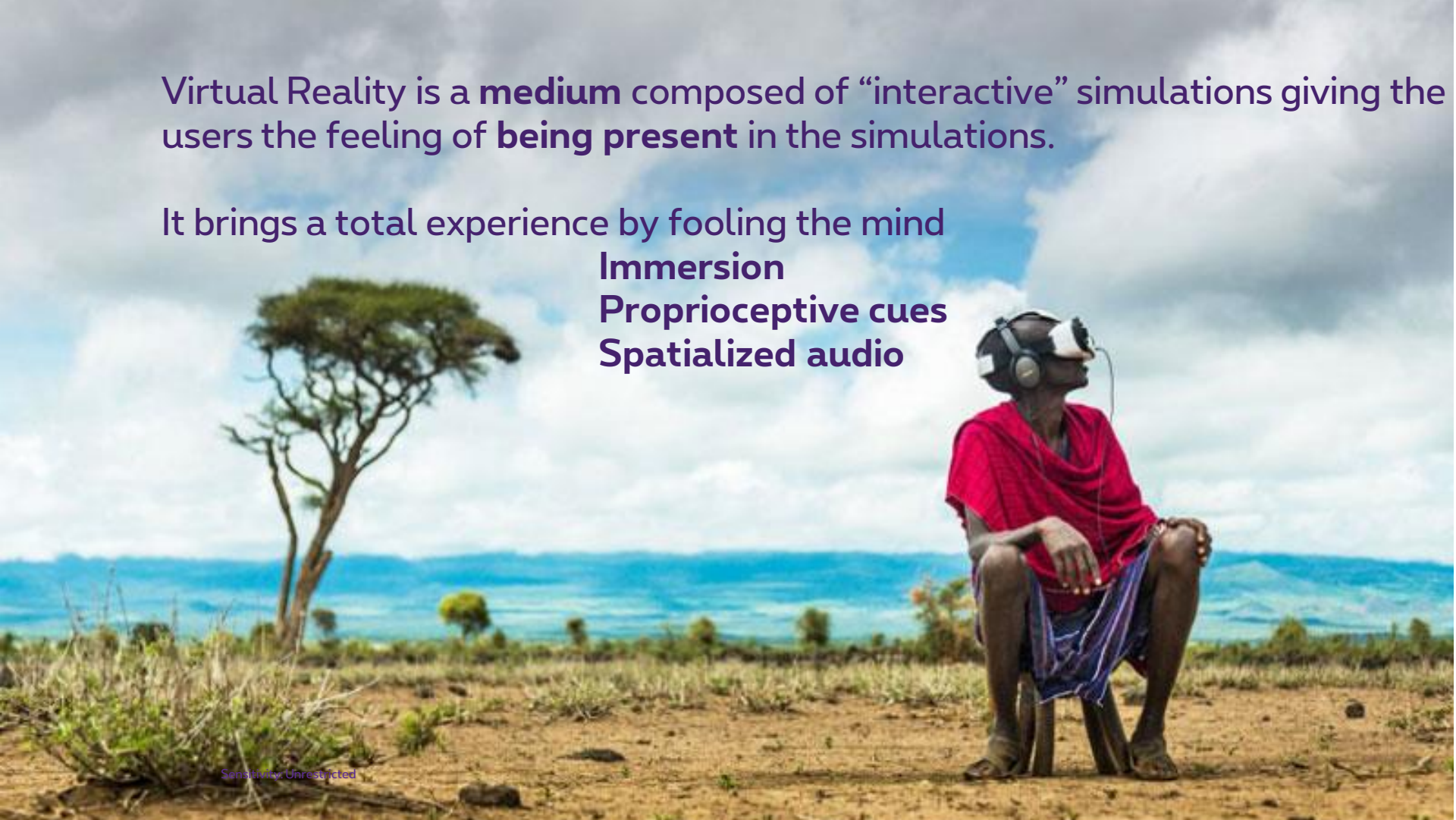
Virtual Reality: a user approach

Stéphane Cambier

Virtual Reality is a **medium** composed of “interactive” simulations giving the users the feeling of **being present** in the simulations.

It brings a total experience by fooling the mind

Immersion
Proprioceptive cues
Spatialized audio

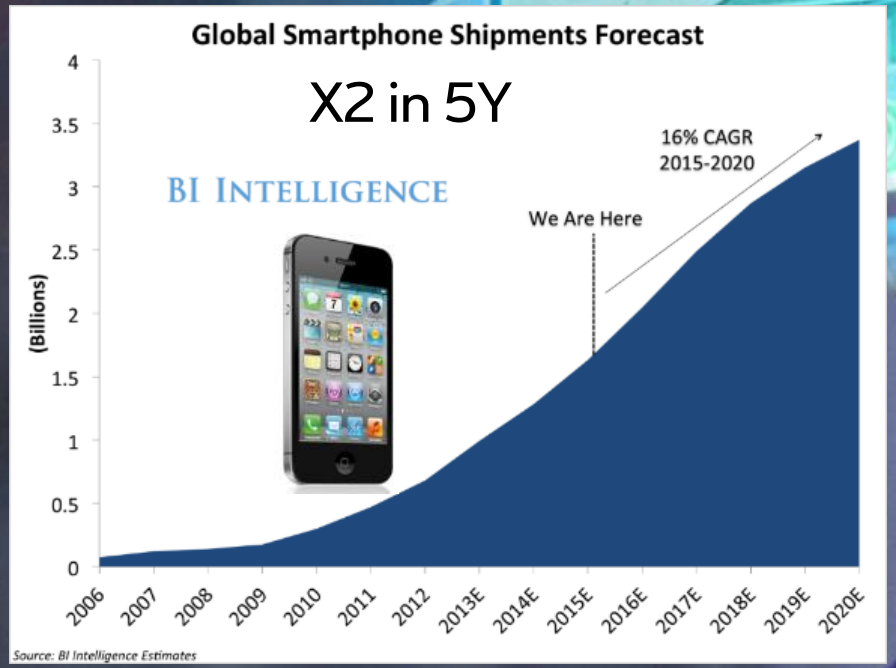


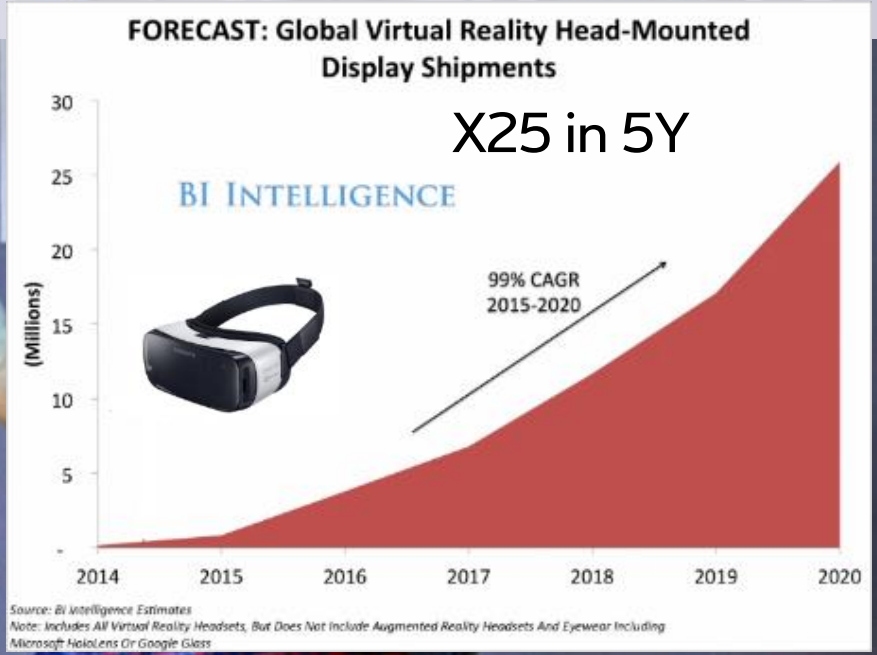
Sensitivity: Unrestricted

VR Cube
@ Tilburg

Market comparison

Compound Annual Growth Rate





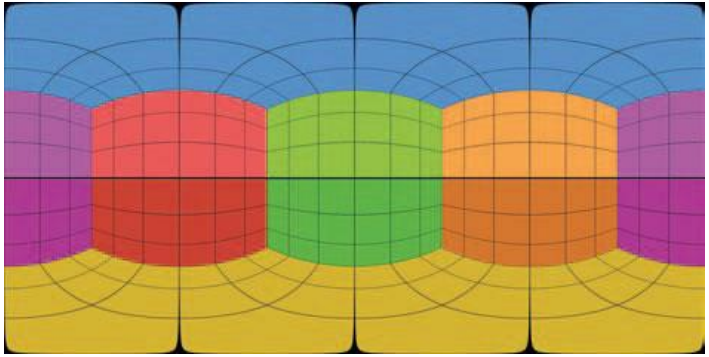
VR activity in Brussels = 1200 people; 40 firms concerned

The technology.

Let's geek !

Equirectangular pictures

n pixels



2 n pixels

Equirectangular movies

Some amazing transformations

(done with pano2VR)

You can even print your pano in 3D
(Scandy)

Some VR cameras

Go Pro

Jaunt

Nokia Ozo

Panono

Giroptic

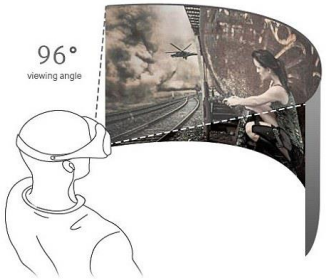
Some VR cameras

Ricoh Theta S
350 Euros

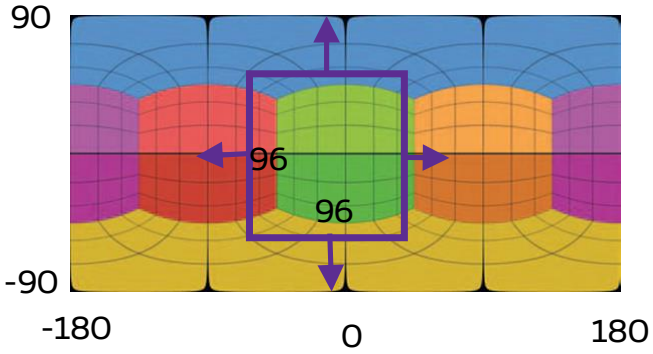
LG 360
5.1 sound

Samsung
Gear 360
400 €

Nikon Keymission 360
(Q1 2016) 4K
Waterproof



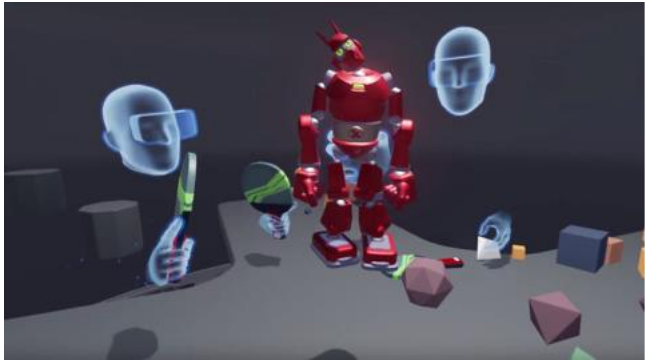
Best in 4K or 8K
90-120 fps
50-80 Mbps
Lagtime<20 ms



SBS

Accessories

controllers



Occulus toybox

Some VR headsets (basic)

Stereoscope
19th century

Viewmaster
1939

Google cardboard
DIY
3-15€

Some VR headsets (better)

LG / G3

Google Daydream

Huawei

Samsung VR Gear

S6/7 *100 €*

Oculus store

Some VR headsets (best)

Occulus
699€
store

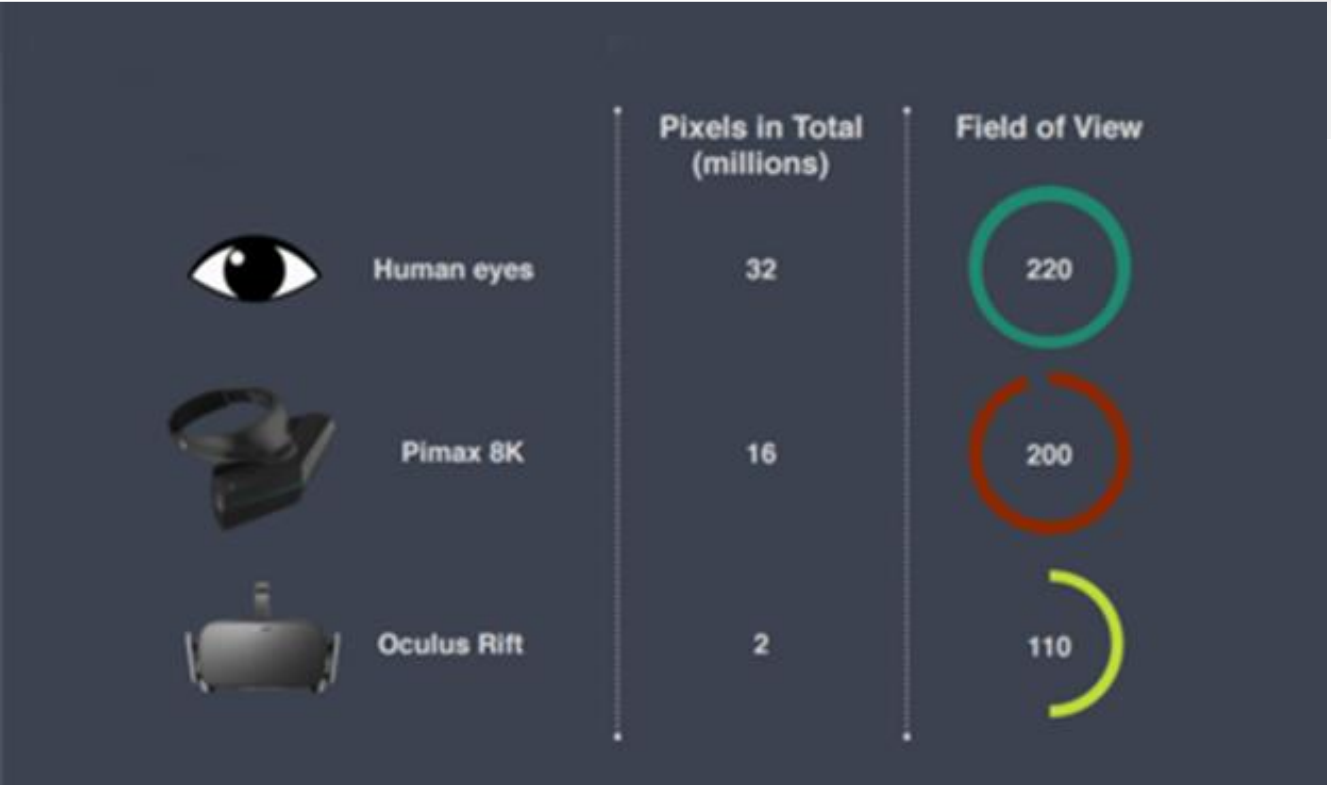
HTC Vive
899 €

HUAWEI

GoPro

?

Some VR headsets (ideal)



Startbreeze (IMAX)

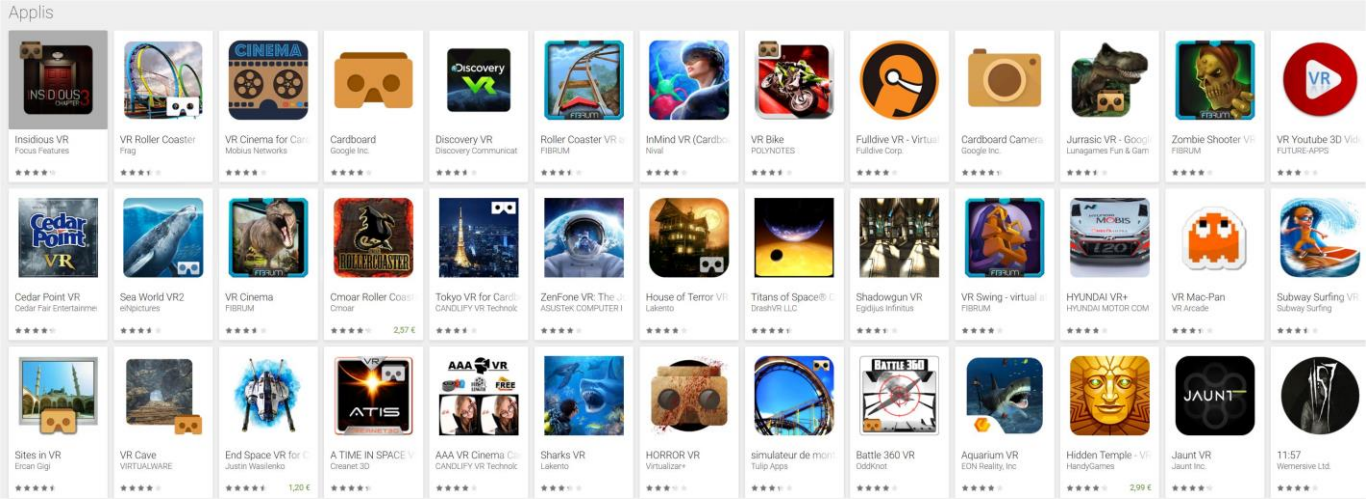
Pimax (4K/eye, 200°)

Price ?

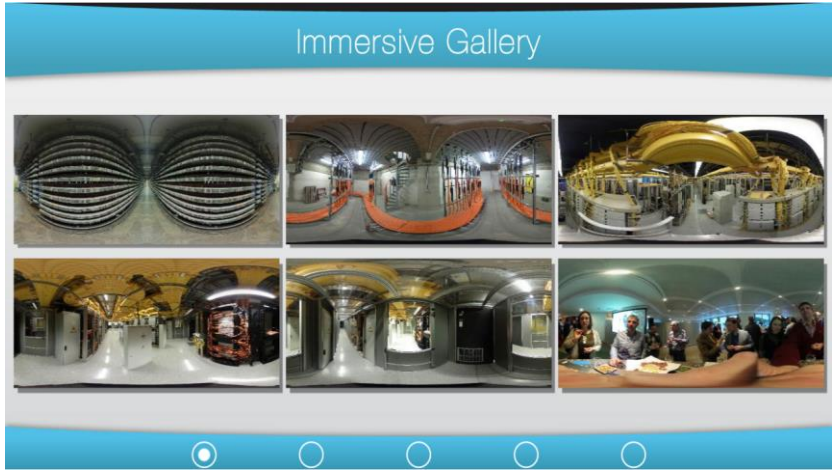
PC processor ?

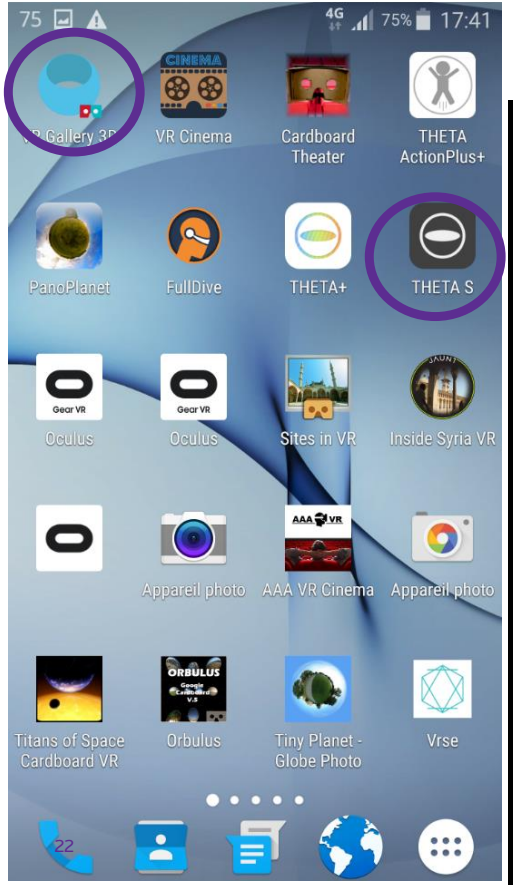
VR appli & viewer

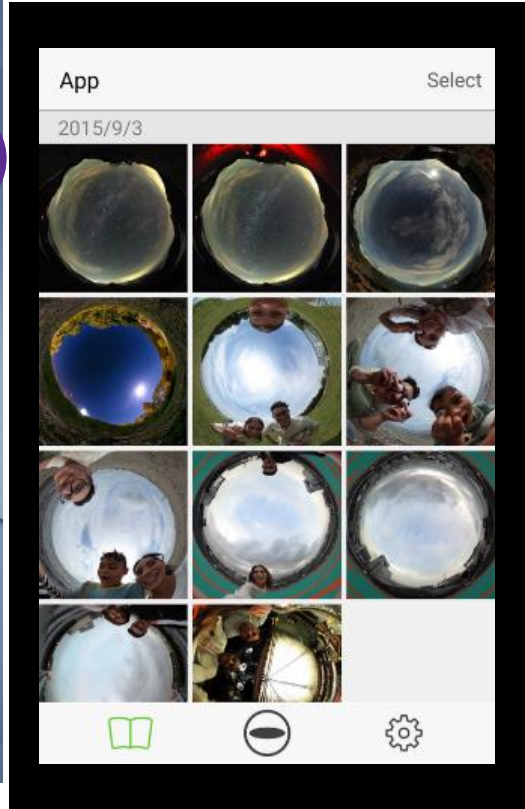
- Android VR (Nougat), iOS …
- Virtual visit e.g [roundme]
- Social network : Altspace VR



VR appli & viewer







Imagine …

What could be possible if VR was available some years earlier

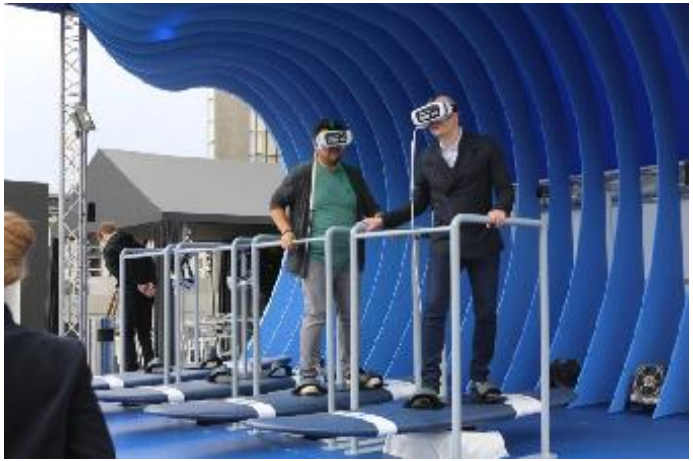
Obvious benefit of immersion for some movies

for some games

399€
13 Oct 2016

and some events

Leisure Park in VR



MK2VR

faire de l'escalade,
visiter des fonds marins,
faire des courses de rameur interplanétaires,
se promener aux côtés des dinosaures
voler comme un oiseau avec le fameux *Birdy* (sensations garanties)
être dans la peau d'un assassin dans *Assassin's Creed*
chasser les impériaux aux commandes d'un X-Wing dans *Star Wars Battlefront*.

Every important event, personal or societal, could become an incredible immersive experience

Opportunities

Virtual visit
-> roundme

Branded cardboard

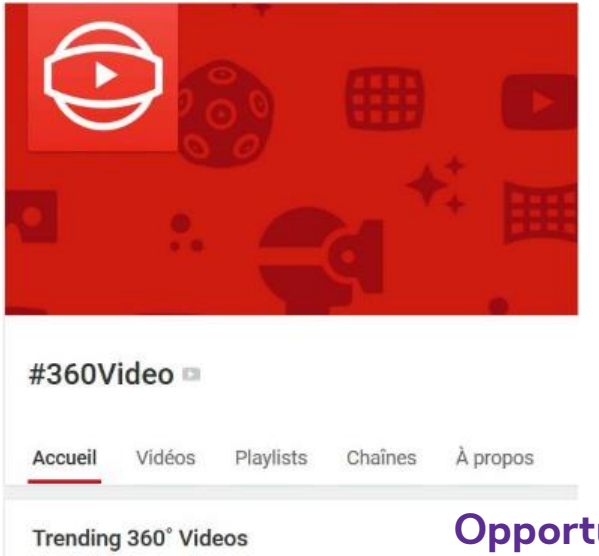
*Cardboard **used as packing** to sell smartphone*

Shot for iPhone

VR integration in smartphones

Sensitivity: Unrestricted

Where to find VR content ?



Opportunities :

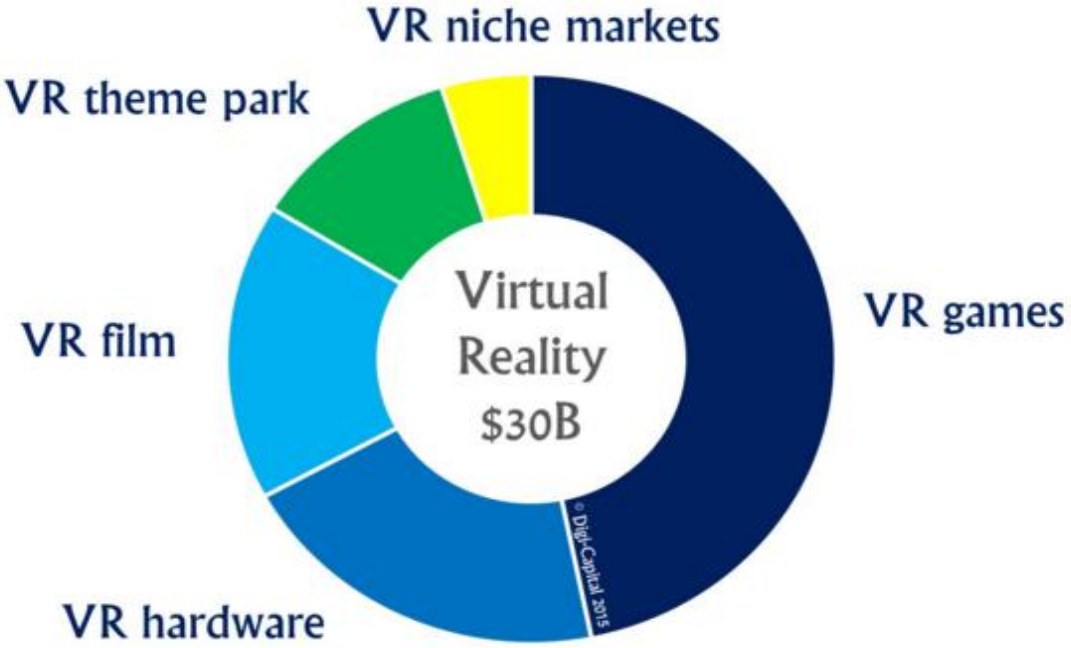
PXS Promo movie

PXS pictures gallery on flickr,

(Netflix)

(360 channel on Proximus TV, with smartphone remote control) …

Sensitivity: Unrestricted



VR Revenue Share 2020