

Key XR content projects to pave the way for 5G



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1. VR / AR Market



5G as a Driver of AR / VR

High coverage and latency are critical for AR and VR applications

The carrier serviceable addressable market (SAM) opportunity in AR/VR by 2025 is expected to reach more than **\$93 billion**, 30% of the total value of AR & VR opportunities.

Content and platform revenue depend greatly on service launches, **content agreements**, and activity within the space – some mobile operators have begun activity across both the content and platform segments for VR and AR.

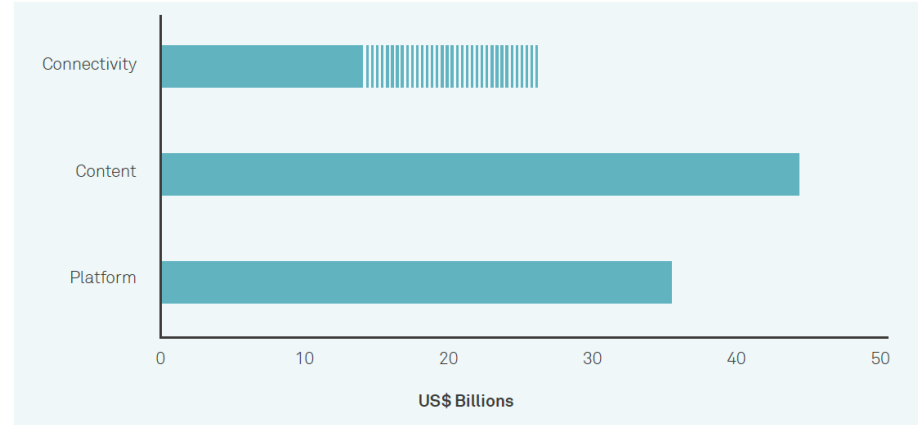


Chart 5: Carrier Addressable Opportunity in AR/VR World Market, 2025

(Source: Wireless X Labs, ABI Research)

5G potentially offers a number attractive features, particularly high reliability and stability along with greater security in connectivity

2. AR/VR Perspectives



5G

Emergence and Rise of Cloud XR

Cloud XR (AR/VR/MR) is the key for immersive businesses :

Processing Power will be transferred in the Cloud instead of hardware computers or headsets = smaller and cheaper headsets

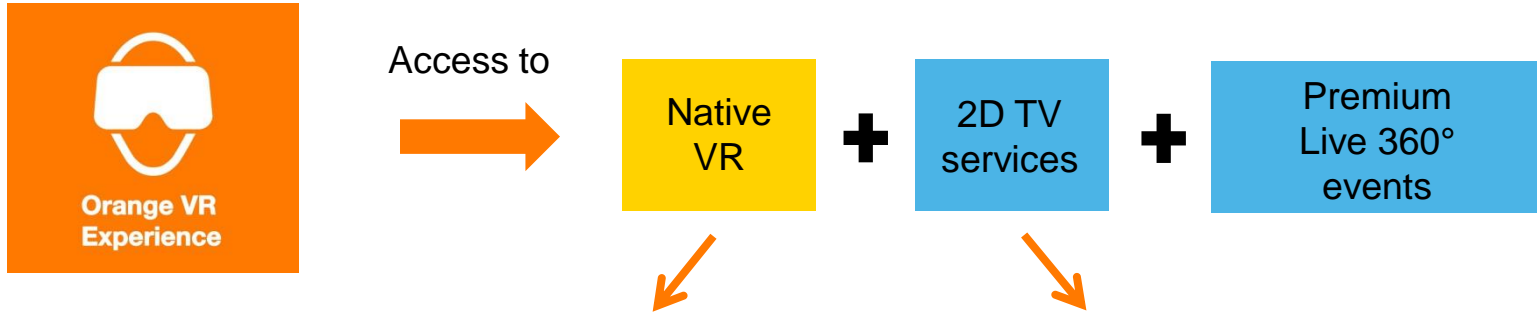
Hardware prices and technology will not be a hurdle anymore : **MOBILE EDGE COMPUTING**



To reach its full market potential several key milestones must be satisfied :
5G is one such key enabler, enabling Cloud AR/VR to help solve device and cost constraints
pressuring AR & VR

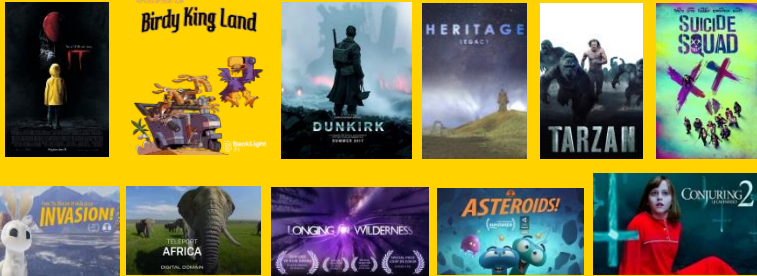
Orange VR Experience

Paving the way for VR portal content



VR native content catalog

- Objective : offer premium VR content in streaming from big studios and independent rising talents



Orange 2D TV services

- Objective : Promote TV services, be ready for mass market VR usages

- Test of different features:

- Social interactions in the Cinema room
- Advertising in a VR environment



A New Partnership : Iconic Engine

Expand the scope of possibilities

Since January 2019, OVRXP has changed its “back office” platform partner, already chosen by Telcos



Streaming of the contents:

Heavy downloads and weight curbed the growth of the application.

With Iconic Engine all the 360 experiences are now streamed

Augmented Reality:

Our new platform is now AR compatible.
AR is essential and will take a big part of the market.

We will be able to implement AR Contents on the platform

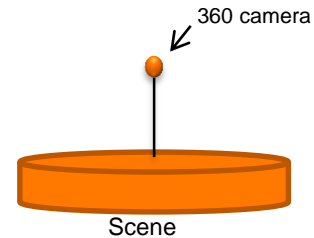
4. Orange VR Experience Evolution



Concert Hyphen Hyphen 360

CONCERT LIVE VR

On January 23th, Orange Content organized a concert live in VR. The band Hyphen Hyphen made a 30 min private show case. It was **live on the app Orange VR Experience** and in 9 Orange Stores in France. The live was made for VR with a camera 360° in the middle of the scene. the experience is now available on IOS, Android and Oculus during 1 year.



OVRXP possible evolutions

Develop an Orange VR Experience Magic Leap version ?

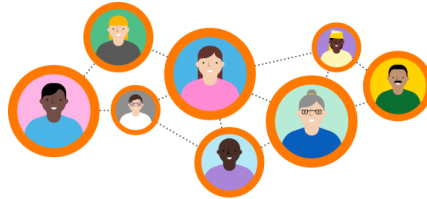
- AR contents
- TV 2D



- Be on the top of techno
- Be ready for AR revolution

Develop long term new services ?

- Add a 2D TV live (TV d'Orange) in the app to complete the access of TV 2D replay
- add social interaction between users of the app



- Expand 2D TV services
- Build stronger relation with the users

Live VR streaming event ?



Focus on “Immersive Live Event” use case

Sport / Concert events



4K/8K Streaming over 5G

Orange customers to enjoy a premium experience



- At specific **locations** (shops, fan zone...) or at **home**
- On VR **headset** and **smartphone/tablets**
- **Live** or replay **on-demand**

Product development strategy

Under evaluation

	CMS Encoding
	FoV*
	CDN
	Social
Orange VR experience	



*: Field of View (FoV) technologies allow for 70-80% bandwidth savings and scalability (e.g. 8K streaming at 20-25Mb/s instead of 100Mb/s)



Thank You