Virtual Reality Primer
Virtual Reality

Virtual Reality (VR) is the hottest topic in tech these days for a good reason. Virtual and augmented reality technologies will change the way we communicate, learn, are entertained and create.

VR breaks down the wall between the virtual and physical worlds allowing users to step inside the digital world such as a piece of film or an interactive simulation. This creates new exciting ways for users to interact with media content enabling them to not just be passive consumers but active participators.

VR has been used in high end research and military applications for many years, but recent innovations in mobile and display technologies means this is now ready for the mass market.

Key milestones in VR:
- Facebook invest $2bn in VR technologies in 2015
- New York Times distribute a million free Google Cardboard headsets to its readers
- Major hardware launches from Oculus, Sony, Samsung and HTC set for H1 2016
- VR content win Emmy awards in 2015
- Youtube makes all videos VR compatible

Why use VR?

From a brand perspective VR offers the opportunity to make deep more meaningful connections with your audience. It’s already been used by many of the world’s leading brands like Nike, Ikea, Volvo, Redbull to create impactful campaigns.

It solves a number of problems that brands typically have:
- Outreach fails to engage with their customers
- Customers cannot remember their marketing campaigns
- Little or no competitive advantage over their competitors

This is how it solves them:
- **Immersive** - users wearing a headset are completely immersed in your content meaning fewer distractions and more attention on your message.
- **Impactful** - the direct nature of VR means the intensity of experience is greater than traditional media generating strong emotions in its users and proven to result in behaviour change.
- **Memorable** - our brains are built to remember events linked to locations, this means that VR experiences have a much longer trace in the user’s memory.
- **Novel** - with high media and public interest in VR early adopters can benefit from favourable media exposure for their spend currently.
The Technology

You experience VR by wearing a headset that covers your eyes called a head mounted display (HMD). This supplies immersive 360 degree stereoscopic visuals that tricks the brain into thinking that you are actually in a virtual space. You have to try it to believe it. If you'd like a demo please get in touch.

A new generation of input peripherals allow you to reach out and manipulate objects in the virtual world in a naturalistic and easy way.

Today, there are two main types of VR HMDs.

Desktop VR

Desktop VR offers the cutting edge in terms of high fidelity VR experiences. The Oculus Rift is the best known of these types of headsets, but competitors are due on the market early next year. They contain an in-built display but rely on an external PC to drive them which is connected via a cable.

The headsets retail for around £250-£300, but you need to factor in the cost of the PC which typically brings the cost up to £1,400. We have these and can hire units to you for special events.

Mobile VR

Mobile VR combines regular smartphones like the Samsung Galaxy S6 with special optics to bring the cost and availability VR to the masses. The advantages are both portability and lower cost with the tradeoff being the level fidelity and complexity of the content that can be provided.

Headsets retail for anywhere between £5 and £120 but once you add the mobile phone the overall system cost is nearer £500-£600. Examples include: Samsung Gear VR, Google Cardboard, Zeiss One.
**VR Content**

VR can be used to capture real life events through the use of panoramic camera rigs or transport users to completely imaginary environments using computer graphic simulations. The right approach will depend on your use case.

VR has lots of great applications but we feel that the media works best in the following contexts:

**Experience**

Put your audience at the heart of the action. Whether it is test driving a car, flying a jet or playing world class rugby VR is the next best thing to being there. Why not capture your next marketing event in 360 surround video to give others the excitement of a launch event?

Redbull offers VR experiences alongside it’s extreme flying races so fans can experience what it is like to be in the plane.
Wear the Rose places the user at the centre of the national rugby team’s training session, commanded by coach Mike Catt.

Volvo let users drive the XC90 before it arrived in this immersive app for Google Cardboard.

Explore

VR can transport you to real or imagined places instantly. Take clients on a virtual walk around an apartment or hotel suite that may not even be built yet, do a tour round your factory or office place. Or why not transport them to a virtual showroom to view your latest products?

Marriott created a 4D sensory ‘Transporter’ that transported guests to a beach in Miami. It toured six cities.
Hacienda Patrón tequila distillery took clients on a virtual tour of its facilities using video and CG

Tommy Hilfiger Store gave their customers a front seat at their fashion runway presentation and could buy any items they liked.

Educate

VR is set to revolutionise education allowing students to virtually attend centers of learning, museums and galleries from around the world. In journalism, VR’s ability to see the world through another’s eyes allows for new empathetic possibilities. Research by Stanford University around environmental education showed VR can trigger real behaviour change.
For the United Nations General Assembly delegates were transported to Za’atari refugee camp near the Syria border.

VR allowed children to experience a historical re-enactment of The Apollo 11 mission to the moon and let them feel like what is was to be launched into space.
VR is being used for safety training for flight attendants, miners and oil workers. Allowing them to practice scenarios in a safe environment.

Entertain

Of course there is no better way to experience entertainment than through virtual reality. The games and movie industries are investing millions to create the next generation of immersive entertainment. The creative possibilities of storytelling is just getting started.

For Game of Thrones HBO created an experience that allowed users to ascend the wall in famed elevator
The Void are opening up a global network of theme parks in which friends can run around a real environment battling monsters and exploring strange worlds.

Paul McCartney allowed VR users to go on stage with him at one of his concerts.
About Mbryonic

Our Services

We offer end-to-end design and development service for your VR needs. This includes consultancy, design, development and deployment. We understand that VR is new for a lot of people and so we are happy to provide friendly advice on how to integrate its use into your brand in a free initial consultation. Contact us at info@mbryonic.

We'll work to develop a concept and we will devise an amazing experience that your customers will want to talk about to their friends. We advise on costing and look after all aspects of production for you.

Our Competitive Advantage

We are a highly experienced team that have a proven track record in delivering high quality VR and interactive content. We are also a small flexible organisation that keeps our costs low and allows us to provide a tailored personal experience. Mbryonic HeadQuarters are based in East London.

Our Latest Work

Veil

“Veil Groundbreaking virtual reality installation...” - crowdedbrain.co.uk

Critically lauded by journalists, Veil was our latest virtual reality exhibit. Showcased in the Barbican, Herrick Gallery, competition winner for Zealous X Festival and featured on the BBC and Wearable magazine.
Veil is an innovative art installation that uses virtual reality (VR) technologies to transport visitors to an alternate reality where they can experience art in new and extraordinary ways, and in the process subvert the gallery experience. View the video here.

Audience Member Reactions:
“it was surreal, it made me jump. I never experienced anything like that in my life”
“It was quite stunning and a certain moments startling.”
“The 3D is incredible, just felt really immersed”

Play Sage Gateshead

“Virtual Reality Transforms an Iconic Concert Hall into an Instrument” - the creators project

We transformed the iconic UK concert hall into a playable 3D instrument in a new app built by in collaboration with Atomhawk Design. Play Sage Gateshead allows users to enter a digitized version of the Sage Gateshead concert venue and essentially bang on the structure's interior elements to create percussive music.

“Working on Play Sage Gateshead with Mbryonic has been a real joy for us here at Sage Gateshead. It is a very new form of commission for us and Mbryonic’s expertise and creative flair has played a central role in bringing it to life.” - Adam Kent, Innovations Manager of Sage Gateshead,

"I can’t think of a better way to celebrate the Sage Gateshead’s 10th birthday than to transform the building into a virtual musical instrument that audiences can play from anywhere in the world." - Ruth Mackenzie, launch CEO of The Space

Let’s Chat

Let's schedule a quick 10 minute call so we can talk about how virtual reality may help your company. Email us at info@mbryonic.com to let us know when works best for you.

Look forward to speaking,