A LOOK AT THE OPPORTUNITIES WITHIN EMERGING TECHNOLOGY AND CONTENT TRENDS
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BLURRING THE REAL AND VIRTUAL WORLDS TO CHANGE THE FUTURE OF BRAND EXPERIENCE

Virtual reality (VR) and augmented reality (AR) are two hot topics in the marketing world, promising to change the way brands engage with consumers in-home, in-store, on-site, and anywhere where there’s a screen.

After decades of development, modern VR technology is here: the most advanced medium to truly bring a multisensory experience to life. Realistic sound and visuals, even smells and touch sensations, can be virtually reproduced, opening up a new creative canvas to deliver on a brand’s promise.

As the technology matures and moves up the adoption curve, we will continue to see a lot more testing of VR’s capabilities and the creative bar will continue to rise. According to analysts Digi-Capital, by 2020, the VR/AR industry is projected to reach $150B in revenue. Does this mean virtual reality is inevitably the format of the future, transforming the media habits and expectations of tomorrow’s consumers?

In this Spotlight On, we will go beyond the headlines to better understand what virtual and augmented reality really are, as well as assess the benefits these immersive media offer brands. Across industries, these technologies represent an opportunity to reach consumers in new and exciting ways.

Of course, wise marketers cannot blindly buy into the hype of a platform that still requires investment on both sides – hardware and content – before it reaches scale. Especially considering the deflated expectations of the last time virtual reality seemed on the verge of ubiquity, skepticism is to be expected. With great advancements comes great risk; we will look at the trade-offs and limitations of VR and AR that marketers should consider before diving in.
**Virtual Reality**, commonly referred to as VR, is often used as a catch-all for immersive or interactive multimedia. To be precise, VR is an immersive computer-simulated reality experience that “transports” viewers from their physical reality into a closed virtual reality. VR usually requires a headset device that takes care of sights and sounds, while the most involved experiences can include external motion tracking, and sensory inputs like touch and smell. A VR experience is like sitting in your living room, putting on goggles, and suddenly feeling immersed in the sounds and sights of another universe, like the deck of the Starship Enterprise. While you remain physically at home, technology designed to manipulate your senses makes it truly feel as though you are on that ship, moving through the VR environment and interacting with the crew.

**Augmented Reality**, known as AR, is a technology that overlays virtual 3D images within one’s field of view of the real world. Utilizing a head-mounted display, AR layers various computer-generated enhancements on top of your existing reality. AR offers the ability to create new meaning by adding new ways of interacting with your field of view. Think of it as sitting in your home, putting on goggles, and suddenly seeing the crew of the Starship Enterprise in your living room interacting with you and the physical space you inhabit. Unlike with VR, you remain able to see your actual living room, but AR has added new media and interactivity on top of your reality.

It’s important to understand that reaching consumers with immersive video does not rely solely on sales of the single purpose devices getting so much attention recently. “VR Lite” in the form of spherical video requires only a smartphone and earbuds, and, when done right, can still deliver a high-impact brand experience to the viewer.

**DID YOU KNOW?**

360 degree or “spherical” video is a format often inexactively labeled as VR, but is in fact more limited in interactivity. With a headset, 360 videos can be experienced in 3D, but unlike VR and AR there is no interactive element. You are essentially seeing through the eyes of a stationary, spherical camera rig. You control your angle of view, but not your position in the immersive environment. 360 videos, in conjunction with the accelerometer in mobile devices (or clicks in a desktop browser) allow viewers to change the angle as they move their phone.
While augmented and virtual reality are at the forefront of conversation among the tech-enthusiast press, it is critical to have a look at how the general consumer views VR/AR to identify potential opportunities for marketers and brands as these technologies move towards mass-market adoption. MEC Consumer Pulse, a nationally representative survey of 950 US adults 18+, found that while the technology is still in its infancy in terms of penetration and adoption among general consumers, excitement is abound. Below are our key findings.

**Awareness**
- 79% aware of VR/AR, but very few have used it
- 14% experienced VR/AR tools

**Experience**
- 18-34 year olds more likely experienced on Smartphone or Tablet
- 35-54 year olds more likely experienced at Retail

**Purchase Behavior**
- 51% 18-34 year olds willing to purchase product/service after experiencing it through VR/AR

**VR/AR Applications**
- Enjoying better TV or movie experience: 57%
- Trying out products in virtual environment: 55%
- Using interactive map: 55%
- Experiencing events (such as concerts): 54%
- Enhancing environment (e.g. virtual showroom): 52%
- Being immersed in environment: 50%
- Exclusive content I cannot access anywhere else: 47%
- Receiving special offers from brands: 44%
- Using VR/AR technology through an app (e.g. Snapchat): 42%
- Virtual reality video gaming: 40%
- Augmented reality video gaming: 40%
- Interacting with advertisements: 31%
2016 WILL BE THE YEAR THAT DETERMINES THE TRAJECTORY OF THIS TECHNOLOGY

With consumer-grade VR finally hitting the marketplace, this is the year we will finally know how much devices will cost, and how quickly a dominant platform emerges. A number of factors will challenge the technology’s growth and scale, including:

TECHNOLOGY
• Current format headsets require corded connections, or become uncomfortable after a time
• Ensuring there is no misuse of devices (to prevent motion sickness from image lag, unclear neurological side-effects)

MARKETPLACE
• High prices for most consumer devices
• Platform proliferation, igniting a VHS/Betamax-like war

EFFICACY
• How to make an impression with consumers beyond “oh, that’s cool,” to make VR a regular habit
• Visual storytelling without control over what the audience has in view at any given moment

Just as in the early days of television and the web, there is opportunity and risk for brands, whether as advertisers, partners or producers.
HiGH END TECH WILL FOCUS ON GAMING FOR THE NEAR TERM

Games represent the bulk of early VR and AR content, and as such their influence has already been cast on technologies like Facebook's Oculus Rift, which, through Facebook's partnership with Microsoft, will ship with an XBOX One controller to make it compatible with many popular games. Additionally, the high-end technology's price point and demand for top-of-the-line graphics cards to properly function will appeal to gamers, who may already have high-end computers and be willing to spend large amounts of money for the best tech. Conversely, mobile games and non-graphically-intensive games will push lower-end VR systems that appeal to a more casual audience, such as Google Cardboard.

MOBILE VR WILL QUICKLY GROW

Thanks to devices like Google Cardboard and Samsung Gear VR, headsets that run off of a smartphone will be among the key drivers of consumer-centric VR experiences. They require a far smaller investment, making them more likely to be adopted by a wide range of consumers who are not ready for or cannot afford the higher-end VR headset devices. These developments will drive phone manufacturers to focus on 3D and VR-compatibility in next generation components.

LIVE EVENTS, SPORTS WILL TAKE OFF BEFORE LONG-FORM AND NARRATIVE FILM

Entertainment industry leaders like Disney and Fox are investing in VR, both by backing start ups building the technology and storytelling capacity, and in setting up their own in-house VR capabilities. VR experiences that approximate the feeling of attending live events like a Paul McCartney concert or an NBA game have been early showcases for the technology. Integrating VR elements into the movie-going experience that audiences are used to will take more time to crack.

AUGMENTED REALITY WILL FACE AN UPWARD BATTLE OF ADOPTION

Unlike VR, there are not as many consumer-friendly AR devices hitting the marketplace that are both easy to use and affordable. While HoloLens is considered a game changers, its estimated price point is still too high for the majority of consumers. Augmented reality, even more than VR, has the feel of magic, but in the near term will be limited in reach.

360 VIDEO IS THE EARLY LEADER

Many apps, including Facebook, YouTube and VRSE, allow users to hold their smartphone or tablet up and spin around to see 360-degree videos. A Google Cardboard adds stereoscopic immersion. Because this format reaches beyond early adopters, we expect a lot of brands to work with 360 video production companies – or invest in the technology themselves – to ensure their apps are 360 video compatible to offer new in-app experiences.
ENTHUSIASM – WITH CAUTION – IS WARRANTED

Have a clear vision of your goals before proceeding
Plenty of articles over the past 16 months have touted the “game changing” technologies of VR and AR. The developments are interesting and some brands have taken on some worthy experiments. A consumer-facing experience without a reason to exist beyond generating PR will be both expensive and unsuccessful; nobody wants to read about a replicated campaign or stunt.

VR/AR is in “Phase I”
While several long-anticipated consumer technologies go to market this year, and Google Cardboard is proliferating through campaigns and giveaways, a brand’s VR reach today will likely max out at a million or so consumers per execution, while the costs are high. If you’re looking for an efficiency play, this isn’t for you. The opportunity is to get in early, test the technology, and determine how VR can be leveraged to tell your brand’s story in a new way.

Context matters when aiming for the “wow” factor
VR is powerful for driving unique, on-site branded experiences, often requiring significant computing power, and devices with multiple peripherals. Scaling a VR experience for personal consumption, however, is limited by the different context of a home environment. Also to be considered is the solitary aspect of most headset experiences. Unlike a film or television show, home-based VR is not (yet) a group activity. Off-site experiences need to be designed with the habits and technology proficiency of the average home media consumer in mind, at the same time that they deliver a new experience special enough to be worth seeking out.
NBA and NextVR

VIRTUAL REALITY BRINGS COURTSIDE “SEATS” TO THE MASSES

The NBA currently maintains a global audience with a broadcasting reach to 200+ countries. Yet this year they tested a new way to help fans feel as if they were actually at the arena during a game. For the launch of the 2015-2016 season, the NBA hosted a VR livestream of the championship ring ceremony and first game of the defending champion Golden State Warriors, all made possible thanks to a collaboration between the NBA, Turner Sports and NextVR.

How it worked: A sideline rig captured the action on the court and streamed live to viewers within the NextVR app and website. Anyone with a Gear VR headset and a Samsung Note 4 or Galaxy S6 phone could experience the thrill of courtside seats. To reach viewers over lower bandwidth connections, a smaller stream with 180 degree view was available.

Coca Cola and Blippar

AR TURNS A SODA CAN INTO A JUKEBOX

To promote its new 250ml cans in the U.K., Coca-Cola partnered with Spotify to turn the cans into digital jukeboxes playing the hottest chart-topping songs via Blippar. Coke drinkers could use Blippar, an app that recognizes logos and creates an AR overlay, or launches a game based on what it’s looking at.

How it worked: Whenever Blippar users aimed their phone at a 250ml can of Coca Cola, a Spotify overlay launched, allowing users to listen to the top songs in the U.K.

Over 75,000 unique users interacted with the cans, outperforming Coke’s earlier on-pack QR code campaign by 300%. By creating a fun and unique experience with AR and music, Coke gave their consumers an unexpected way to improve their experience with the product.
The New York Times and Google Cardboard

A NEW WAY TO REPORT THE WORLD

In November, the New York Times sent one million home subscribers a free Google Cardboard, along with a reminder to download the new, free NYT VR app on the App Store or Google Play.

The Times’ app can be used on its own to view 360 video, or enhanced with stereoscopic 3D using the Google Cardboard viewer. Content on the app at launch included a short GE-sponsored animated video. The app premiered “The Displaced,” the first in an ongoing series of immersive films meant to bring more empathy and perspective to the experience of reading the news. The Times partnered with Vrse to produce the short, in what represents a major commitment to this emerging form of storytelling.

The NYT VR app attracted more users in the first four days of launch than any other Times app before it.

Marriott and Samsung Gear VR

Virtual reality transports guests around the world

Marriott’s VRoom Service offers Samsung Gear VR headsets to guests at select properties, loaded with experiences that transport them to Chile, Rwanda, and Beijing.

The VR “Postcards” – short films that place the viewer in the perspective of a traveler in various foreign locations – was produced by Framestore and accessible on Samsung’s Milk VR platform.

The VR Postcards served as a unique way for Marriott to show their guests a unique hospitality experience, and position themselves as a tech-savvy brand.
Today’s VR technology is orders of magnitude better than 10 years ago. Experts say the advancements of the last 3 years outpace those of the 20 before. Everyone who owns a smartphone is now only a few, inexpensive steps from an immersive viewing experience. And the high-end technology promises a thrilling, non-nauseating experience.

From components to platforms to producers, the industry is a “wild west” of big and small players, with no one format or use case (beyond gaming) driving technology or adoption yet. That means there are many ways to enter the space, and every reason to experiment. Best practices, however, have yet to be established.

While gamers have been breathlessly awaiting the Rift and other releases for years, demand for VR among most consumers is soft. Oculus and Hololens are poised to dominate the high end with gamers and early adopters, while Google and Samsung drive awareness and sampling of the dramatically cheaper and less immersive Cardboard and 360 video format. True scale will require a middle ground.

The novelty era for branded VR stunts is over. Consumers will quickly discover that not everything calling itself “VR” is the same. Whether true VR, innovative AR, or increasingly accessible 360 video is chosen for a brand experience, it must have an enduring reason to exist to return benefit to the brand.

For questions or to request more information, please contact Whitney Fishman Zember or Chet Fenster.
While there are a number of players in the space, we’ve provided a look at the current leaders across hardware and distribution, content production, software platforms as well as other underlying technology offerings. It is important to note that many play in a number of these areas, however, we’ve group them loosely between VR and AR, and hardware and software players.

VIRTUAL REALITY

These companies are at the forefront of the new wave of VR, making multibillion-dollar bets in hardware and distribution.

FACEBOOK/OCULUS VR
Oculus VR’s Rift, a virtual reality head-mounted display headset uses state of the art displays and optics designed specifically for VR. Pre-orders recently began for a $599 release that includes an XBOX controller and two games. Advanced, location-tracking controllers that incorporate haptic feedback, called Oculus Touch, are expected later in the year. Facebook described Oculus as being in support of their goal of “creating a more open and connected world.”

GOOGLE CARDBOARD
Google’s effort to create a VR ecosystem at a low price point. Cardboard is an open-source, self-assembled cardboard “goggles” kit with a slot for a smartphone. Together with the Cardboard app, Cardboard offers stereoscopic image and a wide field of view. Especially targeting schools and developing markets, Cardboard makes 360 degree videos immersive without expensive or cumbersome equipment.

GOOGLE JUMP & GOPRO
Google’s in-house immersive video platform, Jump comprises a camera rig, processing algorithm and distribution platform for 360 degree videos. The basic design has been released for free, and GoPro will begin selling a version of the spherical camera rig later this year. Google will offer an assembler service. GoPro also plans to release a drone camera, called Karma, in 2016.

HTC & VALVE
The HTC Vive is a high-end VR head-mounted display designed in conjunction with gaming leader Valve’s SteamVR project. Delivering “room-scale” VR experiences, the Vive, like the Rift, requires a connection to a powerful PC, peripherals like hand-held controllers, and positional tracking sensors.

SAMSUNG
Samsung introduced the Gear VR in 2015 at a $99 price tag. Instead of an external computer, a smartphone connects via micro-USB to provide the Gear VR headset’s display and processor, while the Gear VR contains the high field of view lenses and rotational tracking. Milk is Samsung’s content platform for the Gear.

SONY
Sony’s headset, previously known as Project Morpheus, is designed to compete with Oculus Rift and HTC Vive, and will be fully functional with the PlayStation 4 video game system. The PlayStation VR can render two separate displays simultaneously, one for the headset and one for television, ensuring VR isn’t a solitary experience.
AUGMENTED REALITY

A few giants are staking a place in this realm, which observers anticipate will result in devices far more attractive than Google’s Google Glass.

MICROSOFT

HoloLens is Microsoft’s upcoming AR headset device that projects virtual elements onto real world environments, allowing users to interact with them via ocular, hand and voice movements. HoloLens is designed to serve as the comprehensive communications, entertainment, and productivity platform of Windows 10. Demos have included Skype calls laid over the world in front of you, Minecraft, and shooting aliens that emerge from a living room couch. Developer kits that cost around $3,000 range are expected to ship this quarter.

GOOGLE

While minimal details are available and plenty of rumors are spreading, Google is known to be working on a “Google Glass 2.0.” Reportedly called Enterprise Edition, we can guess it will still be a wearable, but with massive improvements based on consumer feedback from Glass wearers and its Project Explorer program. Some analysts expect Google to follow up its $542M investment in Magic Leap with a full acquisition and possible integration with the Glass.

MAGIC LEAP

Counting Google and Qualcomm as investors, the company is focused on developing a product that promises a “cinematic reality” experience. While quite secretive about the specifics, Chief Content Officer Rio Caraeff, claimed late last year that the plan is to create “a broad-based platform for visual computing,” that is “the most exciting thing in the last 100 years, up there with the invention of film and electricity.” Hopefully we will see what that means in 2016.

FULL-SERVICE AND SPECIALTY CONTENT PLAYERS ARE SETTING A HIGH BAR

This space continues to rapidly grow, as companies like Apple (who acquired AR software maker Metaio) and Amazon are reportedly developing VR and/or AR projects. Facebook has introduced a 360 video product within the News Feed, making the distribution of short-form immersive video as frictionless as “regular” video. User-generated VR is another exciting prospect, with Facebook getting a leap in this area as they guide every day users how to publish their own 306 videos. But first, let’s look at the professional content developers currently focused on the production of immersive video content.
BELOOLA
A fully web-based VR platform that runs on any device and any browser with no additional software or plugin needed. Without leaving the browser, users can create their own virtual reality environments and engage with each other (and brands).

BLIPPAR
An app that recognizes scannable markers in real images, known as “blipps,” Blippar presents users with an AR experience they can interact with through their smartphone camera, primarily on behalf of brands, though they have also explored applications in education.

FRAMESTORE
A fully immersive, headset agnostic, interactive and experiential content studio. Among the brands they have worked with are Marriott Hotels, Merrell, Volvo, Marvel, Samsung, and Fiat.

GOPRO
Offers professional solutions to harness the power of spherical content, including the cameras needed to capture content, the tools to render clips to create spherical and panoramic videos/photos, and sharing solutions to drive audience engagement.

JAUNT VR
Focused on live-action virtual reality content, Jaunt VR has developed a cinematic VR content-creation platform that includes a custom camera, software, distribution system, and a production studio. Recent partners include ABC News and The North Face.

MATTERPORT
Combining the computational power of the cloud with advanced spatial data processing and camera design, Matterport offers a real-time mobile application for capturing 3D images designed for next generation tablets with 3D sensor capabilities. This technology is empowering users to build their own AR.

NEXT VR
The current leader in VR livestreaming, Next specializes in capturing and distributing live VR content with the goal of creating VR experiences that are better than actually being “there.”

OCULUS
Besides devices, Oculus is an important software player, offering developer tools, including a free audio SDK, so that mobile and PC VR developers can build 3D audio into their games and applications.

REEL FX
A design, visual effects, animation and entertainment studio, Reel FX has worked with Lionsgate, AT&T, Samsung, and JCPenney.

VVIDEO
A startup with major media investors, Vrideo is building a centralized, streaming, hardware-agnostic, and independent platform for immersive video, like a VR Vimeo.

VRSE
Led by award-winning director Chris Milk, the VR production studio has worked with brands ranging from the UN to the New York Times. Its recent work can be viewed via VRSE’s iTunes and Google Play app using Google Cardboard (and soon with other VR headsets).