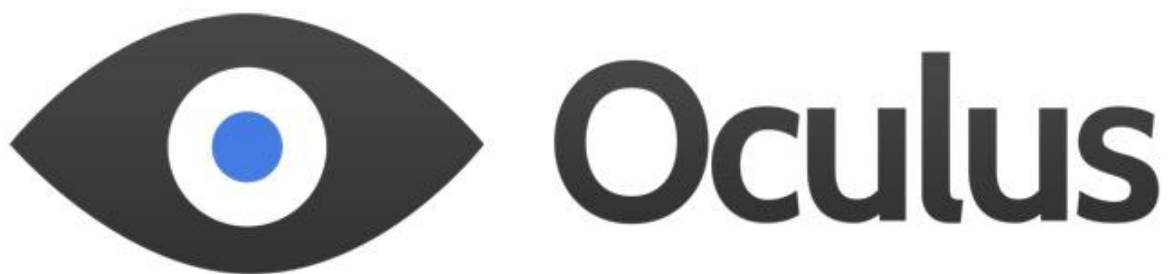


Western Washington University



Marketing Plan

(Final Deliverable)

Team Members:

Antonio Canedo
Benjamin Waples
Jessica Navedo
Nick Boer
Christopher Lockwood

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Industry Analysis

(VR Headsets OCULUS)

Market Review

A virtual reality (VR) headset is a device used to deliver virtual reality experience for 3 dimensional simulations, computer games, and other applications such as movies, videos, etc. This has turned into an amazing way to deliver “out of this reality” content for consumers using the power of technology. VR uses the headset and motion tracking to take you on a trip virtually anywhere and makes you feel as if you were actually there. Oculus has come up with the popular Rift, HTC has the Vive and Sony launched the PlayStation VR to gain a competitive advantage in their industry.

The modern VR headsets split into two different categories: mobile or tethered. Mobile headsets are shells with lenses into which you place your smartphone. The lenses separate the screen into two images for your eyes, turning your smartphone into a VR device. Some examples of this are the Samsung Gear VR and the Google Daydream View that are relatively cheap at around \$100 due to the fact that it lacks the added accessories and other building factors. Tethered headsets on the other hand, like the Oculus Rift, HTC Vive, and the PlayStation VR are physically connected to PCs, this puts all of the actual processing in a box instead of having your phone strapped to your face which makes the VR experience that more enjoyable, but of course, this comes with the caveat that the least expensive options are priced at around \$400, and that’s before you address the processing issue for each VR headset, for example the Rift and the Vive both need very powerful PCs to run them, and the PS VR obviously needs a PlayStation 4 gaming console.

Virtual Reality is an emerging technology and is expected to have a high demand in a lot of applications, the rising demand for high quality and effective pictures has led to continuous development of this amazing tool. VR headsets are increasingly used in the development of training methods, engineering design process, business environments, and audience

engagements such as VR gaming, sports, and events. In addition, VR headsets are being used in the medical sector to train students for surgery, and other operations.

Five

Forces

Bargaining Power of Suppliers

- Low concentration of suppliers
- Limits bargaining power for suppliers

Bargaining Power of Buyers

- Limited buyer information
- Less negotiation chance from customer
- Limited buyer choice
- Customers pay higher prices for product that available

Competitive Intensity



- Quick growth rate of industry
- Less likely to compete because market is also growing
- Few firms competing

Threat of Substitutes

- Limited number of substitutes
- Customers cannot easily find other products
- Beneficial for Oculus
- Substitutes: Sony Playstation VR, HTC Vive, Samsung Gear

Threat of New Competition

- High capital requirements
- Limits entrants
- Advanced technology is required
- Patents limit new competition
- Patents cover important technology

Competitive Review

Brand competitors

- HTC Vive
- PlayStation VR

Product competitors

- Windows Mixed Reality
- Google Daydream View
- Samsung Gear VR
- Magic Leap

Generic competitors

- Xbox One
- PS4
- Windows OS
- Samsung
- iPhone / Android
- Tablets..

Total budget competitors

- Sony
- Instagram
- Apple
- Microsoft



Competitive Market

Due to the fact that there are very few producers and sellers of VR headsets being a relatively new and up and coming product we can catalog this as an Oligopoly. As we have stated from the competition and the market review, there are only a handful of businesses that handle this kind of technology, like Oculus, PlayStation, HTC, Google and Samsung to name a few. Having competition, even if it's from a small number of firms keeps this market from turning into a Monopoly in which there is only producer that can dictate any price they choose, and turns into a market that offers affordable prices for this new and exciting new product. Another reason why the market is oligopoly instead of monopolistic competition because the entry barrier is high and in the past summer, one company's launching price on VR headset triggered a series of VR price cut in the industry.

Customer Review

Buyers:

Technology enthusiasts ready to try a “break-through technology” during its early stages; developers; gamers; students, educators and trainers; military; medical industry; corporate entities in a diverse (and growing) range of industries such as design, mental health, real estate, space, manufacturing, and so on.

Oculus ships to 22 countries: many European countries, Japan, Australia, New Zealand, Taiwan, USA and Canada.

Because of affordable prices starting below 100USD for a mobile phone-integrated headset like Samsung Gear VR (an Oculus product), consumer entry into this market is accessible to any individual with a small amount of disposable income who has or is able to obtain a system with

the capacity to run the programming, gleaming a very large market potential. Most gamers have strong system capacity already. According to polygon.com, game-playing devices are in 65% of US homes and 47% of US homes have a dedicated game console. 47% of gamers are between 18 and 49 years old and are slightly more male than female. Many gamers will spend hours a day at their favorite game console, though most consumers will likely spend a few hours a day or a week, depending on motion sickness and types of applications and uses they are interested in.

This is a very new and growing market. As the technology develops and more applications are available for use it will likely become more attractive to a wider base of families, individuals and corporations alike. There is great potential to develop the commercial sector in particular. To boost more content and application offerings, Oculus' site includes tips, instructions and application lifetime data to support developers. Dev kits are available for \$300. Once developed, applications can be loaded onto Oculus Store for approval and subsequent market availability. Some developers gain a dedicated following of their own fans and customers who purchase their products through the Oculus platform.

Market size:

IDC forecasts the overall AR and VR headset market to grow to 8.9 million units in 2018, up 6% from the prior year. That growth will continue throughout the forecast period, reaching 65.9 million units by 2022.

VR headsets are predicted to grow from 8.1 million units in 2018 to 39.2 million units in 2022. The commercial sector already constitutes 24% of this market in 2018 and is expected to grow immensely despite perception that VR is primarily a consumer product. IDC projects that VR Tethered HMD technology will own 42.5% of the AR/VR market by 2022.

Statista predicts Oculus will ship approximately 1 million units in 2018, up from the .7 million units shipped in the year prior, with the 2018 market totaling 27-billion USD. Oculus owned 21% of the growing 14.1-billion USD VR market share in 2017 and is forecast to own 20% of the 2018 market share.

Oculus is currently named the second-best VR headset in consumer reviews, with the HTC Vive holding strong at first place due to its superior room-scaling and sensor abilities as well as the robust Steam gaming store and network.

According to polygon.com, gaming consumers spent \$23.5 billion on the gaming industry in 2015. \$16.5 billion was spent on gaming content alone.

Purchase decision process:

Research:

- Read tech articles, consumer reviews, reference customer ratings
- Review product and bundle features and statistics
- Price checking
- Minimum PC requirements met or cost-effective updates possible
- Product comparison
- For example, HTC Vive has higher quality experience w/ higher price tag

Experience:

- Demo a headset if possible
- Talk to friends that follow and/or use the technology

Customer incentives to purchase:

- Cutting edge and exciting entertainment technology!
 - VR is an immersive, break-through technology and many customers are excited to try it while it's still early, especially now that the technology is improving.
- Practical applications
 - Some customers, individual or corporate, use headsets and applications or content to train, educate or for social interaction. It is more cost-effective to use VR for many situations and some situations, such as exposure therapy or body swapping, may be entirely impossible to facilitate without the VR technology.
- Low cost of entry
 - VR costs are falling and are now low enough for many with varying economic status to access the value of new and immersive experience at a wide range of pricing tiers and technological sophistication. However, the technology is rapidly developing, so buying now will likely mean outdated product in a few short years.

Customer expectations:

- A new, immersive experience featuring 360-degree graphics
- Emergent technology still in development, so design, offerings and technology aren't completely refined
- Technology is developed enough for a high degree of crisp graphics and exhilarating experiences
- High quality audio, able to support variety of headphones
- Smart design – comfortable, lightweight, breathable visor with very high quality graphic display capabilities
- Versatile integration with streaming hubs, cell phones, Xbox, computers, etc., and expanding accessories such as different types of remotes and controllers. Uses standard

connector/plug types (HDMI or USB).

- Hundreds of games and apps currently available with many being added
- Affordability (Headsets starting at 100 USD and rising in cost to several thousand)
- Simple, quick set-up – intuitive install application and easy to troubleshoot by design
- Bundled remotes and sensors provide intuitive and intelligent interaction/use. Lots of add-ons available
- Supporting ecosystem/network (from headset to audio to games to add-ons)
- Products with a high level of accessibility and integration – able to connect with a variety of devices customers likely already possess

Drawbacks:

- High-quality devices are not wireless
- Realistic graphics are still developing
- Won't track hands without the special Oculus Touch remotes (or something analogous)
- Technology still heavy for extended play
- Motion sickness and feelings of disembodiment

Consumer hopes:

- Built-in room-scaling
- Wireless headsets
- Flawless built-in hand-tracking
- Deeper, longer, better games
- Better graphic art and design
- Voice-integration/-activation
- Improved user experience
- More sleek design



Macroenvironment Review

Macroenvironmental factors pertinent for Oculus include economic, social, and legal factors. The set-up and maintenance for a virtual reality lab, one like Oculus can be used in, is relatively small compared to the places it can take one, in turn having little effect on the natural environment after production. Similarly, because virtual reality is just that, virtual, this group suspects few consequences, without spreading propaganda or starting a military coup, in the political sphere. The following is a macroenvironmental analysis for Oculus.

Economic:

Large scale effects of virtual reality can be compared to the effects that smartphones have on the economy, according to Laurits Christensen, et. al. the purchase of a smartphone or tablet on GDP “represents a multiplier of approximately 4.3 times the cost to the consumer of owning the device.” Meaning every \$100 spent on a device, GDP is increased \$430 more. Carrying over the idea of additional GDP benefit beyond just the price of smartphones to virtual reality, Laurits Christensen et. al. applies their smartphone/ tablet findings to a broader economic scope of total impact. Depending on level of adoption of virtual reality (low, medium, high) the economic benefit varies from \$14.6 billion (low adoption) to \$126 billion (high adoption).

Social:

The social effects of virtual reality are like current issues society faces with video games. Games like Call of Duty and Grand Theft Auto are thought to desensitize players to violent actions in the real world. When compared to virtual reality, a far more subversive reality than video games, one can infer the social implications would be more drastic. Other issues include

“people turning their backs on the real world and wonder around synthetic worlds that fulfill their whims” (Gopal. Shiqi. 2017.). This proves to be a social impact with people becoming farther and farther removed from consequences and real-life decisions with impacts. Life becomes a game without consequences which is dangerous for everyone involved.

Legal:

With the large change that virtual reality will bring to society, a consequential and needed addition in law will occur too. Courts must understand the world of virtual reality to effectively change these laws as well. Few elemental parts of virtual reality can be compared to current technologies, for example, if one receives a death threat via email this is like the death threat of virtual reality. Though far more immersive. More grey area is identified when looking at usage of the device; if someone trips over a shoe they did not see in the room because they had a virtual reality headset on and has a head injury, is it company or user error. Like GPS devices, when one drives their car into a lake because Google said to, is that company or user error.

Firm Analysis

(VR Headset OCULUS)

Company Background

Oculus is a VR technology company founded by Palmer Luckey, Brendan Iribe, Michael Antonov and Nate Mitchell in Irvine, California in July 2012. It specializes in virtual reality hardware and software products.

In April 2012, Luckey announced the Rift, a VR headset designed for video gaming and launched a Kickstarter campaign in August to make VR headsets available for developers. The campaign proved to be a success as it raised \$2.4 million, approximately 10 times its original goal of \$250,000.

In March 2014 they came to an agreement with Facebook’s CEO Mark Zuckerberg to be acquired for \$2.3 billion in cash and stock.

In 2015, Oculus VR acquired Surreal Vision, a British startup focused on 3D reconstruction and mixed reality. The company also partnered with Samsung to develop the Samsung Gear VR in November 2015 for the Samsung Galaxy smartphones.

Headquarters:

Menlo Park, California

Key Management:

Hugo Barra (Vice President)
Brendan Iribe (Vice President, former CEO)
Jason Rubin (Vice President)
John D. Carmack (CTO)
Michael Abrash (Chief Scientist)

Company Type:

Privately Held

Company Size

501 – 1000 employees

Specialties

Computer Hardware, Virtual Reality, Software Development and Video Games.

Primary Products

Oculus Rift

The Oculus Rift was the first big name in the current wave of VR, and Oculus still a major player. While the retail version of Oculus Rift is more expensive than the developer kits were, it's also much more advanced. From a technical standpoint, the headset is nearly identical to the Vive. It also includes the excellent Oculus Touch motion controllers, can support large-area VR like the Vive, and at \$399 is a full \$200 less than the HTC Vive—and even less than the PlayStation VR with Move controllers.

Oculus Go

The Oculus Go is the least expensive way to jump into virtual reality. At \$200 it's pricier than the mobile VR headsets, but unlike those headsets, you don't need a compatible (and usually expensive flagship) smartphone to use it. The \$200 investment gets you right into a Gear VR-like virtual reality experience, complete with an intuitive controller. It makes some compromises for the price, like using a dated Snapdragon 821 processor and offering only 3DOF motion tracking, but it's still enough to try out Netflix on a virtual theater screen or play Settlers of Catan in VR.

Current Goals and Objectives

From the shareholder stakeholder perspective Oculus's goal is to "make the consumer virtual, augmented, and mixed reality experiences that ship in five to ten years great." Moreover, they are "building a team capable of leapfrogging VR forward by bringing together researchers and engineers spanning a wide range of expertise" including UX, Optics/Displays, social interactions, and more!

What this corporate literature means is that Oculus is aiming to push the limits of what VR is capable of and not just create the hardware which is used to experience VR. In a few quite bland and Steve Jobs-esque opening keynotes Oculus executives discuss the future of VR and how the "best is yet to come" (Oculus. YouTube.) A few notable actionable goals are in the future for Oculus. Just how PC changed the world of software and what we thought was possible with computers, Oculus plans on pushing what is possible with VR. Some of those tangibles include efficiently tracking pupils by addressing eyelashes, pupil dilation, and eyelids. One can assume that goals like these with a talented team at Oculus is why Facebook decided to purchase a firm with the only commonality being technology and digital interaction.

Moreover, other objectives which Oculus aims to reach for includes hand tracking. Currently hand touch controllers are the only way of navigating a VR platform, Oculus aims (and most likely not in the next five years) to have hand tracking technology to increase the user experience and interactions one has with their VR avatar. Also, similar goals include making the hardware lighter, comfortable, and eventually wirelessly.

The largest, and most invasive, goal of Oculus is to create a Mixed Reality. A place where you can choose whatever elements you want at any time. They must reconstruct the real environment as well as humans. Though this sounds like a horror movie, it could mean more information for individuals received faster. If in an emergency, one could receive the information they need directly in front of them and solve the issue quickly.

Current and Past Strategies

When Oculus launched in 2012, it was buoyed by an exceptionally successful Kickstarter campaign fueled by the intense interest of technology enthusiasts and developers. The company's founder, Luckey, was keyed into a network of innovative techies and visionaries, focusing almost entirely upon the development of an improved VR platform and only able to provide prototype headsets. For the first two years, Oculus focused on selling dev kits to developers who would create a robust network improving and innovating the Oculus platform, establishing the foundations of the Oculus ecosystem which would later make the product viable.

The initial hype in the tech world was not unnoticed. As the Oculus hardware became more robust and new competition began to make moves in the VR market, Facebook moved to acquire Oculus in 2014, launching a second devkit within four months of the new acquisition. Oculus from Facebook quickly acquired the British AR company Surreal Vision in efforts to improve their technological capabilities and partnered with Samsung to produce Samsung Gear VR in an effort to develop a more accessible, lower-cost platform to consumers – signaling bold plans to those watching the emerging industry. In 2015, a sleek and refined logo and understated branding assets launched. Oculus was developing the future, appealing to those on the cutting edge of technological innovation, and still early in a slow development curve.

In January 2015, among much media hype anticipating the new technology, the first-generation platform from Oculus, the Oculus Rift, was released for public consumption at \$599 for just the headset. The set-up cost for a compatible gaming and media system was high. While Oculus from Facebook continued to align with developers as their greatest allies, they began to access a wider audience in the form of early adopters who are interested in interacting with the latest technological advances. The end of 2016 saw the launch of a new, more intuitive and better-integrated controller system, the Oculus Touch, as well as news of more improvements in the functionality of the developing next generation. Publicly, Oculus from Facebook focused on improvements to experiences, rather than technology.

By the end of 2017, Oculus by Facebook bundled the Oculus Rift and Touch together at a price of \$399 and launched the low-priced Oculus Go while regularly adding games and other media offerings – often in excess of 30 new releases per month. The VR technology was becoming more accessible, more refined, and the applications more diverse.

At present, Oculus by Facebook is focused on connection and usability. The chic advertising features diverse demographics, elegant imagery of well-designed products and high-quality – often interactive – special effects. They send a message that VR is the future, and that the cutting edge is close enough for anyone to grasp. Oculus continues to both serve and rely on developers who are key to growing the budding ecosystem they are now switching focus to. The company's public voice speaks of diverse experiences available – both imaginative through games and connective through platforms such as the forthcoming Facebook Venues – and there are rumors of improved hardware buzzing in the background, promised for a (potentially much) later date. Despite the dying media fanfare, there is a whole world waiting to be explored and a growing backlog of games to discover behind the newest features and company picks on the sleek, smooth and sexy Oculus site. Their homepage now boasts three different products available to consumers and an extensive store packed with options for everyone ready to experience VR, placing themselves as an industry innovator, leader and someone you can trust. As Oculus's brand webpage states, "We're here to connect the world through the power of virtual reality. To help people experience anything, anywhere, with anyone, we always speak honestly, communicate clearly, and share our values with the ones who matter most."

Current Performance

Performance	Oculus Rift
Sales:	The Oculus Rift has shipped around 1 million units in 2018.
Market Share:	The Oculus rift estimated share of the market worldwide is around 20% in 2018 for all levels of VR headsets. Among its most immediate competitors, Windows Mixed Reality and the HTC vive, both PC based devices, the Oculus Rift holds 47.3% of the market for high end VR headsets.
Market share growth:	In 2017 the Oculus Rift and HTC Vive had almost equal market shares of 46.98% and 46.09% among Steam users. In 2018, the market share for Oculus Rift passed the HTC Vive and now is around 47.3% of the market.
Profitability:	With the growth and increase of units sold, the Oculus Rift is becoming profitable. Upon its launch in 2016, the Oculus Rift failed to draw in the audience that Facebook had hoped to receive. In 2018 however, unit shipments worldwide has increased to 1 million units.

In terms of sales, the Oculus Rift has increased its units shipped to 1 million in 2018. While the sales of the product are in a growth phase, the market share for the Oculus Rift within the industry of VR/AR devices is around 20% in 2018. Among higher end PC based VR headsets the Oculus Rift currently holds 47.3% of the market. This number has grown to the point of passing its most immediate competition: the HTC Vive. With so much growth in the VR industry the Oculus Rift is becoming a profitable business. During its initial launch, Facebook's Oculus did not achieve the profitability expected. Despite this, the market for VR has grown and the Oculus Rift is becoming profitable.

SWOT

<p>Strengths:</p> <ol style="list-style-type: none"> 1. Allows the possibility of many doors to be opened not only in the realm of gaming but as a tool for many disciplines to benefit from. 2. Backed by Facebook 3. Standard for Virtual Reality gaming 4. Uses technology found in mobile phones which helps save money in R&D phase 	<p>Weaknesses:</p> <ol style="list-style-type: none"> 1. Not offered in a wireless version 2. Not supported on most gaming consoles 3. For PC use, it requires a high-performance system 4. Some believe there is a correlation between brain development and tv/ internet usage. People may resist VR specially for that reason. 5. Not enough VR content (yet)
<p>Opportunity:</p> <ol style="list-style-type: none"> 1. Broad Field of use (i.e. Medical field, Contractors, Gaming, Therapy, Soldiers, etc.) 2. Trends in technology world are shifting and people are beginning to recognize that. Tapping into a new market makes the possibilities endless for VR usage. 3. Complements to VR usage Ability to have larger online presents 	<p>Threats:</p> <ol style="list-style-type: none"> 1. Not the first Virtual Reality headset 2. Large tech companies have the capital to move into new market even though barriers to entry are high 3. Loyal customer base of other companies 4. Growth in portable electronic market

Current Lifecycle Stage of the Product

The market for virtual reality headsets is currently in a growth phase. The product, Oculus Rift, is also in this growth phase that the VR/AR industry is experiencing. Following the introduction of the product, the Oculus Rift has experienced growth in adoption. As the product begins to reach the early majority of consumers, it has been forecasted that the virtual reality industry will be generating \$21.5 billion in revenue by 2020.

There is plenty of evidence to suggest that the Oculus Rift will experience more growth over the coming years. 51% of the US population are aware of VR devices as of 2017. In the previous year only 28% of the US population were aware of VR devices. Following the introduction of the Oculus Rift product in 2016, the awareness for VR products doubled. In addition, there is clear evidence that the Oculus Rift has not yet reached maturity in the demographics of users. Among 4 million US consumers surveyed of online shoppers, only 14.3% of VR purchasers were female. In a Statista survey, the Oculus Rift was indicated by respondents to be one of the best known virtual reality headsets in the US. With Facebook backing up the product, there is plenty of resources to supplement the products growth. Growth pertaining to sales of the product is forecasted to grow from 10.1 million units in 2016 to over 60 million units by 2020.

To summarize, the Oculus Rift has reached a portion of early adopters in the gaming and technology industry. Where Oculus will experience rapid growth is in the upcoming years where VR headsets become easier to acquire and normalized in the minds of the mass marketplace. As a fair amount of the US population indicates interest in VR headsets, consumption of these products is still growing. The Oculus Rift will continue to grow as the demand for VR headsets increases with consumer awareness. The adoption of this product has yet to reach the full potential as it is still a relatively recent development. As the adoption of VR headsets becomes mainstream and reaches most consumers in the marketplace, the Oculus will likely see continuity in its current growth. As a leading brand in the industry of VR headsets, the Oculus Rift is currently in the growth stage of the product life-cycle.

Current Branding Strategy

Oculus's current branding strategy is to begin creating trust with the customer. Currently, consumers hear the words extreme or immersive and they brush it off immediately because they see diction like such in every advert. By creating a foundation of trust with consumers they will be keen to purchase Oculus hardware and become loyal customers to the brands. Another way Oculus is building trust is by providing demos in stores such as Best Buy. Because buying Oculus headsets and hand controllers are a high involvement purchase decision, they provide demos to demonstrate how VR "is going to work".

Moreover, Oculus aims to make VR mainstream with their product line being the standard for entering the market. Even though Oculus is not the first mover into the VR market, they want to brand themselves as if they were. With their "Step into Rift" campaign, Oculus would like to appear as the VR hardware used by the average consumer which, if successful, could have a network effect. To expand upon that, if one was a novice in the world of VR but knew (or at least thought) their friends who did have VR has Oculus then one is more likely to purchase Oculus for the benefit of interactions with their friends.

In AdWeeks article *Facebook's Oculus Has Hired a New Agency to Finally Make Virtual Reality Mainstream*, by Marty Swant, Swant quotes Milling Smith, co-founder of Here Be Dragons, saying "it's not whether VR will go mainstream, but how soon." If Oculus can be the company who makes VR go mainstream then it is more likely they will have loyal customers for life similar to how Apple made Mac users for life fall in love with their hardware and interface.

Core Competencies

1. **Better tracking than most VR headsets**
 - a. Oculus Rift: Roomscale tracking for 360° experience
 - b. Oculus Rift: external sensors and motion cameras used for tracking accuracy
 - c. Headsets and controllers enhance tilt and tracking through built-in gyroscopes, magnetometers and accelerometers
2. **Better Controllers**
 - a. Intuitive design for smooth user experience
 - b. Bundled Oculus Touch controllers build to simulate hand feel and motion
 - c. Oculus Rift platform able to integrate with Xbox One controllers
3. **Better quality displays and optics**
 - a. Oculus Rift: 1,080 by 1,200 resolution (per eye)
 - b. Oculus Rift: 90Hz refresh rate
4. **Immersive sound**
 - a. 360° built-in spatial audio
 - b. Ability to attach external headset through universal 1/8" jack
5. **Comfortable wear**
 - a. Lightweight, breathable headset with ability to add headphones
6. **Low Price for great performance**
 - a. Oculus Rift introduced a permanent price drop below \$400 which includes headset and controllers
 - b. Additional products available for smaller-budgets and less robust operating systems such as cell phones
7. **Variety of products**
 - a. Oculus Rift platform integrates with gaming PC and Xbox
 - b. Oculus Go and Samsung Gear VR integrates with Android cell phone systems
8. **Industrial design**

9. Robust ecosystem of applications

- a. Over 1000 games, social apps and experiences available
- b. Accessible minimum system requirements
- c. Oculus Rift:
 - i. CPU: Intel i3-6100 / AMD Ryzen 3 1200, FX4350 or greater
 - ii. Memory: 8GB + RAM
 - iii. OS: Windows 10

Competitive Advantage

Cost Advantage:

1. Control of design chain
 - a. Does not rely on external suppliers and developers
 - i. Lowers cost of development, delivery, etc
2. Economies of scale
 - a. Being owned by facebook means knowledge of applying efficient operating costs.
 - b. A big firm like Facebook also means Oculus has buying power with suppliers which will result in a lean supply chain and in turn lowering costs.

Differentiation Advantage:

1. Brand reputation
 - a. First mover into VR market
 - i. Makes brand synonymous with VR in present and future
2. Higher capital than up-and-coming competition
 - a. This is due to a recent buyout by Facebook
3. End to end control of design
 - a. Own everything from hardware, software, and distribution platform
 - i. Make it easier to branch out to different clientele
 - ii. Not tied to one platform of distribution like Sony to Playstation
 - b. Less reliant on external suppliers
 - i. Keeps cost lower and product consistency higher

3 Circle Targeting

(VR Headsets OCULUS)

Target Segmentation

Virtual Reality (VR) technology is quickly becoming a sharp tool for both the entertainment and education sectors. Through the VR platform, one enters into a space that parallels lived experiences. Constructed classrooms are accessible anywhere there is VR technology and the training and education therein allows programs to run without the need for traveling to specific locations or live instructors, creating consistency in how and what is taught and reducing human resources costs. VR is increasingly utilized in a variety of training situations across diverse industry and greatly anticipated to continue this expansion and adoption trend.

We've already seen HTC Vive partner with Lowes, a large hardware store chain, to introduce VR programs catering to the Do-It-Yourself (DIY) market. Trade schools are currently a highly viable market with attractive career potentials. Entry-level tradesmen need affordable training, practice, good-habit formation to build their skills upon, and clear, relevant instruction. It is important for them to be engaged with hands-on experience as they develop their trade. Concise courses, convenience and plentiful material to practice with buoy the appeal of courses and their level of ease of engagement.

VR classroom spaces which can be enhanced by virtual workshops, greatly cutting materials costs as trainees engage in a preliminary learning curve acquiring a new skill set, can satisfy the identified needs of entry-level tradesmen to an exceptional degree. Courses would feature expertise from virtual instructors, ensuring training and education is based in best-practices and properly sequenced. Programming training content ensures a curated level of quality as well as consistency in trade knowledge and techniques. Because both human resources, materials and space costs would be reduced or eliminated, course costs would drop significantly or become more affordable for organizations training their own staff in a specific trade. VR is convenient, interactive, affordable and offers the opportunity to access a variety of logged information built into an ecosystem of resources.

Key Competitor

HTC Vive is the by far Oculus V's biggest competitor, because it offers similar benefits and services as far experience. Vive's best quality is its Lighthouse room tracking, which enables you to move around with the headset on, and it does this better than the competition.

Be aware that despite the ability to move around, the cable is still a nasty reminder that you're tethered.

However, because the Lighthouse sensors need good vantage points to track all your head and hand movements, it means mounting them up high. This makes setup for the Vive a bit convoluted compared to, say, the Rift or PSVR. For the Rift, you can just plop down the sensors on a desk, though to get the same 360 tracking you'll need to buy an extra sensor.



Context Definition

Our goal is to figure out how Oculus VR Headsets can increase market share by creating more value for DIY's than HTC Vive.

Customer Perspective

Oculus Rift Vs. HTC Vive

1. Touch controllers

1. Oculus Rift

1. **Description:** The Oculus Rift offers touch controllers. The ease of use of this product is slightly lower performing than the HTC Vive touch controllers. This may be due to being slightly older than the Vive. The physical touch and feel of the controller has been noted to, "feel better" in some customer opinions but the overall technological performance of the HTC Vive is slightly better.
2. **Customer importance:** 8
3. **Customer evaluation rating:** 8

2. HTC Vive

1. **Description:** The HTC Vive provides a slightly better touch controller. The sensitivity, layout and design of their touch controller is similar but slightly better than that of the Rift due to being a newer technology.
2. **Customer importance:** 8
3. **Customer evaluation rating:** 9

2. Feel and comfort of the headset

1. Oculus Rift

1. **Description:** The Oculus Rift provides a more polished and comfortable feel versus the HTC Vive. Both technologies are relatively new. The Rift is a lighter product than the Vive to give the customer a better experience and better comfort when using. The headset itself has a small problem with ventilation when using, but this is noted to be a minor problem among users.
2. **Customer importance:** 9
3. **Customer evaluation rating:** 9

2. HTC Vive

1. **Description:** Without the Vive's, "deluxe head strap upgrade", the Vive is noted to be less comfortable than the Rift. The headset itself is physically heavier than that of the Rift, which could put strain or discomfort to users'.
2. **Customer importance:** 9
3. **Customer evaluation rating:** 8

3. Usability / ability to perform with PC

1. Oculus Rift

1. **Description:** The Oculus has a ASW feature allowing the Rift to run on weaker systems. The minimum requirements for this product are: Core i3-6100/FX-4350/Ryzen 3 1200 with a GTX 960/1050Ti/RX470.
 2. **Customer importance:** 9
 3. **Customer evaluation rating:** 9
2. **HTC Vive**
 1. **Description:** The HTC Vive is a newer product than the Rift. The minimum system requirements are higher for the Vive: Core i5-4590/FX-8350 with a GTX 970/R9 290. This means users need a better computer to use this product.
 2. **Customer importance:** 9
 3. **Customer evaluation rating:** 8
4. **Price of product**
 1. **Oculus Rift**
 1. **Description:** The price of this product is \$399. For a product that performs on par with most the features customers in this segment seek, Oculus has a clear cost advantage over competitors in educational institutions.
 2. **Customer importance:** 10
 3. **Customer evaluation rating:** 10
 2. **HTC Vive**
 1. **Description:** The price for this product is \$499. Having a higher cost than its competitor may place this product above Oculus in terms of luxury, but with the segment of educational institution customers having a higher cost for a product to be used for educational purposes puts the Vive at a disadvantage. In addition to this price there are a lot of accessories that may add to the costs if required for the customer benefits sought.
 2. **Customer importance:** 10
 3. **Customer evaluation rating:** 8
5. **Motion Tracking**
 1. **Oculus Rift**
 1. **Description:** Motion tracking is a crucial element to trade school customers. The motion tracking of the Rift is slightly less than that of the Vive. In a 2.5mx2.5m are the Rift can perform well with 3 motion tracking cameras. Any area greater than this and the Rift begins to have problems. This problem would be applicable depending on the type of education sought from the customers'.
 2. **Customer importance:** 9
 3. **Customer evaluation rating:** 8
 2. **HTC Vive**
 1. **Description:** The HTC Vive performs very well with motion tracking at 5mx5m and can continue to perform well in areas greater than this. This feature would only be useful if the customer in the trade education segment requires an area this large for their educational benefits sought.

2. **Customer importance:** 9
3. **Customer evaluation rating:** 10

Overall Score:

- **Oculus Rift:** 44
- **HTC Vive:** 43

Firm Perspective

Oculus Rift Vs. HTC Vive

Oculus Rift key features:

1. Ease of set up
 1. Oculus Rift is virtually plug and play on any PC. From start to finish it takes about a total of 10 minutes with little to no hang-up since they make setup very straight forward.
2. Controller Additions:
 1. With the purchase of a Rift controller you also receive a regular Xbox One controller. That, along with easier to use menu buttons, are ideal for sit down gaming.
3. Headset Weight:
 1. Rift was designed to be as light as possible. This puts less strain on the user neck and makes it more comfortable to wear for long periods of time.
4. Included games:
 1. The Rift comes with 2, highly polished games that are perfect for continued gameplay that you will rarely get bored with. This makes it more playable right out of the box and doesn't require additional purchases upfront.
5. Reliability:
 1. When set up, the Rift is the go to VR for anyone looking for something reliable. Although not as in-depth as some VR controllers, it works every time, exactly as it should. This guarantees long, seamless, consistent gaming.

HTC Vive key features:

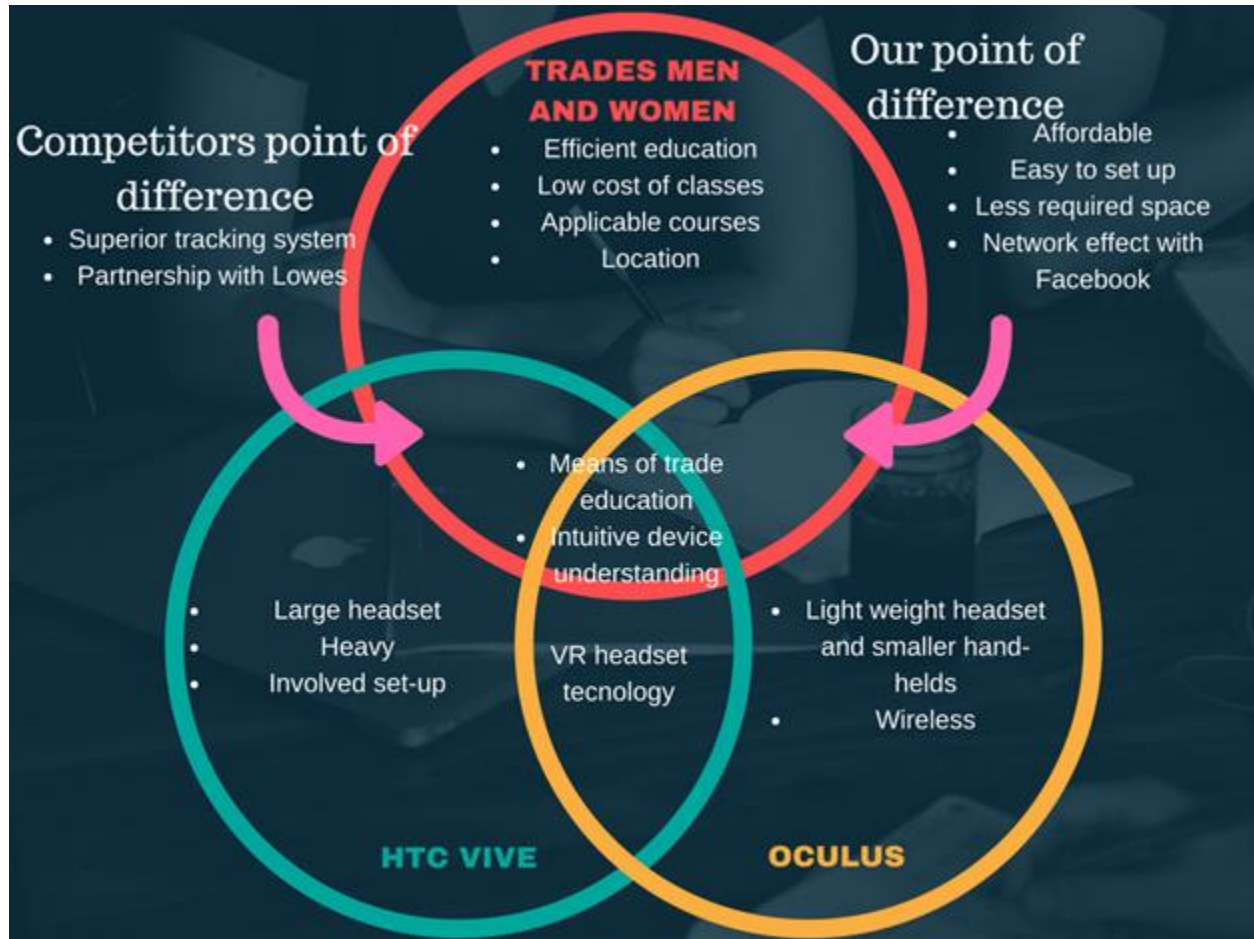
1. Stand up and play feature
 1. Vive offers more in-depth, stand up game play than other competitors. This involves the user even more giving it a more lifelike experience while being inserted into the game.
2. Controller Design
 1. You get 2 handheld controllers that can be seen in-game. The button placement is much more natural while hand movements and motions feel more comfortable in-game.
3. Headset Look:
 1. With heavy duty straps, adjustments, and thick dimpled plastic. The Vive has a much sleeker, utilitarian look. While also offering a few more fine tune adjustment points.
1. Downloadable games:
 1. The games available for free with the purchase of a Vive are more to showcase Vives performance rather than play for hours on end. With a "Canvas" feature,

you can paint virtually anything in A 3D world around you, as well as, other interesting simulators.

2. Experience:

1. Out of all the VR headsets, the Vive is said to have one of the most immersive experiences when it is working correctly, this can be a hassle most of the time for a casual night of gaming.

3 Circles Map



Key Opportunities for Growth

Approaching a direction toward educational purposes with the VR industry is a huge opportunity for growth. For customers in the trade school education segment, they are seeking an efficient, “hands on” educational experience. They also seek the benefits of reducing the costs of learning said trade and the ability to practice skills in a non-location specific environment. With a lower price point than the HTC Vive, the Oculus Rift can do well to sell to these types of customers. Education through VR could provide an environment for tradesmen and women that minimizes the risk of learning said trade and eliminates the costs of materials for honing skills in said trade.

Features that can be Eliminated

A feature that is not necessary for the trade school education segment is the wireless feature. Because the trade school students will not be using the device for gaming it is okay if the device is not extremely mobile. The technology can be shifted to a wired connection to remove the battery and make the maintenance for the device simpler

Features that should be better promoted

One of the most beneficial features for the tradesmen education segment would be the affordability of Oculus. With a smaller start-up cost than the HTC Vive, the cost of courses can be lowered which will attract a larger part of that segment. Moreover, the ease of set-up means that the educator will not have to hire outside specialists to set up Oculus and therefore lowering the price of classes further. Additionally, the low price of class could mean running promotion for beginners who are not sure what they want to start with in the professional tradesmen carrier thus making mentorships more efficient by having a early screening of trades.

POD's to take away from Competitor

One of the point of differences that Oculus can take away from HTC Vive is the superior tracking. Currently, Oculus is developing advanced eye tracking and movement tracking technology to change the behaviors that VR users can do. Instead of being an observer, Oculus aims to put the user in a role in the VR world. Many simulation are built with the user as an observer and Oculus believes this is not immersive enough. With the planned improvements in the Oculus eye tracking and body tracking technology, Oculus will be able to put HTC Vives tracking capabilities as a point of parity instead of difference.

Marketing Plan

Marketing Goals and Objectives

Our goal is to figure out how Oculus VR Headsets can increase market share by creating more value for DIY's than HTC Vive. There is a wide market out there for the taking in terms of Virtual Reality and Oculus is, for the most part, the number one VR Headset brand in the country, but we can't let our competitors take advantage of emerging groups that could take away our positioning from us. And so, we decided to target a beachhead that could turn out to be another channel in which we put the name of Oculus on the mind of the consumer as the number one Virtual Reality brand in the market.

Our main objective is to increase our presence and positioning amongst consumers that we are the leading brand on Virtual Reality products by proving that our quality in VR experience is unmatched. We want to be the first to capture the idea of Virtual Reality Headsets in the mind of the consumer.

Segmentation

Through extensive research, we have narrowed down the segments that Oculus has, and should be targeting as they continue to grow in size. The specific groups are: Casual users, Educational users, and Performance users. The purpose that the users purchase this product for, would in turn, place them in one specific category. As a team, we decided to focus on educational users, or DIYers, because this has the potential to become a very large market for Oculus in the near future.

Casual Users:

Casual users are individuals that purchase, or receive Oculus as a gift, that are just planning on casually using the virtual reality software to see if it's something they are interested in. They have the disposable income to have the newest products that may or may not suit their gaming and lifestyle needs.

Educational Users:

Educational users are people, or companies, that are using Oculus to further their knowledge on a specific path. Whether it be trade schools or some other form of education furtherment. Companies can also use this technology to train employees in the masses without having the overhead of physical classroom space and teachers to teach. Educational users are different from casual users because they have a specific purpose for buying Oculus in regards to knowledge it provides.

Performance Users:

Performance users are consumers that have the primary goal of using the Oculus for the full, immersive experience. These individuals have extensive product knowledge and understand the full potential these VR headsets offer the consumer. This group looks to improve their gaming experience with the highest quality and numerous application fronts.

Targeting

The segment being targeted moving forward with the process is do-it-yourself oriented tradesmen and women. People within this segment consist of aspiring tradesmen and women looking for an alternative mode of education for their desired trade. The reason behind this strategy is the Oculus Rift has an opportunity to expand outside of the entertainment and video game industry. The product potential for the Oculus Rift could revolutionize the education process. This segment is ideal for expanding into the industry of education due to the benefits sought by the target market. Tradesmen and women who wish to hone their skills with their respective trade can cut the costs of materials while practicing their skills using the VR product. This technology allows for a virtual experience that can help the target customer expand on their skills using the Oculus for educational purposes.

Positioning

Casual Users: Oculus platforms' resolution and technology is advanced and consistently improving while maintaining a low or equivalent cost compared to similar products. Marketing focuses on hip, diverse individuals who engage with imaginative experiences, escaping the confines of reality in a safe and empowering way. As VR becomes more normalized in the consumer consciousness, multiple entry points through online searches, word of mouth, cell phone companies, electronics and entertainment departments, and press coverage focusing on breakthrough technology and emerging popularity provide access and low-risk exploration of the technology. Oculus has more presence for the everyday consumer than other VR firms.

Oculus-specific popular games such as *Marvel Powers United VR* engage with a wide range of consumer curiosity while making entry into the VR market both accessible and exciting. A growing library of applications unique to Oculus platforms provide an extensive array of games and experiences at a multitude of levels from childhood to advanced gamers - one of the most diverse and well-designed VR ecosystems available.

Educational Users: It is projected that by 2020 50% of the VR market will be with institutions, not individual consumers. While VR trainings are becoming more clearly established in trainings and some educational settings, this is still an underdeveloped market. Through unique and exclusive partnerships between Oculus and reputable educational or vocational institutions, a more refined and robust suite of educational and supplemental courses will be developed - complete with hands-on experiences for users to practice developing skills.

Oculus educational experiences will be given validity through the high-quality institutions collaborating on the development of these programs. Public and private institutions may contract to access these cost-saving and accessible courses and trainings, while taking advantage of the affordability of robust Oculus platforms and flexible integration options. Tradespeople can access typically high-cost education and experience at a fraction of the cost with the same quality-standards. Through partnerships with hardware stores and potentially an Oculus vocational school suite, Oculus can create accessibility to choice or abbreviated educational experiences for DIYers giving them the privilege of certified and reputable courses and trainings while saving their material costs through virtual hands-on demos and practice sessions.

Performance Users: Oculus maintains the reputation of VR pioneers throughout the world of cutting-edge technology. Continued advances in the Oculus platform, particularly in image resolution and tracking sophistication, push the envelope beyond the competition. Exclusive alliances with developers create desirable and alluring content engaging with users interested in the best experience in technology and revolutionary games ranging from strategy to multiplayer to single-shooter and far beyond. With the ability to interface with a variety of technology,

Oculus is accessible through cell-phone-integrated platforms and incredibly sophisticated through computer consoles utilizing powerful capabilities and high-level refresh rates in real-time.

The Oculus experience stands apart as the leader in the establishing entity of the VR industry and as the bleeding edge, forging new expectations no other platform is able to satisfy.

Marketing Implementation

Goal:

With the inevitable advancement in virtual reality technology, this group suspects virtual reality headsets be accessible to more consumers because of the technology trickle down effect to other manufactures as well as a noticeable increase in competition resulting in lower prices for

consumers. With virtual reality technology existing in consumers knowledge set, one can infer an increase in adoption of the technology into everyday consumer lives. Therefore, this group expects tradesmen and women to accept the technology as a valid and accredited source for training.

This group aims to use the educational users segment, specifically consumers looking to obtain an education in a trade, to further adopt virtual reality technology. Oculus as a brand must first move away from only being useful for gaming and adopt a broader application of virtual reality. Once the brand is not just seen as entertainment it will be easier for tradespeople to understand the efficiencies of using virtual reality technology.

Implementation:

Our go to market plan is two part: first, this group wants to validate the Oculus brand within the construction industry, then deliver our educational programs through partnerships and trade/vocational schools.

In order to validate the brand in the construction industry, this group aims to attend the 2019 Build Expo in Los Angeles in March and in Seattle in September. The intention with attending the Build Expo is to demonstrate the cutting edge technology of Oculus Rift and provide hands on experiences of how it can be a sufficient tool in trade education. The demonstrations will be the basics of laying flooring, hanging drywall, and framing. At the tradeshow there will be an emphasis on how comfortable, immersive, and informative the headset and programs are. We believe the people Build Expo draws to its shows are going to be the early adopters of innovation in the construction industry. Moreover, Seattle and Los Angeles were chosen because they are already technology hubs and it is not a reach to believe the people attending the expo will be familiar with virtual reality in some respect.

Next, by the end of 2020 Oculus will carry over the brand strength and create a partnership with Home Depot. The partnership will result in 8 labs across the west coast, 3 in California, 3 in Washington, and 2 in Oregon. Home Depot has a strong brand, especially in the construction industry, and this group aims to utilize that value by partnering. Along with the partnership, Oculus will build labs with 5 trade/vocational schools, 2 in Washington, 2 in California, and 1 in Oregon. The intention with having these labs available to both individuals looking to start an education in a trade, or midsize to large construction firms paying for employees attend a lab course, will reduce operational costs by lowering working hours as well as material waste. The goal with these labs is for them to spread geographically and have specified programs available to common consumers. For example, GE can create a program illustrating how to install and set-up a new fridge.

Lastly, to compliment both facets of the implementation plan, this group would establish an online presence in order to efficiently reach potential customers. By utilizing economies of scale, assuming Facebook is sufficient at digital marketing, Oculus will have positive SEO by content creation and link building. Much of the content would be geared towards sharing the success and low cost of using VR for a trade education supplement.

Cost:

Build Expo -- 2 Expo's with 2 booths at \$400 each booth = \$1,600

Home Depot partnership -- West Coast, 8 stores at \$10,000 each = \$80,000

Accredited institutions -- Start with 5 at \$10,000 each = \$50,000

Training for teachers -- 21 at \$1,600 each = \$33,600

Teachers are trained for 2 weeks at a rate of \$20/hr

Evaluation and control

- Sales as a percentage compared to the industry revenues

As far as our Online store:

- Total Conversions or Conversion rate: to analyze how many customers are purchasing our product.
- New Sessions: to analyze the number of customers interested on learning more about our product, as well as being open for promotions and additional information.
- Channel Specific Traffic: to analyze where our customers are coming from on the Web.
- Bounce rate: to analyze how many customers are not interested or satisfied with our online content.
- Customer Retention Rate: to analyze how efficient we are at holding on to our customers.

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