



Live Concert Virtual Reality Application VReality

Name
Chan Kah Hwee Joseph
Madeline Tooh Weiping
Loon Hai Qi
Nurul Afiqah Binte Rashid

Table of Contents

Executive Summary	5
Business Opportunity	5
Value Proposition	6
Market Positioning	6
Revenue	6
Required Funding/ Return on Investment (ROI)	6
Value Proposition and Innovation	6
1.1 Big Pain	7
1.2 Big Value	7
1.3 Product & Services	7
1.4 Shortfalls of Current Plans & Solutions	8
1.4.1 Failure in Network Connectivity	8
1.4.2 Lack of Familiarity towards VR Technology	8
1.4.3 Lack of Concert Choices	8
1.5 Benefits of Solutions	8
Market Identification and Analysis	8
2.1 Market Size	8
2.1.1 Initial Target Market	8
2.1.2 Addressable Market	9
2.1.3 Total Market	9
2.2 Market Growth	9
2.3 Customers	9
2.3.1 Primary Customer	9
2.3.2 Secondary Customer	9
2.3.3 Customers Archetype	10
2.4 Market Segmentation	10
2.5 Trends	10
2.5.1 Technological	10
2.5.2 Social	10
2.5.3 Demographical	10
2.5.4 Regulatorical	10
2.6 Competitors	10
2.6.1 Direct Competitors	10
2.6.2 Indirect Competitors	10
Competitive Marketing and Sales Strategy	11
3.1 Product Distinction from Competitors	11
3.1.1 Product Quality	11
3.1.2 Product Offering	11
3.1.3 Cost Effectiveness	11
3.1.4 After Sales Service	11

3.1.5 Comparison Matrix	11
3.2 Market Positioning	12
3.2.1 Positioning Strategy	12
3.3 Tagline of the Product	12
3.4 Sales Strategy	12
3.4.1 Pricing	12
3.4.2 Promotion	12
3.4.3 Market Entry	13
Sustainable Competitive Advantage	13
4.1 Competition Against Small Followers	13
4.2 Competition Against Large Companies	13
4.3 Intellectual Property (IP) Strategy	14
4.3.1 Defensive Publishing	14
4.3.2 Optimizing R&D Operations	14
4.3.3 Monetizing IP Assets	14
4.4 Competitive Strategies	14
4.4.1 Good Positioning in the Market	14
4.4.2 Having an Impressive In-house Research and Development (R&D)	14
4.4.3 Maximising Intellectual Property (IP) Strategy	14
4.5 Critical Success Factors	15
4.5.1 Strong Research and Development (R&D) Towards the Value of Product	15
4.5.2 Establishing a Reputable Brand	15
4.5.3 Building a Strong Team	15
Company Products and Services	15
5.1 Products	15
5.1.1 VReality Application	15
5.1.2 VReality Headset	15
5.2 Services	16
5.2.1 Ticket Sales	16
5.2.2 Advertisements	16
5.2.3. VReality Headsets Delivery	16
Team	16
6.1 Core Team Members	16
6.1.1 Chief Executive Officer (CEO)	16
6.1.1.1 Background	16
6.1.1.2 Competencies & Experience	17
6.1.2 Human Resources (HR) Strategist	17
6.1.2.1 Background	17
6.1.2.2 Competencies & Experience	17
6.1.3 Director of Business Development	17
6.1.3.1 Background	17

6.1.3.2 Competencies & Experience	17
6.1.4 Product Engineer	17
6.1.4.1 Background	17
6.1.4.2 Competencies & Experience	17
6.2 Advisors	18
6.2.1 Concert Holders	18
6.2.2 VR Specialised Company, IgniteVR	18
Operational Plan	18
7.1 Business Model Canvas	18
7.1.1 Execution of Business Plan	18
7.1.2 Key Activities, Timeline and Milestones	18
7.1.2.1 Key Activities	18
7.1.2.2 Timeline	18
7.1.2.3 Milestones	19
7.1.3 Resources Needed	19
7.2 Risks and Mitigation Strategy	19
7.2.1 Risks	19
7.2.1.1 Operational Risks	19
7.2.1.2 Funding Risks	19
7.2.1.3 Technology Risks	19
7.2.1.4 Development Risks	19
7.2.1.5 Procurement Risks	19
7.2.2 Mitigation Strategy	19
7.2.2.1 Operational Risk	19
7.2.2.2 Funding Risk	19
7.2.2.3 Technology Risk	20
7.2.2.4 Development Risk	20
7.2.2.5 Procurement Risk	20
Expansion Plan	20
8.1 Business Scale-up Plan	20
8.1.1 Timeline of Expansion	20
8.1.2 Resources Needed	20
8.1.2.1 Higher Demand for VR Headsets	20
8.1.2.2 Higher Demand for Manpower	20
8.1.2.3 More Funding	20
8.1.2.4 More Partnerships	20
8.2 Risks and Mitigation Strategy	21
8.2.1 Unable to Obtain Enough Fundings	21
8.2.1.1 Mitigation Strategy	21
8.2.2 Inconsistent VR Quality	21
8.2.2.1 Mitigation Strategy	21
8.2.3 New Competitors	21

8.2.3.1 Mitigation Strategy	21
Financials	21
9.1 Business Model	21
9.1.1 Key Sources of Revenue	21
9.1.2 Main Cost Items	22
9.2 5-Year Projection P&L	22
9.3 Monthly Cash Flow Projection	22
9.4 Required Investments and Equity	23
9.4.1 Usage and Proceeds	22
9.5 Exit Strategy	22
Conclusion	24
Market Opportunity	24
Value Proposition and Innovation	24
Investment Required and Expected Return on Investment (ROI)	24
Call to Action	24
References	25
Annex A	27
Tables and Figures Referred to in Main Report	27
Annex B	33
Patent Form Application of VReality under IPOS	33
Annex C	34
Resume of VReality's CEO, Hai Qi	34
Annex D	35
Resume of VReality's Human Resource Strategist, Madeline	35
Annex E	36
Resume of VReality's Director of Business Development, Afiqah	36
Annex F	37
Resume of VReality's Product Engineer, Joseph	37

Executive Summary

Business Opportunity

VReality is an application designed mainly to address problems encountered by spectators of concerts worldwide. The big issue that these spectators face is the difficulty of acquiring scarce concert tickets to attend concerts of their favourite pop-stars and idols. These problems may have risen due to either: popular tickets being sold out, or, due to geographical restrictions. For example, spectators in Singapore

being unable to attend concerts held by Katy Perry in U.S.A, G-Dragon in Korea or even Adele in Britain.

Value Proposition

VReality has designed solutions to eliminate these issues by introducing an application for spectators to view these concerts in the comforts of their homes, but at the same time, being able to enjoy the live concert experience. The customer only has to download the application on their mobile devices, which is readily available on the Google Play Store, or the Apple App Store, purchase the concert tickets through the application and order a rental service or purchase of the virtual reality (VR) headsets in order to immerse themselves in the 360-degree live streamed concert experience without facing the problems further explained in Section 1.1.

Market Positioning

VReality would be positioning its market in the Asia-Pacific market while it remains untapped. The market segmentation focuses on the initial target market in Singapore. The market is segmented to concert fans who are unable to purchase tickets from sold out concerts in Singapore. These fans demographically are within the age of 18-34, who psychologically has a lifestyle towards celebrity fandom or 'worship'. The size of the segment is approximately calculated in Section 2.1.1, and generates a revenue of \$0.6 million. However, the total market, which consists of all music fans who have a strong resolution to attend concerts, could estimate up to a number of 228 million fans worldwide and thus, summing up to a whopping amount of \$16.8 billion. as revenue.

Revenue

VReality is not only packed with fulfilling benefits to the customers but also packed with many revenue avenues for the company and its investors. Firstly, ticket sales will be the main revenue stream to the company, although the company will not be acquiring the full sum of the ticket sales as part of the sales needs to be redirected to the concert artiste's managerial company as well as copyright fees. Secondly, advertisements will also be included in the live stream of concerts, which will be another large aspect of company's profits. Lastly, the company will be looking to sell and rent newly developed headsets to customers which guarantees a better VR concert experience. When the profits and revenues of the company increase, investors will stand to gain more in the long run.

Required Funding/ Return on Investment (ROI)

VReality aims to raise \$150,000 in the first round of funding, for which investors can expect to receive 10% of the company's shares. From the fourth operating year, investors can expect a ROI of 78.44% and this figure is estimated to increase in subsequent years.

Value Proposition and Innovation

Many seek to attend concerts to immerse themselves into their favourite music while watching their idols at the same time. However, it is not an easy task for one to be able to attend a concert they love. Concert fans are constantly facing problems that many are unable to easily identify. VReality hence helps to solve the three big pains identified in concert fans:

1. Sold out concert tickets
2. Unable to attend desired concert due to geographic location restrictions

3. Expensive concert tickets

1.1 Big Pain

Travel agencies have been providing music concert experience packages abroad for customers. One of these agencies includes City-based Revel Travel, the official partner of Tomorrowland in the Middle East. These type of travel packages have been increasingly popular, with the number of packages sold “double year-on-year”. Inability to attend concerts due to geographical location is a pain to most individuals, and according to Sadhwani, who is a frequent traveller for music concerts, she explains that there is a pain because “Most international artists don't come to India”(Balram, 2016). Concert tickets are usually priced at an average of \$150, together with an air ticket, accommodation and daily expenses, one will easily require a minimum of \$800, which varies based on travel distance. However, not everyone has the luxury of time and money in doing so.

Due to the popularity of the concert, prices can hike up to a few hundred which are not affordable to many. For instance, the best seat of the Britney Spears’s upcoming concert in Singapore was priced at a steep price of \$568 and even the cheapest ticket costs \$188. As compared to other artists like Ed Sheeran, the most expensive ticket is sold at \$248, which is about 50% cheaper (Haid, 2017). Other than the Britney Spears’s concert, there are other concerts that hiked their prices much higher, such as American rock band Guns N' Roses, where the VIP package was priced at \$2,063. Based on the examples, concert prices costs at unbelievably high rates and not many can afford such expensive tickets. Less than a month to the Britney Spears’s concert, the first and second categories were still categorized as available and not even marked as limited “available” which shows that even the biggest fans could not afford the best category seats (Yeo, 2017).

Other than that, there is also a problem that lies upon low priced concert tickets that are high in demand. Resellers have been exploiting this market by purchasing a huge number of tickets, causing concerts to be sold out fast and reselling those tickets at surged prices. For instance, Bruno Mars's 22,000 tickets were fully sold in less than 1.5 days and resellers are selling his Category 1 tickets, originally priced at \$348, for \$1,500 on Carousell (Ragurmana, 2017).

1.2 Big Value

VReality identified the big pains of the market and seeks to aid the majority of the population to purchase cheaper tickets, as well as solves the geographical issue of market users. VReality uses Virtual Reality (VR) technology, to bring across high-quality streams of live concerts happening around the world. VReality aims to deliver these high-quality streams directly to users. This VR technology will be able to solve the geographical issues that many market users currently face.

With the introduction of VReality, users can now view high-quality live concerts directly streamed to their mobile phones. Equipped with a VR headset, users will be able to experience a live concert in the comfort of their homes.

VReality aims to tweak the ticket prices of VReality streams to be slightly cheaper than that of live concerts, so as to cater to those who are unable to purchase the expensive tickets to view concerts live in person.

1.3 Product & Services

VReality offers a 360-degree panoramic, immersive concert live experience, using our high-end VR technology headsets that are equipped with great audio enhancements as well. These live concerts will be streamed over a reliable network just by using a user-friendly mobile application. This application makes the process of buying affordable concert tickets more convenient and the rest of the services are handled by VReality, such as delivery of VR headsets. Detailed products and services will be further explained in Section 3.1.2, 5.1 and 5.2. Users of VReality will hence be provided services at affordable pricing and

convenience.

1.4 Shortfalls of Current Plans & Solutions

1.4.1 Failure in Network Connectivity

Streaming of live concerts is highly dependent on the internet connectivity. As compared to attending a real-life concert, users of VReality might face connectivity issues and real-time concert disruption when streaming live concerts. In the event of network failures, customer experience might be affected. To counter this problem, VReality will be providing a playback feature for customers to continue watching from the part of the concert that was stopped due to network failure.

1.4.2 Lack of Familiarity towards VR Technology

VR is a relatively new technology and most individuals are unfamiliar with operating VR equipment. However, with VReality's user-friendly mobile application interface that controls the VR equipment, one does not need to know how to operate VR to use services provided by VReality.

1.4.3 Lack of Concert Choices

As the use of VR in watching live concerts is a relatively new business concept, music managerial companies might not partner with VReality. VReality will not be able to gain the access to live videos of some artistes and this may deter consumers due to lack of credibility. For a start, the company can approach less renowned artistes who are passionate about sharing their music as opposed to earning profits. From there, VReality can improve the results over time and gain the trust of other companies as well as users.

1.5 Benefits of Solutions

VReality serves as an alternative to live concerts and not a replacement for attending real-life concerts. Not only will artists be able to deliver amazing performances to a wider audience around the world, but also, avoid disappointment to fans who are restricted to attend concerts due to the big pains mentioned in Section 1.1. According to Walker (2016), research by Eventbrite has shown that 78% of millennials value experiences more than physical product possessions and 73% has agreed that the reason is due to 'FOMO' (fear of missing out). They described experiences as something that they can 'always remember', and these experiences 'last much longer than a new dress'. Therefore, VReality provides a reliable platform to experience a fully immersive live concert experience that opens up new opportunities for everyone and is a win-win situation for both artists and consumers.

Market Identification and Analysis

2.1 Market Size

VReality has an experiential and uncommon offering of live streaming concert services that appeal to a large concentrated music fan base. The following sections outline the key information regarding the initial, addressable and total markets respectively.

2.1.1 Initial Target Market

The initial target market is one for which success is highly probable, thus, the target will be the concert fans who are unable to purchase tickets from sold out concerts in Singapore. The massive demand for live music concerts has caused rapid sell outs which results in approximately 60% of fans to miss out on purchasing tickets (Patel & Rossen, 2016). For one concert, an estimation of 9,000 out of 15,000 fans is

unable to attend concerts due to sold out concerts. This will sum up to \$0.6 million in revenue if each view costs on an average of \$245.69 for a 360-degree live streaming concert through VR headsets. The estimation of the profit is done by calculating “ $245.69 \times 0.3 \times 9000$ ” and the further explanation on the calculations will be reflected in the section 9.1.1.

2.1.2 Addressable Market

The addressable market does not only include concert fans who no longer have the opportunity to purchase tickets from sold out concerts but also those who are constrained due to overwhelming ticket prices and geographical restrictions. Based on the iconic Californian music festival, Coachella, there were over 9 million views, consisting mainly of viewers from other countries, watching the live stream (Guichard, 2016). With the assumption that 5.4 out of 9 million fans fail to acquire tickets, and instead, purchase our live streaming services, it will sum up to a revenue of \$0.4 billion.

2.1.3 Total Market

According to iROCKE (Rogers 2014), live-streamed concerts appealed to 380 million fans worldwide in 2013. As a whole, the total market consists of all music fans who have a strong resolution to attend concerts which are estimated to be 228 million fans worldwide and thus, summing up to a whopping amount of \$16.8 billion.

2.2 Market Growth

Karp (2016) claimed that there is a growth in concert goers in the music industry and fans are not hesitant to pay for music. Streaming has changed the music landscape and provided a new robust platform where customers can get media content anywhere at any time. According to Global Music Report 2017, the growth in streaming revenue rocketed by 60.4% due to the evolving global market and it is forecasted to rise to \$7.4 billion in 2021 (Resnikoff, 2017).

From Figure 1 in Annex A, the streaming revenue is gradually increasing from 2009 to 2014. The numbers are increasing possibly due to factors such as convenience, availability, mobility and affordability. Hutchinson (2015) believes that live streaming concerts are one of the untapped entertainment markets of live streaming. Thus, VReality believes that consumers will ultimately be the real winners because live streaming concerts by VR headsets offer consumers a platform to not miss out on the wholesome concert experience while countering the problems of accessibility, budget and even for disabled individuals. According to The Motley Fool (2016), VR technology is expected to be a \$30 billion industry by 2020. It would be a great opportunity to enter the market while it is untapped and when demand is high.

2.3 Customers

The customer base will generally be fans who have a strong resolution to attend concerts.

2.3.1 Primary Customer

The primary customers are the music concert fans who miss out on concerts due to sold out concerts, overwhelming ticket prices and are constrained by geographical locations or disabilities.

2.3.2 Secondary Customer

Currently, there is no secondary customer target but in the expansion plan for the years to come, the secondary customers will be those who wish to rewatch or reminisce about past streamed concerts that is no longer debuted.

2.3.3 Customers Archetype

Festival demographics showed that most concert-goers are millennials, aged between 18 to 34, according to a survey by the research firm Nielsen Music (2015). In addition, the average age of concert-goers is 22 and the proportion of males to females within this population is 59:41. These music fans are driven to watch their respective idols perform live at concerts. The archetype of customers, Alex and Helena, is found in Annex A as Figure 2.

2.4 Market Segmentation

The market is segmented to concert fans who are unable to purchase tickets from sold out concerts in Singapore. These fans demographically are within the age of 18-34, who psychologically has a lifestyle towards celebrity fandom or 'worship'. The size of the segment is approximately 9,000 fans based on calculations in Section 2.1.1, which would generate a revenue of \$0.6 million.

2.5 Trends

2.5.1 Technological

Torr (2017) claims that VR is one of the latest trends in the technology market. VR offers the unique ability to achieve a one-of-kind experience, which can engage audiences to immerse themselves in the life-like digital renders. There has been an increasing trend to enhance such VR applications to suit games, concerts and much more.

2.5.2 Social

Nowadays, youth millennials are highly influenced by social media especially due to the growing popularity of celebrity culture globally. Most of these millennials are music fans who would not want to miss concerts as it reflects support to their respective favourite artists.

2.5.3 Demographical

As mentioned previously in Section 2.3.3 by Nielsen Music (2015), 64% of youth millennials worldwide, from the age of 18 to 34, are passionate concert goers. There is also a rapid increase in the number of concert-goers over the past decade.

2.5.4 Regulatorical

Torr (2017) claims that Info-Communications Media Development Authority is pushing boundaries for the VR landscape in Singapore and investors are pumping huge sum of fundings on start-ups working on the developments of VR technology.

2.6 Competitors

2.6.1 Direct Competitors

There is a competitor, LIVE Nation, who provides live concert streaming for a limited period and dominates the US market. Therefore, VReality still has the opportunity to dominate the Asia Pacific region's market.

2.6.2 Indirect Competitors

Indirect companies are mainly major streaming market players that sell streaming products or services.

Existing companies such as Qello and Spotify that provide subscription-based music streamings. Other than that, NextVR provides VR streaming for sports, such as NBA, NFL, and live broadcasts.

Competitive Marketing and Sales Strategy

3.1 Product Distinction from Competitors

3.1.1 Product Quality

LIVE Nation and VReality utilise the same technology (6DoF) for recording the footage. However, VReality also focuses on making the audio recording ambisonic which is not present in LIVE Nation's recording. Thus, enhancing the quality of the live-streamed concert experience.

3.1.2 Product Offering

Unlike our competitor, LIVE Nation, who emphasises the value of bringing fans closer to their idols, VReality decided to take a different approach as the goal is to meet the needs of the concert goers. VReality will emphasize on the sense of belonging that demonstrates fan worship which is what concert goers expect from a concert (Kempton, 2014). Hence, VReality aims to provide a more affordable and interactive one-of-a-kind VR live concert experience unlike any of the existing products in the market. VReality has incorporated interaction tools such as speech to text or text to speech feature that enables users to communicate with the other fans at real time while watching the live-streamed concert. Secondly, VReality has included an optional service that provides VR coverages of users' waiting in a line before entering the concert venue and walking into the venue itself etc. Thirdly, VReality will provide a platform for users to revive concert experiences that are unlike LIVE Nation that only streams live concerts. All of these will make VReality's products more customer oriented and customisable.

3.1.3 Cost Effectiveness

LIVE Nation prices are on the premium side, as compared to VReality because users are expected to own a compatible VR headset brand such as Samsung or Oculus. Take Samsung Gear as an example, users are required to have a compatible Samsung mobile phone. Headsets are developed for multiple functions, not limiting to gaming and video. For individuals who want to experiment with the brand and gain confidence, the additional cost makes it difficult for them to enter the VR concert market. Additional conditions such as being a Citi user, further tie users down. VReality, on the other hand, does not require users to own a pair of VR headset.

3.1.4 After Sales Service

VReality recognises that users may have doubts about our product as it relies heavily on strong internet connection. Hence, to make our product worthwhile and attractive to the market, VReality will provide a playback option in case of network failure. This is not a feature that is made available by LIVE Nation.

3.1.5 Comparison Matrix

For comparison matrix, VReality has identified 4 features that customers will anticipate in our service, namely video streaming quality, product offering, cost-effectiveness and customer service. Each of the features is rated by comparing the performance of VReality and LIVE Nation in that area. The ratings are represented by “*” . Refer to Table 1 in Annex A for comparison matrix of VReality and our direct competitor, LIVE Nation.

3.2 Market Positioning

3.2.1 Positioning Strategy

VReality will pursue product characteristics as the positioning strategy. The reasons of the choice are, firstly, there is minimal competition in the VR concert market and secondly, the concept of VR concerts may be the next big thing in the near future, which can introduce more competition globally. Even though VReality will have the first mover advantage in Singapore, the company wants to reassure users that our goal is to always exceed users' expectations towards concert experience by bringing in new ideas to make the whole experience memorable so that VReality is not a backup for not being able to secure concert tickets. This makes the switching cost high for users. As mentioned previously in Section 3.1.2, VReality will focus on bringing a real concert experience at the comfort of users' homes. The product characteristics that VReality offers to users are of premium quality, wide ranges of product offerings and uninterrupted video streaming. Refer to Figure 3 in Annex A for positioning of VR competitors in the current market.

3.3 Tagline of the Product

"The eyes you've never imagined."

3.4 Sales Strategy

3.4.1 Pricing

According to our pricing objective from Table 2 in Annex A, the pricing methods that VReality will adopt are psychological pricing, going-rate pricing and perceived value pricing. Refer to the pricing strategy from Table 3 in the Annex A. Therefore, based on Table 3 from the Annex A, the strategies supports that VReality should price the VR concert tickets over a range of 70%-95% of the Category 1 tickets or the best seats of the actual concert.

3.4.2 Promotion

To further promote the brand, VReality has plans to utilize social media influencers as the figure in our advertisements. Initially, the plan was to use a celebrity but considering the higher price, an influencer will be a better choice. The advertisement can be in the form of a poster or a video, depending on which platform we used. Based on our research, 78% of the millennials use Snapchat, which is the highest of all social media platforms for the group (Smith & Anderson, 2018). Also, it is noticed that Youtube still remains at the most widely used platform for all generations as shown in Figure 4 in the Annex A. Hence, VReality will be putting up short video advertisements on only Youtube's pre-roll before product launch in the second year. For subsequent operating years, VReality will use both Youtube and Snapchat's discover. Furthermore, we will be participating in TECHSPO Singapore 2018, to expose the public to our company.

To promote a concert, VReality will be utilising poster advertisements on Facebook's domain ads and Youtube's pre-roll, but not restricted to those mentioned. Influencer sponsored posts can be an opinion too where the influencer will post about the event and VReality will pay them according to the likes of their posts. VReality will be promoting the concerts on all our social media platforms including Twitter, snapchat, Instagram etc. For the first buyer, users are able to get 5% discount off the VR tickets. Users who choose bundle package such as purchasing VR headset with VR tickets may be given 5% rebate off the cost of VR headset.

To foster customer loyalty, VReality has ranking system “Real Awards” for loyalty program where there are 3 loyalty categories namely bronze, silver and gold. Refer to the customers categories from Table 4 in Annex A. These ranking system allows customers to earn Realpoints according to the rank. With the Realpoints, customers are able to exchange their Realpoints with rewards such as complementary headset. Refer to Realpoints Rewards Guide in the Annex A.

3.4.3 Market Entry

VReality Headquarters based in Singapore will have strategic alliances with multiple concert organisers and one of the proposed main partner is IMG Singapore. VReality will only be doing co-marketing alliance and other business strategies of both companies are independent. VReality identifies that it would be cost inefficient for the company to be promoting on the concert just to bring awareness of the VR coverage. The company is directly marketing the concert for free. Hence, VReality chooses to pursue a co-marketing alliance that will benefit both parties.

VReality has chosen IMG as the main partner due to their competency in organising large-scale concerts by international artists. This creates a platform for VReality to connect to various global entertainment companies. The advantage of such arrangement allows us to have wider concert varieties to serve a bigger market. The way our partners can benefit from the alliance is that VReality will act like a central marketing agency, allowing companies to outsource their marketing to us at a cheaper price (approximately 10% off the market price). This will allow them to free their resources in marketing, saving more cost. If the company could not find a suitable partner, VReality has planned to restrict marketing at the surface level and not spend too many resources on it.

Sustainable Competitive Advantage

In order for VReality to sustain competitive advantage, the company has to remain unique in our business model. On top of that, achieving a favourable long-term position over competitors.

4.1 Competition Against Small Followers

VReality will build a strong, invaluable and reputable brand that focuses mainly on building customer loyalty and good customer service, leading to customers preferring VReality over small followers. The other move is to have the product be consistently adaptable and always improving to keep VReality more distinct than the small followers. This may open up a domain to include in more follow up products to improve the live streaming concert experience. Managing brand value and having great corporate reputation can be a sustainable competitive advantage for VReality.

4.2 Competition Against Large Companies

Competition against large companies will be countered with the possession of strategic assets. VReality will maintain a high standard and excellent Research and Development (R&D) to achieve valuable strategic assets such as patents, trademarks and copyrights to keep the company more unique than other large companies. Moreover, to penetrate a market with large competitors, market pricing and product differentiation are crucial. Keeping products and services affordable by pairing user-friendly mobile application with in-house high-quality VR equipment for a 360-degree experience virtual technology device and surround sound audio will make a huge impact in differentiating VReality from other companies. With that, consistently building up an outstanding team to work with will also bring more opportunities for the company to grow.

4.3 Intellectual Property (IP) Strategy

As mentioned before, VReality will maintain the R&D quality standards to achieve strategic assets to remain competitive in the long run against other companies. At the most basic level, VReality will be aiming for three IP strategies which are defensive publishing, optimizing R&D operations and monetizing IP assets.

4.3.1 Defensive Publishing

Defensive publishing will help to protect VReality's products from threats such as patent trolls who collect license damages and also competitors who may incrementally improve our core patent to erode its value. To ensure exclusionary rights to the product's lifecycle by remaining strong, VReality will be applying for patents to protect IP investments.

4.3.2 Optimizing R&D Operations

Optimizing R&D operations will speed up decision-making of the company. Patent searches, technologies and databases may be hard to execute, therefore, retrieving analytic tools to optimise such processes and operations will be ideal to deliver more insights of the product. Overall, this will foster VReality to be more buoyant and remain competitive in the market.

4.3.3 Monetizing IP Assets

Monetization will help to market the products faster. On top of that, the IP portfolio has to be strategically managed to identify potential licensing partners and also provide opportunities in new markets for future product launches. Thus, monetizing IP assets will help to sustain competitive advantage.

4.4 Competitive Strategies

4.4.1 Good Positioning in the Market

One of the strategies would be positioning - in terms of brand and geography. In terms of branding, VReality aims to build a reputable established brand based on maintaining customer loyalty and providing excellent services and products. In terms of positioning geographically, the strategy is to monopolise the Singapore market and expanding towards the Asia-Pacific market while it is untapped as VReality will then be more reputable and capture a higher percentage of the market.

4.4.2 Having an Impressive In-house Research and Development (R&D)

Having an impressive in-house R&D is one of the strongest strategies as it not only gives VReality the competitive advantage but also acts as a barrier for competitors to enter the market. With an outstanding in-house design of headsets, it will be hard for competitors to copy or catch up to VReality's business model due to high adaptability and consistent improvements in the quality of products. Moreover, the high R&D costs will hinder competitors to enter the market.

4.4.3 Maximising Intellectual Property (IP) Strategy

As mentioned before, maximizing IP strategy will help VReality to remain competitive in the long run against other companies. The strategy was explained further in Section 4.3. VReality will be applying for a patent under Intellectual Property Office of Singapore (IPOS). Application of IP patent detail form is in Annex B.

4.5 Critical Success Factors

4.5.1 Strong Research and Development (R&D) Towards the Value of Product

Possessing strong R&D will add value to the quality of the product for users to have a wholesome and fully-immersive live streamed concert experience. This will be a critical success factor because more users will appreciate the value of the product and use it as an alternative solution when facing the big pains of purchasing concert tickets.

4.5.2 Establishing a Reputable Brand

To establish a reputable brand, VReality has to be successful in rounding up the market. VReality can achieve this success factor by maintaining customer relationships, sustaining customer loyalty and providing excellent services and products.

4.5.3 Building a Strong Team

Another critical success factor is fostering a supportive team that is willing to input calculated risk towards the success of VReality. With having a strong team, each member will compliment their strengths and make up for their weaknesses, thus, maintaining efficient output in the long run.

Company Products and Services

5.1 Products

5.1.1 VReality Application

VReality will be launched as an application that will be made available to download on major mobile phone platforms such as the Apple app store or Android play store. The VReality application serves as the main product of the company. VReality allows customers to view “pay-per-view” live concerts happening all around the world.

As mentioned in Section 2.2.1, the company targets a large audience - mainly concert-goers - to attend concerts in person. The application will serve the best possible solution to this problem, by mimicking the experience that concert-goers get when attending live concerts, such as the mood during the concert, the background cheers of other spectators and evokes many more feelings that one gets when attending live concerts. Users will only require a mobile phone with the downloaded application, along with the rented VReality headset to enjoy the live concert experience, in the comfort of their homes.

5.1.2 VReality Headset

The company intends to produce its own brand of headsets for sale or rentals. Although there are current headsets in the market, the company feels that aside it being another revenue stream, it also will allow users to enjoy better comfort whilst wearing the headset.

With R&D into the production of feasible quality headsets, the company aims to achieve the following in the new headsets:

- Aesthetically pleasing
- Light weighing
- Comfortable
- Better surround sound quality and ambience
- Lower cost as compared to the other headsets in the market

An important factor that VReality's research team has decided to include within the headset design is such that, it will be designed like a helmet. This is designed so as to achieve the surround sound ambience effect. This surround effect hopes to imitate the effects that a user gets when he/she attends a live concert.

5.2 Services

5.2.1 Ticket Sales

Ticket sales of the streamed live concerts can be purchased via the application 2 weeks before the live concert date itself. This allows users who are unable to purchase live concert tickets, due to unavailability, to still enjoy and immerse oneself in the concert from the comfort of home.

Tickets will be one of the main revenue streams of the company, although ticket prices will be reviewed once the application is nearing its official launch date. The current decision of the ticket prices will be at 70%-90% of the live concert category-1 ticket prices, which will be attractive to customers, as they will enjoy the close-up view of the performance.

5.2.2 Advertisements

Advertisements, aside from ticket sales, will be the primary source of revenue for the company. Advertisements can come from sponsors, entertainment companies and many others. These advertisements will be placed on the application page, beginning, middle and end of live broadcasts. Although advertisements may be a hindrance to users while viewing live streams, the company hopes to make these advertisements as subtle as possible, in order for users to enjoy the live concerts without much disturbances.

5.2.3. VReality Headsets Delivery

The company intends to provide free delivery services to customers who opt for rental or purchase of VReality headsets. The company hopes that these intentions shall encourage more customers to purchase or rent the headsets. The delivery costs will be incurred by the company itself. In the current stage of the business plans, the company intends to utilize delivery services from third-party vendors and delivery companies such as NinjaVan, GogoVan, Singpost etc. When the company has stabilized its monetary resources and customers base, it shall purchase delivery vans and hire additional manpower to provide these free delivery services to customers. VReality will set up collection points in popular spots to aid users in convenient returns of loaned headsets.

Team

6.1 Core Team Members

The core team comprises of the Chief Executive Officer (CEO), Human Resources Strategist, Director of Business Development and Product Engineer.

6.1.1 Chief Executive Officer (CEO)

6.1.1.1 Background

Hai Qi, is the CEO of VReality, who portrays strong leadership, holds the primary responsibility to manage the company and makes major corporate decisions over the overall operations, resources and financial position. In addition, the CEO models and sets the company's culture, values, and behavior to steer the company together towards success.

6.1.1.2 Competencies & Experience

The CEO is an all-rounder who possesses a handful of leadership experience and communication skills over the past decade. Moreover, being competent in terms of business, marketing and knowledgeable in technological concepts and aspects. Refer to Annex C to browse through the CEO's resume filled with personal achievements and past experiences.

6.1.2 Human Resources (HR) Strategist

6.1.2.1 Background

The Human Resources Strategist of VReality, Madeline, integrates human resource management systems to achieve the overall mission success of the company while meeting the needs of employees. The HR strategist handles partnerships and collaborators with other companies as well as taking the responsibility in conducting financial works.

6.1.2.2 Competencies & Experience

As an HR Strategist, having up-to-date training in human resources management is essential and that is what our strategist has, paired with decision making skills. On top of that, the HR strategist is good at building strong rapports with others. Refer to Annex D to read more on the HR Strategist's resume and past background in Human Resource.

6.1.3 Director of Business Development

6.1.3.1 Background

Afiqah, the Director of Business Development plays the role of increasing revenues and profits by developing a comprehensive internal and external marketing plan. Other than that, the director is in charge of the brand and marketing of VReality using trends for more opportunity. The director also focuses on the expansion plan of VReality.

6.1.3.2 Competencies & Experience

The director possesses the knowledge on digital trends of VR and keeps up with social, economic, legislative and technological trends for more business opportunities. On top of that, Afiqah has past experiences in the field of brand and marketing as well as acquiring web development skills. Refer to Annex E for the Director of Business Development's resume and personal achievements.

6.1.4 Product Engineer

6.1.4.1 Background

Joseph is VReality's product engineer, who is in charge of research and development (R&D) of the mobile application and headsets. The product engineer comes up with new built-in features to match users needs as much as possible in order to provide the best fully immersive live-streamed concert experience.

6.1.4.2 Competencies & Experience

The product engineer of VReality possesses a strong foundation in software engineering and also specialised in virtual reality development. Moreover, having past experiences and knowledge in enhancing UX and IX platforms. Refer to Annex F to read more about the Product Engineer's technical skills and past projects.

6.2 Advisors

6.2.1 Concert Holders

Concert holders will act as advisors for video and audio set up of the concert. Their expertise and advice will benefit in terms of having the best video and audio placement to achieve a great immersion experience within the concert audience while capturing all aspects that a concert-goer wishes to have.

6.2.2 VR Specialised Company, IgniteVR

VR company, IgniteVR will be VReality's advisor in the development of the VR headsets. IgniteVR will be mentoring VReality in the creation of the headset prototypes, using softwares such as Unity3D, to enhance the immersiveness of the VR experience in a concert and also evaluate its effectiveness.

Operational Plan

7.1 Business Model Canvas

Refer to Figure 5 from Annex A for the business model canvas of VReality.

7.1.1 Execution of Business Plan

Currently, the company is in the planning stage of VReality. Following which, the company shall embark on the development phase, whereby research and development are carried out on the development of the VReality application.

According to J Torres (2014), in the article posted in entrepreneur.com, Torres mentions that there are 4 important steps for a business to properly execute its business plan:

1. Set clear Priorities
2. Collect and Analyze data
3. Keep rhythm to meetings
4. Evaluate strategies

These steps have been used as a baseline in the company's business plan, and all the employees have been briefed to follow strictly to these guidelines.

7.1.2 Key Activities, Timeline and Milestones

7.1.2.1 Key Activities

1. Research & Development of application and headset
2. Advertisements
3. Customer service

7.1.2.2 Timeline

The company's timeline follows a recommended timeline as suggested by Charlotte H. (2014), and the following shall show the timeline of the company.

Idea ➡ Market Research ➡ Market Validation ➡ Application Prototype ➡ Seed Funding ➡ Company setup ➡ Create MVP (minimum viable product) ➡ Raise funds ➡ Beta Tests ➡ Product Launch

7.1.2.3 Milestones

Refer to Table 6 in Annex A for VReality's milestones.

7.1.3 Resources Needed

The main resource required to operate is monetary resources. These resources are essential for the company to carry out research & development of the main application, as well as the headset product. As seen above in our timeline and milestones, we have included a phase for seed funding as well as another phase for additional fundraising. In the Financial section, there will be an overall estimate of how much fundings we will require for research and developments, as well as other expenses such as copyrights, location acquisition, manpower and etc.

7.2 Risks and Mitigation Strategy

7.2.1 Risks

The following are risks that the company has identified that may be detrimental to the company with respect to the company's operational plans

7.2.1.1 Operational Risks

The company fears that the operational costs incur will exceed the expected budget and services promise to customers will not be properly fulfilled.

7.2.1.2 Funding Risks

The company fears that the funding stages may not receive enough funding within the planned timeline that will enable the company to carry out its planned businesses.

7.2.1.3 Technology Risks

Technology risks are stated here as the company fears more competitors will join in as VR is an up and coming technology, and there will be companies eyeing to leverage on such technological advancements.

7.2.1.4 Development Risks

The company fears that the development of the application, as well as the headset, may not be completed on time, which will result in more resources being utilized. Application and headset development costs might not be within planned budget.

7.2.1.5 Procurement Risks

This risk might be little, but there is still such a risk such that the company may not be able to get the required resources to produce the headsets.

7.2.2 Mitigation Strategy

7.2.2.1 Operational Risk

VReality intends to reduce its fixed overhead costs, in order to prevent such costs from reducing the monetary resources that are important in sustaining the company's operations. By initially reducing these costs, the company evades uncertainty of whether such costs can be in the future, recovered through operational revenue.

7.2.2.2 Funding Risk

As mentioned under Section 7.1.2.3, our company intends to develop a Minimal Viable Product (MVP). This MVP will allow the company to pitch better to investors, and it can be readily available to be upscaled quickly. This way, an MVP can be used to easily mitigate funding risks that the company may incur in its operational plan.

7.2.2.3 Technology Risk

The company finds that although there is no viable way of stopping more competitors from stepping into the industry, it can do its part to be reputable in the industry, dealing with live concerts. By starting up the company now, it can gain a first movers advantage which will be important in the race against its competitors.

7.2.2.4 Development Risk

In any case that development of the application or headset cannot be completed within the planned time frame, what it can do is to outsource such developments or even increase its development team's manpower to tackle this risk.

7.2.2.5 Procurement Risk

As procurement risks are low, the company should still consider its mitigation strategy against such risks. The company intends to not only engage with a single supplier or vendor for its supplies, but to engage multiple vendors in case supplies could come to a low, or when demand is heavily increased.

Expansion Plan

8.1 Business Scale-up Plan

VReality provides world-wide live concerts to consumers first. In the long run, VReality will not only be targeting the market of concert-goers who are unable to attend concerts due to restrictions but also look into providing live concert services for customers who wish to reminisce past concerts that are no longer debuted, such as the American singer's Michael Jackson concert.

8.1.1 Timeline of Expansion

Refer to Annex A, Figure 6 for the company's timeline of expansion plans.

8.1.2 Resources Needed

The daily operations of VReality require adequate resources other than just the VR headset. With the idea of expansion in mind, these are the resources that will be needed: higher demand for VR headsets, manpower, funding and partnerships.

8.1.2.1 Higher Demand for VR Headsets

With the growing market size, VReality will be producing more VR headsets to cater to the demand. This eventually leads to the need to have more manpower in creating and maintaining the headsets.

8.1.2.2 Higher Demand for Manpower

As a new startup, VReality will have a small team of 6 members. As VReality progresses and further expands, more manpower will be required. Thus, having the need to expand the team to 40 employees by 2022 to produce better quality headsets and cater to the consumers' needs and trends.

8.1.2.3 More Funding

VReality will be constantly sourcing for startup venture funds. A large amount of money will be needed to buy licenses, in R&D, as well as to expand overseas.

8.1.2.4 More Partnerships

To expand the business and increase the number of concerts available to consumers, VReality will be partnering with more entertainment companies to ensure the frequencies and varieties of concerts.

8.2 Risks and Mitigation Strategy

8.2.1 Unable to Obtain Enough Fundings

VReality aims to follow closely to the expansion timeline as stated in Section 8.1.1. However, there can be a possibility that we are not able to obtain our desired amount of funding to proceed with the plan.

8.2.1.1 Mitigation Strategy

In this event, VReality will continue the improvement of VR headsets, and attract more customers and investors. There will also be increased an marketing effort to increase awareness of VReality to everyone around the globe. At the same time, the team will continue to source for fundings, until sufficient amount is reached to expand overseas.

8.2.2 Inconsistent VR Quality

VReality produces its own VR headset and consumers have the option to rent the headsets. VR headsets are produced by different employees, and with human carelessness, some headsets might have compromised quality.

8.2.2.1 Mitigation Strategy

VReality will provide staff training to all employees. All headsets will be tested for quality assurance before renting/ selling. Consumers who choose to purchase our headsets will also be given a 5 years product warranty.

8.2.3 New Competitors

To enter the VR concert industry, there is a high barrier to entry. However, this new concept might not deter some from entering.

8.2.3.1 Mitigation Strategy

VReality produces its own headsets, and thus, differentiating its product from the rest. With the differentiated product, consumers who are used to consuming VReality services will have a high switching power. On top of that, VReality will retain the customer loyalty by providing bundles and packages, as well as promotion to all its loyal customers to retain them.

Financials

9.1 Business Model

The sources of income are VR concert tickets and clients' advertisements.

9.1.1 Key Sources of Revenue

As mentioned in Section 7.1, the main sources of revenue are the sales of VR concert tickets and advertising. The first source of income are the sales of VR concert tickets. Our pricings are based on the demand for tickets and price of the cat 1 ticket of the actual concert. For highly demanded concerts such as Ed Sheeran's concert in Singapore last year, we will be pricing the VR concert ticket at 95% of the cat 1 ticket. Otherwise, it will be 70% of the ticket. After which, 40% - 60% of the profit will be given to the entertainment companies and the artists. For the purpose of estimation in the report and in financial statement, it is assumed that VReality will take 80% and 50% as the average of ticket price and additional

revenue to artists respectively. The profit to the company is 30% of the actual ticket price.

The second source of income is advertising. VReality plans to insert advertisement at the beginning and the end of the video, allowing clients to choose the budget of their advertisement will a minimum of \$2 per click for the start.

9.1.2 Main Cost Items

The main cost components are R&D of VR headsets, VR recording equipment with an expected lifespan of 5 years, license fee and advertising cost. To differentiate ourselves from competitions based on video quality, we are allocating \$12,500 per month to the development of a better VR headset. Secondly, the procurement of VR recording equipment is a high cost to the business. For one concert coverage, it is possible that three or four VR cameras, along with the same qualities recording equipments are needed for recording. Each VR camera cost around \$200,000. The third costing item is license fee for recording in private locations. Some concert venues do not allow videography, and hence an agreement must be formed between VReality and the concert holders to gain permission. VReality will be offering venue owners 3% of the profit from that concert as the payment for license fee. Lastly, it is advertising cost. As explained in Section 3.4.2, VRealirt will be advertising the concert on behalf of the concert organisers. Hence, funds are allocated to advertisements on various platform with the goal of marketing the concert and VR concert. VReality will spend an average of \$800,000 per month in the third financial year.

9.2 5-Year Projection P&L

VReality will be able to break even in the third and a half year of operation. The detailed 5 years Profit and Loss statement is shown in Table 8 in Annex A.

9.3 3-Year Monthly Cash Flow Projection

The 3-Year monthly cash flow projection is shown in Table 10 in Annex 8.

9.4 Required Investments and Equity

The investments that VReality aims to obtain are crowd-funding, government grants and corporate as well as individual investors in funding rounds. For crowd-funding, our goal is approximately \$50,000 and for corporate and individual investors, we are looking for \$80,000 in the first funding round. As for government grants, we can apply for “Startup SG Founders” and “Startup SG Tech” for development of VR headsets that grant \$30,000 and \$500,000 respectively on successful applications. The only equity investment is from corporate and individual investors, where preference and ordinary shares are given.

Investors can expect the first payout to their investment by June 2021. Refer to ROI projection in Table 9 in Annex A for more details of the investment returns.

9.4.1 Usage and Proceeds

All the proceeds including founders’ capital added up to approximately \$780,000. VReality has \$30,000 unused funds that will be used in the event of emergency. Refer to Table 7 in Annex A for the funding breakdown of the allocation of investments.

9.5 Exit Strategy

Acquisition seems to be the best option for VReality because in an acquisition, we are still able to work on our ideas and are provided with more resources including mentorship to make the idea works. The

founders' motivations are to allow audiences to be able to watch the concerts that they want regardless of whether they are able to secure the tickets. Hence, even if we are under a parent company and not able to exercise absolute authority in decision making, we believe that the quality of our services and products will be better than before.

Conclusion

Market Opportunity

With the growing rates of streaming and huge market sizes as stated in Section 2.1 and 2.2, together with the solutions that VReality offers to counter the big pains in attending concerts, VReality believes that the market holds a lot of potentials and opportunities to release VReality's products while the market still remains untapped. The current trends will push the innovations of VReality to be successful when it hits the market. Revenue of the initial target market in Singapore would already reach up to an estimation of \$0.6 million itself.

Value Proposition and Innovation

VReality offers a unique value proposition that no other competitor has, to eliminate the problems of attending a concert due to restrictions, including sold out tickets, high concert ticket prices, as well as geographic limitations. VReality takes research and development seriously to develop the best VR headsets for all concert-goers to maximise their satisfaction and experiences.

Investment Required and Expected Return on Investment (ROI)

The present of market opportunity and the superiority of VReality's products and services, contribute to the possibility that VReality is likely to be successful. As demonstrated in Section 9.3, investors are able to anticipate a semi-annually dividends of 30% of the net profit with effect from June 2021 and a ROI of 78.44% in the fourth financial year. ROI and profit margin are estimated to increase over the years, further proving that VReality is a worthwhile investment. The company is hoping to gather \$150,000 of equity financing, in exchange for 10% of the company's shares. VReality hopes that investors who are equally passionate in enhancing customers' concert experience, are able to join the team to discover endless possibilities in the VR concerts.

Call to Action

VReality calls through this business plan, that the company will be able to gather \$150,000 of fundings, in exchange for 10% of the company's equity. The above business plan has given a clear picture of the company's future directions. All in all, with a strong idea, a big market, as well as a strong research & development team that VReality possesses, VReality will become a successful company in the near future.

VReality is looking to only start marketing and advertising its product only a few months before its official product release. This is to ensure that there is no new entrants into the market and will make VReality gain a first movers advantage that will ensure that it starts and remains as the leading provider of VR live concerts.

The company is also currently seeking advisors to improve the company. Be it within the R&D department or the finance department, VReality will require professional and experienced guidance through its path to success. Another important advisor required will be professional videographers to ensure smooth recording of streams. VReality is also searching for available delivery services that will provide a cheap but fast delivery service to all its customers.

References

- 2015 Nielsen Music U.S. Report. (2016)(pp. 7). Retrieved 22 March 2018, from <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2016-reports/2015-year-end-music-report.pdf>
- Balam, S. (2016, November 08). *They travel abroad only to catch an artiste perform live*. Retrieved March 19, 2018, from The Economic Times: <https://economictimes.indiatimes.com/magazines/panache/they-travel-abroad-only-to-catch-an-artiste-perform-live/articleshow/55311181.cms>
- Charlotte H. (2014) Retrieved 1 April 2018, From <https://www.quora.com/What-is-the-usual-timeline-for-milestones-in-a-startup>
- Event Tickets - Worldwide | Statista Market Forecast. (2017). Statista. Retrieved 22 March 2018, from <https://www.statista.com/outlook/264/100/event-tickets/worldwide#market-global>
- For Music Fans, the Summer Is All a Stage. (2015). Nielsen.com. Retrieved 25 March 2018, from <http://www.nielsen.com/us/en/insights/news/2015/for-music-fans-the-summer-is-all-a-stage.html>
- Global Music Report 2017: Annual State of the Industry. (2017) (pp. 13,16 - 37). Retrieved from <http://www.ifpi.org/downloads/GMR2017.pdf>
- Grate, R. (2016). Music Festival Demographics. Eventbrite US Blog. Retrieved 22 March 2018, from <https://www.eventbrite.com/blog/music-festival-demographics-ds00/>
- Guichard, B. (2016). The Future of Live Streamed Music Events. Cleeng. Retrieved 22 March 2018, from <https://cleeng.com/blog/live-streamed-music-events-are-concerts-of-the-future/#gs.anJ1OQ>
- Hadi, E. A. (2017, May 12). *Tickets to Britney Spears' first concert here cost as much as \$568*. Retrieved March 20, 2018, from The straits times: <http://www.straitstimes.com/lifestyle/entertainment/tickets-to-britney-spears-first-concert-here-cost-as-much-as-568>
- Hutchinson, A. (2015). On the future of live-streaming – and why Facebook may be best positioned to win-out.. Social Media Today. Retrieved 22 March 2018, from <http://www.socialmediatoday.com/technologydata/future-live-streaming-and-why-facebook-may-be-best-positioned-win-out>
- IFPI Digital Music Report 2015. (2015) (pp. 13 - 33). Retrieved from <http://www.ifpi.org/downloads/Digital-Music-Report-2015.pdf>
- Karp, H. (2016). Music Industry Sees Growth in Concert Revenue. WSJ. Retrieved 22 March 2018, from <https://www.wsj.com/articles/music-industry-sees-growth-in-concert-revenue-1474250642>
- Kempton, B. (2014). Why do people attend concerts?. Schubert Club. Retrieved 7 April 2018 from <https://schubert.org/blog/2014/11/17/why-do-people-attend-live-concerts/>
- Patel, A., & Rossen, J. (2016). Why you can't get tickets to the hottest concerts. TODAY.com.

Retrieved 22 March 2018, from <https://www.today.com/news/why-you-cant-get-tickets-hottest-concerts-6C10505415>

Patent. (2018). Ipos.gov.sg. Retrieved 8 April 2018, from <https://www.ipos.gov.sg/resources/patent>

Raguraman, A. (2017, October 19). *22,000 tickets snapped up for Bruno Mars' sold-out Singapore concerts* . Retrieved March 20, 2018, from The Straits Times: <http://www.straitstimes.com/lifestyle/entertainment/22000-tickets-snapped-up-for-bruno-mars-sold-out-singapore-concerts>

Resnikoff, P. (2017). Live Concerts + Streaming = 73% of the US Music Industry. Digital Music News. Retrieved 22 March 2018, from <https://www.digitalmusicnews.com/2017/06/07/music-industry-concerts-streaming/>

Smith, A & Anderson,M. (2018). Social Media Use in 2018. Pew Research Center. Retrieved 7 April 2018 from <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>

The Motley Fool. (2016). 12 Virtual Reality Stats That Will Blow You Away. The Motley Fool. Retrieved 25 March 2018, from <https://www.fool.com/investing/2016/06/06/12-virtual-reality-stats-that-will-blow-you-away.aspx>

Torr, J. (2017). Singapore pushes Virtual Reality boundaries. Imda.gov.sg. Retrieved 25 March 2018, from <https://www.imda.gov.sg/infocomm-and-media-news/whats-trending/2016/9/Singapore-pushes-virtual-reality-boundaries>

Torres, J. (2014). 4 Steps to Successful Execution of a Strategy. Retrieved 1 April 2018, from <https://www.entrepreneur.com/article/237005>

Yeo, S. S. (2017, June 9). *Britney Spears concert facing poor showing*. Retrieved March 27, 2018, from Today online: <https://www.todayonline.com/entertainment/music/britney-spears-concert-facing-poor-showing>

Annex A

Tables and Figures Referred to in Main Report

Figure 1: Streaming Growth (IFPI Digital Music Report 2015, 2015)

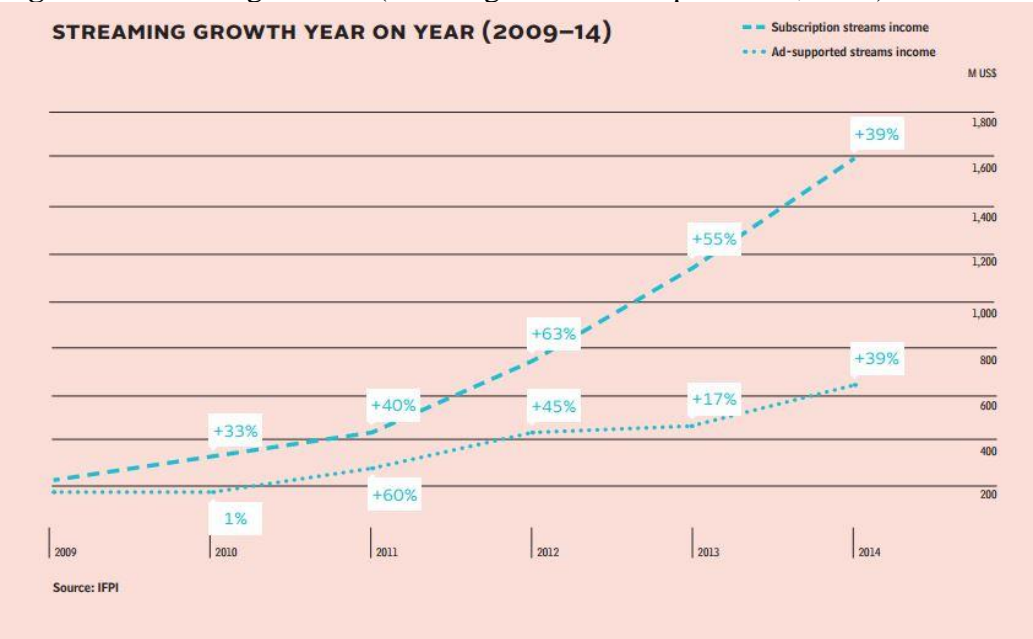


Figure 2: Customer Archetype of Alex and Helena

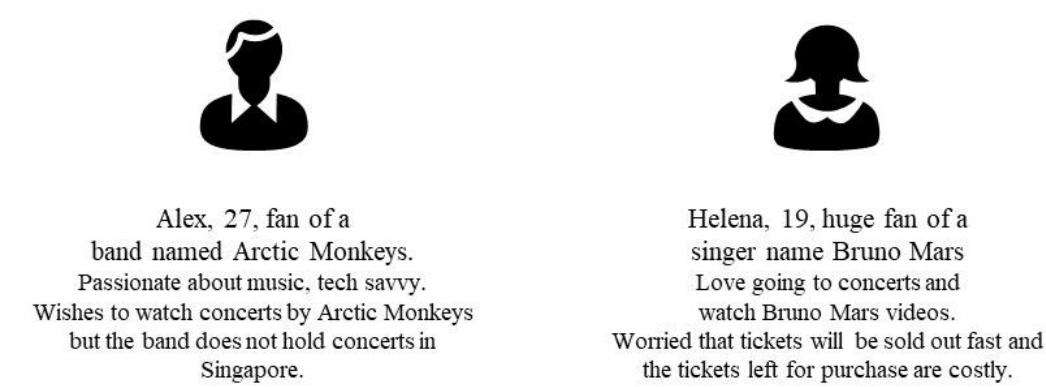


Table 1: Comparison Matrix of VReality and LIVE Nation

	VReality	LIVE Nation
Quality (VR visual and audio recording)	***	**
Product offering (product range)	***	*
Cost effectiveness	**	*
Customer service	***	*

Figure 3: Positioning Map for VR competitors in the Current Market

Positioning Map – VR concerts

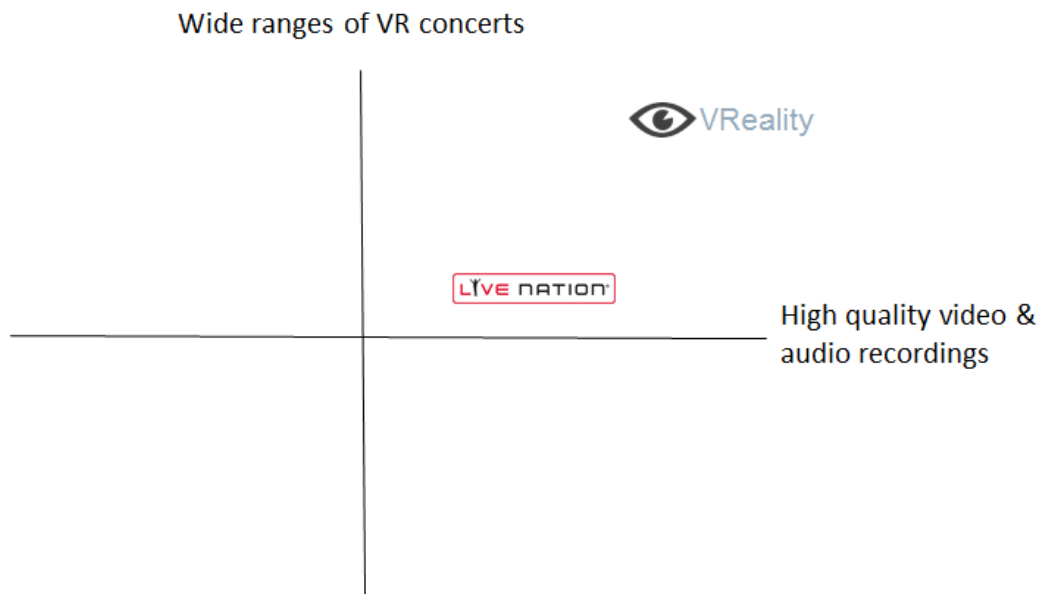


Table 2: Pricing Objective of VReality

Pricing Objective	
Maximum Market Share	LIVE Nation is a worldwide recognised brand for events. Even though their VR concert coverage is limited, there is still a threat to VReality if we want to penetrate into United States by offering concerts that LIVE Nation might possibly have. Hence, VReality plans to provide more product offering but at an affordable price to maximise market share globally.
Product Quality Leadership	VReality will operate a monopoly market in Asia Pacific, which only makes sense that our pricing strategy would not be too low from the actual price of the live concert considering all the technology needed to make VR recording possible.

Table 3: Pricing Strategy of VReality

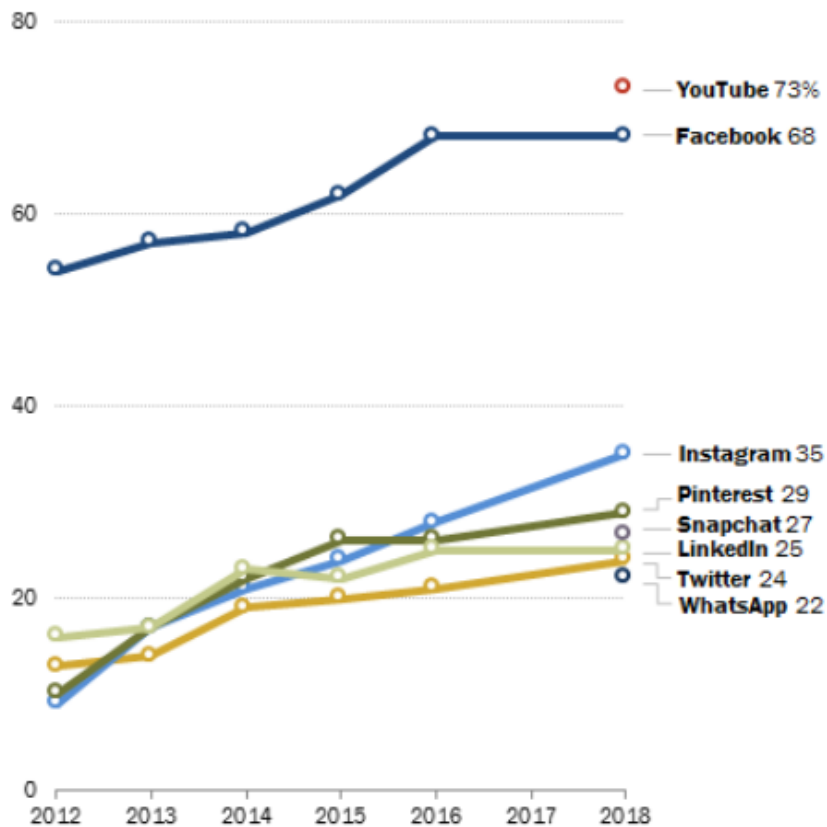
Pricing Strategy	Explanation
Psychological Pricing	By pricing our services within the range of \$79.99-\$99.99, it gives an illusion that there is some kind of savings as compared to using a whole number.
Going-rate Pricing	There exists a competitor that dominates the VR concert market for english music, thus, VReality aims to price our product comparable to LIVE Nation. Even though we are offering a wider range of services as compared to LIVE Nation, pricing way above LIVE Nation would make it difficult to attract users because LIVE Nation is a more recognised brand than VReality.
Perceived Value Pricing	VReality's concept may be new to the Asia market and customers might be skeptical about trying our product. Additionally, customers might

think that our product might not be a good substitute to the actual concert. Hence, VReality will be pricing below the market price of the actual concert and providing the best live-streamed concert experience through VR technology.

Figure 4: Statistics of Number of Facebook and YouTube Users(Smith & Anderson, 2018)

Majority of Americans now use Facebook, YouTube

% of U.S. adults who say they use the following social media sites online or on their cellphone



Note: Pre-2018 telephone poll data is not available for YouTube, Snapchat or WhatsApp.
Source: Survey conducted Jan. 3-10, 2018. Trend data from previous Pew Research Center surveys.
"Social Media Use in 2018"

PEW RESEARCH CENTER

Table 4: VReality's Customers Categories

Real Awards	Bronze (Purchase 40% of total VR concert annually)	Silver (Purchase 60% of total VR concerts annually)	Gold (Purchase 80% of total VR concerts annually)
Realpoint earned per eligible dollar spent	1	2	3

Table 5: VReality's Sample Realpoint Rewards Guide

Realpoint Rewards	Realpoints needed
-------------------	-------------------

Complementary headset rental	5000
5% discount for the next ticket	8000
8% discount for the next ticket	10,000
Autographed poster	15,000

Figure 5: Business Model Canvas of VReality

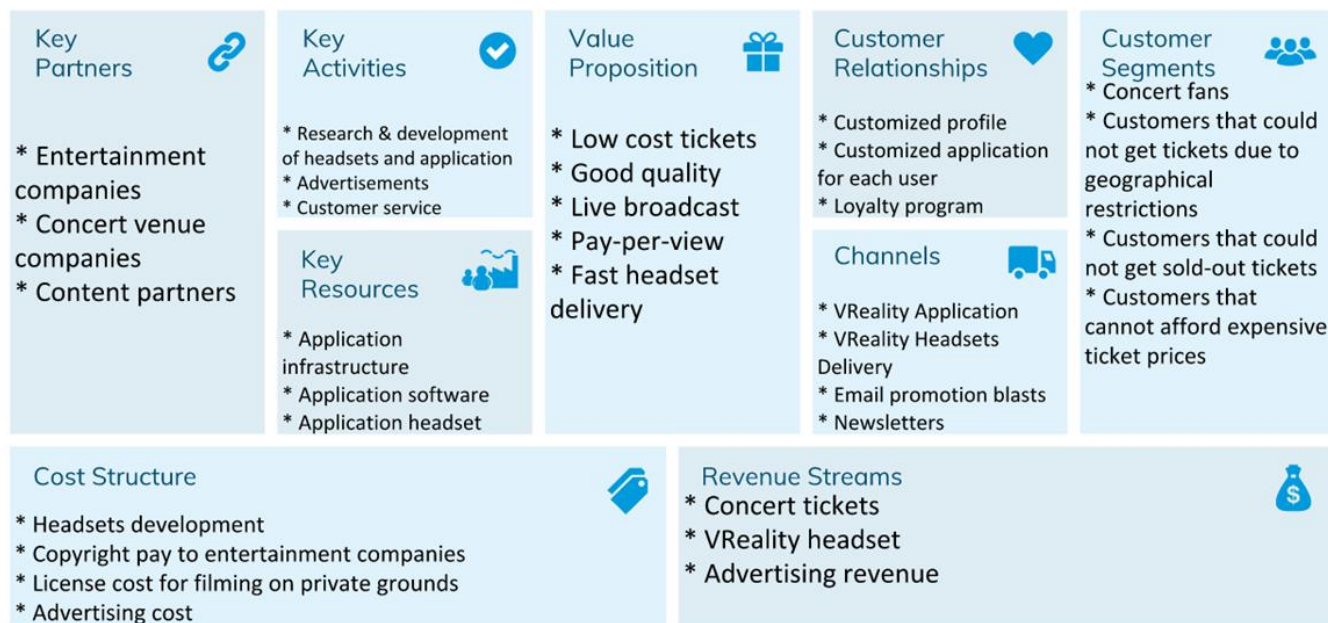


Table 6: VReality's Milestones

Time	Milestones
Month 0-2	Idea, Market Research
Month 2-4	Market Validation
Month 4-8	Application Prototype
Month 8-14	Seed Funding
Month 14-16	Company Setup
Month 16-18	Create MVP
Month 18-20	Raise Funds
Month 20-23	Beta Testing
Month 24	Product Launch

Figure 6: VReality's Expansion Plan Timeline



Table 7: Funding of Each Business Activity of VReality

Business Activity	Funds
R&D of VR headset	\$150,000
Procurement of VR recording equipment (~2 VR camera)	\$500,000
Advertising	\$100,000
Total	\$750,000

Table 8: 5-Year Projection P&L of VReality

VReality					
Profit & Loss Statement	2018	2019	2020	2021	2022
For year ended 2018-2022	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	\$0.00	\$0.00	\$1,549,526.40	\$5,576,814.00	\$18,561,480.00
Less Expenses:					
IT Infrastructure	\$41,000.00	\$23,000.00	\$12,000.00	\$74,000.00	\$48,000.00
Equipments		\$0.00	\$500,000.00		
Depreciation Expense - Equipments			\$98,000.00	\$98,000.00	\$98,000.00
Furniture & Fixture	\$20,000.00				
Depreciation Expense - Furniture & Fixture	\$4,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00

Start-up Expense (One time expense)		\$12,632.00		\$0.00	\$0.00
Rental Expense	\$12,000.00	\$12,000.00	\$12,000.00	\$84,000.00	\$84,000.00
Marketing Expense	\$75,000.00	\$500,000.00	\$700,000.00	\$1,200,000.00	\$1,200,000.00
Salary Expense (Including CPF, AWS, Employees Benefits, Bonuses)	\$72,000.00	\$240,000.00	\$438,300.00	\$1,045,300.00	\$2,630,400.00
Inventory Loss of Damaged Equipments			\$46,485.79	\$167,304.42	\$556,844.40
Interest of debt financing				\$42,000.00	
Maintenance Cost of Equipments					
Company Insurance	\$0.00	\$48,000.00	\$48,000.00	\$48,000.00	\$48,000.00
Credit Card Fee (3% of the transaction)			\$46,485.79	\$167,304.42	\$556,844.40
Dividends	\$0.00		\$0.00	\$38,120.17	\$246,925.80
License Fee for Filming at Private Ground			\$42,455.23	\$159,207.12	\$546,048.00
Total Expenses	\$224,000.00	\$837,632.00	\$1,945,726.82	\$3,125,236.13	\$6,017,062.60
Profit before tax	-\$224,000.00	-\$837,632.00	\$396,200.42	\$2,451,577.87	\$12,544,417.40
Less: Taxation				\$416,768.24	\$2,132,550.96
Profit After tax	-\$224,000.00	-\$837,632.00	\$396,200.42	\$2,034,809.63	\$10,411,866.44

Table 9: ROI Projection

Return on Investment					
	Year 1	Year 2	Year 3	Year 4	Year 5
ROI	0	0	-20.36%	78.44%	208.48%

Table 10: 3-Year Monthly Cash Flow Projection of VReality


Annex B

Patent Form Application of VReality under IPOS

Request for the Grant of a Patent Application under IPOS, first page sample. ("Patent", 2018)

Application No:

SINGAPORE PATENTS ACT (CHAPTER 221) PATENTS RULES

PATENTS FORM 1/8  *2001*	Request for the Grant of a Patent / Statement of Inventorship and Right to Grant of Patent
<p><u>Pre-requisites:</u> a. Among other requirements, a Date of Filing will be issued only if a description of the invention is filed or if a complete and valid statement is made under Part 9 of this form.</p> <p><u>Estimated Time:</u> This form may take approximately 15 - 20 minutes to complete.</p> <p><u>General:</u> a. * denotes mandatory field.</p>	
PART 1 Claiming the Filing Date of an Earlier Singapore Application	
This application is	<input type="checkbox"/> A divisional of an earlier Singapore application.
	<input type="checkbox"/> An application filed in response to an order by the Registrar after determination of a question regarding the entitlement of an earlier Singapore application. Application No. Filing Date (DD/MM/YYYY)
	I choose not to rely on the auto-populated information, changes will be made to the auto-populated information as below. Yes <input type="checkbox"/> No <input type="checkbox"/>
PART 2 Reference	
Applicant/Agent Reference	
PART 3 Title of Invention*	
Title of Invention*	
PART 4 Details of Applicant*	
<i>Note: If there is insufficient space, please use the continuation sheet CS 1.</i>	
Applicants	Type of Applicant UEN/ Company Code Name Address Type Address Is SME

Annex C

Resume of VReality's CEO, Hai Qi

Loon Hai Qi

Contact No.: (65) 90076373 (Mobile Phone)

Email: haiqi19@gmail.com

Educational Qualifications

- | | |
|------------------|--|
| Aug'16 – Present | National University of Singapore, Singapore <ul style="list-style-type: none">• Bachelor in Information Systems• Co-Curriculum Activity:<ul style="list-style-type: none">○ Assistant Honorary Secretary of NUS Outdoor Activities Club○ Programme and logistic in-charge of NUS Sports Camp 2018 |
| Apr'13 – Apr'16 | Temasek Polytechnic, Singapore <ul style="list-style-type: none">• Diploma in Hospitality and Tourism Management with Merit• Co-Curriculum Activity: Member of TP-BP Student Mentor• Achievements: - School of Business Director's List<ul style="list-style-type: none">- Run for Hope, Certificate of Appreciation- BP International Student Mentoring & Tutoring Scheme, Bronze Awards |

Work Experiences

- | | |
|-----------------|--|
| Sep'15 – Feb'16 | Guest Service Agent, Le Meridien Chiang Mai, Thailand <ul style="list-style-type: none">• Conducted Chinese lesson to supervisors• Perform check-in and check-out• Handling of cash and credit card payments• Attend to all guests needs and telephone calls• Met the goals of front office |
| Oct'14 – Oct'14 | VIP Attender, ITB Asia 2014, Singapore <ul style="list-style-type: none">• Managed the needs of all VIP guests• Facilitated in the opening Ribbon Cutting Ceremony• Interpersonal and communication skills learned through serving of guests from all over the World |

Language and Technical Skills

- Fluent in English and Mandarin, proficient in conversational and written skills
- Business Computing Skills in Microsoft Word, Powerpoint and Excel
- C language, Java language, Java EE, MySQL
- SDLC
- Proficient in OPERA system & Galaxy Lightspeed system

Annex D

Resume of VReality's Human Resource Strategist, Madeline

MADLINE TOO H WEIPING

Mobile: (65) 91155416 | Email: madeline_tooh@yahoo.com.sg

EDUCATION

National University of Singapore Aug 2016 – Present

- Bachelors of Computing in Information System (Hons.)
Specialisation: *Digital Innovation*
- Expected Date of Graduation: May 2020

Nanyang Polytechnic Apr 13 – May 16

- Diploma with Merit in Business Management
Dual Specialisation: *Human Resource Management & International Business*

AWARDS AND ACHIEVEMENTS

- Admitted to the *Director's List* for 3 semesters in Nanyang Polytechnic
2013/2014 Semester 2
2014/2015 Semester 1
2014/2015 Semester 2
- Participated in Singapore HR Challenge 2014 by Singapore Human Resources Institute (SHRI)
Conducted a research on fair human resource practices
- Participation in Internal HR Competition "HR Exchange"- Finals - Champion

INTERNSHIP/WORK EXPERIENCE

Chang Cheng Mee Wah Food Industries Pte Ltd

Temporary Data Entry (Part-Time)

Mar 2014 – Jul 2016

- Entered and processed payment and documents such as invoices, journal vouchers, employee reimbursements, and statements
- Bank and general ledger/ transaction reconciliation
- Conducted other administrative duties

Pan Asia Logistics Singapore Pte Ltd

March 2015- May 2015

- Prepared new employees' details for relevant record keeping and other on-boarding administration works
- Designed performance appraisal form and collated appraisal results for performance management
- Designed welfare program package and other administrative works relating to employees welfare
- Administrated training evaluation, grants submission

SKILLS & INTEREST

Softwares: Microsoft Word, Microsoft Excel, Microsoft Powerpoint, Microsoft Access, Dreamweaver, ACCPAC, HRIQ

IT Skills: Java

Language Proficiency: English & Mandarin Chinese

Annex E

Resume of VReality's Director of Business Development, Afiqah



AFIQA RASHID
HP. 81576762 | afiqahrashid@outlook.com

PROFILE

YEAR 2 STUDENT from National University of Singapore
Information Systems with specialization in Digital Innovation.
Love for design, music, coding & cats.
Meticulous, adaptive & kindhearted.

EDUCATION

DEGREE IN INFORMATION SYSTEMS
(specialization in digital innovation)
NATIONAL UNIVERSITY OF SINGAPORE
2016 - CURRENT

DIPLOMA IN ARCHITECTURE
SINGAPORE POLYTECHNIC
2013 - 2016

WORK EXPERIENCE

ARCHITECT INTERN
WATG
March 2015 - June 2015

TEACHER ASSISTANT
MINDCHAMPS
September 2015 - June 2016

STRENGTHS

Goal-oriented, Creativity, Teamwork, Web Design, Graphic Design, Video Editing, Communication, Brand & Marketing

TECH SKILLS

Filmora, AutoCAD 2016, Microsoft Office, Netbeans, Photoshop, In-Design, HTML, CSS, JAVA EE, JAVA SE, SQL, PHP

ACHIEVEMENTS

2018

APPOINTED BRAND & MARKETING MEMBER OF AIESEC IN NUS

2016

AWARDED CCA CERTIFICATE OF ATTAINMENT FOR CCA GRADE

2013

AWARDED CERTIFICATE OF COMMENDATION IN THE CUBE 2013 COMPETITION

2012

AWARDED EDUSAVE AWARD FOR ACHIEVEMENT, GOOD LEADERSHIP AND SERVICE 2012

2012

AWARDED EDUSAVE CERTIFICATE OF ACADEMIC ACHIEVEMENT 2012 FOR BEING TOP 25%

2009 - 2012

AWARDED CERTIFICATE OF APPRECIATION FOR DEDICATION AND SERVICE TO DUNEARN MILITARY BAND

2011 - 2012

APPOINTED AS QUARTER MISTRESS IN DUNEARN MILITARY BAND

2011 - 2012

AWARDED CERTIFICATE OF MERIT FOR VALUABLE CONTRIBUTION TO THE SCHOOL IN THE 7TH STUDENT COUNCIL 2011 - 2012

2011

PARTICIPATED IN A HACKATHON

2010

AWARDED THE 2010 EDUSAVE SCHOLARSHIP FOR BEING TOP 10%

GITHUB <http://github.com/aficat>
ONLINE PORTFOLIO <http://aficatrashid.weebly.com>
LINKEDIN <https://www.linkedin.com/in/aficatrashid/>

Annex F

Resume of VReality's Product Engineer, Joseph

Chan Kah Hwee, Joseph Student	Chan Kah Hwee Joseph Mobile: (+65) 9489 6552 Email: Josephchankh@gmail.com
Skills	Java, C#, HTML, CSS, ASP.NET, JavaScript Microsoft Word, Powerpoint, Access, Excel, Visual Studio, NetBeans SQL Server, MYSQL, Windows
Experience	The Rug Maker / Logistics Support, Indoor Sales 2010 - 2012, Singapore Logistics Support for events, Logistics Coordination, Indoor Sales executive HP Labs / Intern 2012 - 2013, Singapore Development and testing of web application, UI/UX support Singapore Air Force / Medic 2013 - 2015, Singapore Department In-charge, Medical Assistance on and off shore
Education	National University of Singapore / Information Systems 2015 - PRESENT, Singapore Bachelor of Computing (Honours): Major in Information Systems Nanyang Polytechnic / Multimedia & Infocomm Technology 2010 - 2013, Singapore Diploma in Multimedia & Infocomm Technology
Awards	Chief-of-Air Force Coin (Singapore Air Force) Sep 2014 Commander's Coin (Sembawang Air Base) Sep 2014 Public Spiritedness Award (Singapore Civil Defence Force) Sep 2014 Minister's Award for Public Spiritedness (Home Affairs Singapore) Aug 2015