

Virtual Reality Market with COVID-19 Impact Analysis by Offering (Hardware and Software), Technology, Device Type (Head-Mounted Display, Gesture-Tracking Device), Application (Consumer, Commercial, Enterprise, Healthcare) and Geography - Global Forecast to 2025

https://marketpublishers.com/r/V84D2691948EN.html

Date: August 2020

Pages: 191

Price: US\$ 4,950.00 (Single User License)

ID: V84D2691948EN

Abstracts

The virtual reality market was valued at USD 6.1 billion in 2020 and is expected to reach USD 20.9 billion by 2025, at a CAGR of 27.9% from 2020 to 2025. Factors such as penetration of HMDs in the gaming and entertainment sector post COVID-19, advancement of technology and growing digitization are driving the growth of the market during the forecast period.

Modern devices are compact, portable, and convenient to use. They are used to represent graphical and pictorial information. These devices are required to be compact and simple with high-resolution displays. The demand for HMDs, HUDs, and VR projectors is increasing significantly in several industries, including consumer electronics, aerospace & defense, medical, and automotive.

VR HMDs are gaining popularity in consumer applications for gaming and viewing entertaining content; however, the majority of VR HMDs use direct-view OELD displays with the panel size ranging from 2 to 6 inches. Considering the popularity and demand for VR HMDs, the key display manufacturers are developing a better display for VR HMDs, for instance, Kopin has developed a micro display, especially for VR HMDs. The large, cost-effective OLED micro display (LOMID) project has led to the development of CMOS/OLED micro displays for use in VR HMDs. Micro displays can emerge as mainstream display modules for VR HMDs owing to the limitation of direct-view



displays. Considering the aforementioned developments in improving VR display, the demand for VR HMDs is anticipated to surge among technocrats, which will drive the growth of the global VR market.

The market for healthcare estimated to grow at the highest CAGR during the forecast period

The COVID-19 pandemic is anticipated to positively impact the demand for VR/AR HMDs in the healthcare sector, owing to which the VR HMD for healthcare application is expected to showcase a high CAGR. Many market players are receiving orders for VR HMDs. For instance, in May 2020, Vuzix Corporation has received a restoration order for M400 Smart Glasses from a provider of invaluable solutions, Gemvision, for service, maintenance, and healthcare professionals. The objective of the replenishment order is to support Gemvision's efforts to meet COVID-19 remote healthcare needs in the Netherlands.

VR to captures the major market share in North America in 2019

North America led the VR market in terms of market size in 2019, and APAC is expected to lead the market by 2025. Increasing R&D in APAC and growing acceptance of newer technologies in the region are the drivers for the market. The availability of affordable HMDs in APAC would be an added advantage, which will later drive the growth of the market in the region.

The breakup of primaries conducted during the study is depicted below:

By Company Type: Tier 1 – 36 %, Tier 2 – 44%, and Tier 3 –20%

By Designation: C-Level Executives – 61%, and Managers– 39%

By Region: North America – 12%, Europe – 35%, APAC – 32% and ROW – 12%

Research Coverage

The report segments the virtual reality market and forecasts its size, by volume and value, based on region (North America, Europe, Asia Pacific, and RoW), Offering, Technology, Application, and Device Type.



The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the virtual reality market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying This Report

This report includes market statistics pertaining to the offering, technology, application, and device type and region.

An in-depth value chain analysis has been done to provide deep insight into the virtual reality market.

Major market drivers, restraints, challenges, and opportunities have been detailed in this report.

Illustrative segmentation, analyses, and forecasts for the market based on offering, technology, application, device type and region have been conducted to provide an overall view of the virtual reality market.

The report includes an in-depth analysis and ranking of key players.



Contents

1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 DEFINITION
 - 1.2.1 INCLUSIONS AND EXCLUSIONS
- 1.3 STUDY SCOPE
 - 1.3.1 MARKETS COVERED

FIGURE 1 MARKET SEGMENTATION

- 1.3.2 YEARS CONSIDERED
- 1.4 CURRENCY
- 1.5 LIMITATIONS
- 1.6 SUMMARY OF CHANGES
- 1.7 STAKEHOLDERS

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- FIGURE 2 VR MARKET: RESEARCH DESIGN
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Primary interviews with experts
 - 2.1.2.2 Breakdown of primaries
 - 2.1.2.3 Key data from primary sources
 - 2.1.3 SECONDARY AND PRIMARY RESEARCH
 - 2.1.3.1 Key industry insights
- 2.2 MARKET SIZE ESTIMATION
 - 2.2.1 BOTTOM-UP APPROACH
 - 2.2.1.1 Approach for capturing the market size by bottom-up analysis (demand side)
- FIGURE 3 BOTTOM-UP APPROACH TO ARRIVE AT THE MARKET SIZE
 - 2.2.2 TOP-DOWN APPROACH
- 2.2.2.1 Approach for capturing the market size by top-down analysis (supply side)

FIGURE 4 TOP-DOWN APPROACH TO ARRIVE AT THE MARKET SIZE

2.3 MARKET BREAKDOWN & DATA TRIANGULATION

FIGURE 5 DATA TRIANGULATION METHODOLOGY

2.4 RESEARCH ASSUMPTIONS



3 EXECUTIVE SUMMARY

FIGURE 6 VIRTUAL REALITY MARKET, 2016–2025 (USD MILLION)
FIGURE 7 HEAD-MOUNTED DISPLAYS HELD LARGEST SHARE OF VIRTUAL
REALITY MARKET IN 2020
FIGURE 8 CONSUMER APPLICATION TO LEAD VIRTUAL REALITY MARKET FROM

2020 TO 2025

FIGURE 9 APAC TO HOLD LARGEST SHARE OF VIRTUAL REALITY MARKET BY 2025

FIGURE 10 APAC HELD LARGEST SIZE OF VR MARKET FOR CONSUMER APPLICATIONS IN 2019

- 3.1 COVID-19 IMPACT ON VIRTUAL REALITY MARKET FIGURE 11 COVID-19 IMPACT ON VIRTUAL REALITY MARKET
 - 3.1.1 REALISTIC SCENARIO (POST-COVID-19)
 - 3.1.2 OPTIMISTIC SCENARIO (POST-COVID-19)
 - 3.1.3 PESSIMISTIC SCENARIO (POST-COVID-19)

4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE MARKET OPPORTUNITIES IN VIRTUAL REALITY MARKET FIGURE 12 GROWING CONSUMER APPLICATIONS OF VIRTUAL REALITY TO DRIVE MARKET GROWTH DURING FORECAST PERIOD
- 4.2 VIRTUAL REALITY MARKET IN APAC, BY APPLICATION AND COUNTRY FIGURE 13 CONSUMER APPLICATION AND CHINA TO HOLD LARGEST SHARES OF VIRTUAL REALITY MARKET IN APAC BY 2025
- 4.3 VIRTUAL REALITY MARKET: DEVELOPED VS. DEVELOPING MARKETS, 2020 AND 2025 (USD MILLION)

FIGURE 14 CHINA TO REGISTER HIGHEST CAGR BY 2025

4.4 VIRTUAL REALITY MARKET, BY APPLICATION

FIGURE 15 CHINA TO GROW AT FASTEST CAGR DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION5.2 HISTORY AND EVOLUTION OF VR TECHNOLOGYFIGURE 16 EVOLUTION OF VR TECHNOLOGY



5.3 MARKET DYNAMICS: VR MARKET

FIGURE 17 HIGH DEMAND FOR VR APPLICATIONS IN GAMING AND ENTERTAINMENT SECTORS TO DRIVE GROWTH OF VR MARKET

5.3.1 DRIVERS

- 5.3.1.1 Penetration of HMDs in the gaming and entertainment sector post COVID-19
 - 5.3.1.2 High investments in VR market
 - 5.3.1.3 Advancement of technology and growing digitization
 - 5.3.1.4 Availability of affordable VR devices
 - 5.3.1.5 Growing adoption of HMDs in different industries
 - 5.3.2 RESTRAINTS
- 5.3.2.1 Display latency and energy consumption affect overall performance of VR devices
 - 5.3.2.2 Health concerns relating to low resolution and lack of movement
 - 5.3.2.3 Trade restrictions between the US and China
 - 5.3.3 OPPORTUNITIES
 - 5.3.3.1 Penetration of HMDs in healthcare and architectural applications
 - 5.3.3.2 Use of VR in aerospace & defense for training and simulation
- 5.3.3.3 Increasing demand for VR HMDs in the healthcare sector attributed to the COVID-19 pandemic
 - 5.3.4 CHALLENGES
 - 5.3.4.1 Developing user-friendly VR systems
 - 5.3.4.2 Adverse impact of lockdowns due to COVID-19 on commercial trade

5.4 VALUE CHAIN ANALYSIS

FIGURE 18 VALUE CHAIN ANALYSIS (2020): MAJOR VALUES ARE ADDED DURING RESEARCH AND PRODUCT DEVELOPMENT, AND MANUFACTURING STAGES

FIGURE 19 ELEMENTS OF VR ECOSYSTEM

- 5.5 EMERGING TRENDS
 - 5.5.1 MICRODISPLAYS FOR VR
 - 5.5.1.1 LOMID project
 - 5.5.1.2 Kopin's micro display for VR HMD
- 5.6 IMPACT OF COVID-19 ON VIRTUAL REALITY MARKET

6 VIRTUAL REALITY MARKET, BY TECHNOLOGY

- **6.1 INTRODUCTION**
- 6.2 VIRTUAL REALITY TECHNOLOGY

FIGURE 20 SEMI- & FULLY IMMERSIVE TECHNOLOGIES TO DOMINATE



VIRTUAL REALITY MARKET DURING FORECAST PERIOD

TABLE 1 VR MARKET, BY TECHNOLOGY, 2016–2019 (USD MILLION)

TABLE 2 VR MARKET, BY TECHNOLOGY, 2020–2025 (USD MILLION)

6.2.1 NON-IMMERSIVE TECHNOLOGY

6.2.1.1 Usage of non-immersive technology in VR software development set to drive the market

TABLE 3 VR MARKET FOR NONIMMERSIVE TECHNOLOGY, BY OFFERING, 2016–2019 (USD MILLION)

TABLE 4 VR MARKET FOR NON-IMMERSIVE TECHNOLOGY, BY OFFERING, 2020–2025 (USD MILLION)

6.2.2 SEMI-IMMERSIVE AND FULLY IMMERSIVE TECHNOLOGY

6.2.2.1 Fully immersive technology to be the major driver owing to demand in VR HMDs

TABLE 5 VR MARKET FOR SEMI- AND FULLY IMMERSIVE TECHNOLOGIES, BY OFFERING, 2016–2019 (USD MILLION)

TABLE 6 VR MARKET FOR SEMI- AND FULLY IMMERSIVE TECHNOLOGIES, BY OFFERING, 2020–2025 (USD MILLION)

7 VIRTUAL REALITY MARKET, BY OFFERING

7.1 INTRODUCTION

FIGURE 21 VR MARKET FOR HARDWARE TO REGISTER HIGHER CAGR DURING FORECAST PERIOD

TABLE 7 VR MARKET, BY OFFERING, 2016–2019 (USD MILLION)

TABLE 8 VR MARKET, BY OFFERING, 2020–2025 (USD MILLION)

7.2 HARDWARE

FIGURE 22 VIRTUAL REALITY MARKET FOR DISPLAYS AND PROJECTORS TO RECORD HIGHEST CAGR DURING FORECAST PERIOD

TABLE 9 VR MARKET, HARDWARE, 2016–2019 (USD MILLION)

TABLE 10 VR MARKET, HARDWARE, 2020–2025 (USD MILLION)

7.2.1 SENSORS

7.2.1.1 Accelerometer

7.2.1.2 Gyroscope

7.2.1.3 Magnetometer

7.2.1.4 Proximity sensor

7.2.2 SEMICONDUCTOR COMPONENTS

7.2.2.1 Controller and processor

7.2.2.2 Integrated circuits

7.2.3 DISPLAYS AND PROJECTORS



- 7.2.4 POSITION TRACKERS
- 7.2.5 CAMERAS
- **7.2.6 OTHERS**
- 7.2.7 IMPACT OF COVID-19 ON HARDWARE MARKET
- 7.3 SOFTWARE
 - 7.3.1 SDK'S WILL PLAY CRUCIAL ROLE IN VR SOFTWARE MARKET
 - 7.3.1.1 Software development kits
 - 7.3.1.2 Cloud-based services

FIGURE 23 VR SOFTWARE MARKET FOR COMMERCIAL APPLICATION TO RECORD HIGHEST CAGR DURING FORECAST PERIOD

TABLE 11 VR MARKET FOR SOFTWARE, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 12 VR MARKET FOR SOFTWARE, BY APPLICATION, 2020–2025 (USD MILLION)

- 7.4 VR CONTENT CREATION
- 7.4.1 VR CONTENT CREATION IS THE KEY TO STRENGTHEN VR TECHNOLOGY AND GROWTH OF VR HARDWARE DEVICES
- 7.5 IMPACT OF COVID-19 ON SOFTWARE MARKET

8 VIRTUAL REALITY MARKET, BY DEVICE TYPE

- 8.1 INTRODUCTION
- 8.2 VIRTUAL REALITY DEVICES

FIGURE 24 VIRTUAL REALITY MARKET FOR GESTURE-TRACKING DEVICES TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

TABLE 13 VIRTUAL REALITY MARKET, DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 14 VIRTUAL REALITY MARKET, DEVICE TYPE, 2020–2025 (USD MILLION)

FIGURE 25 VIRTUAL REALITY MARKET FOR GESTURE-TRACKING DEVICES TO

EXHIBIT HIGHEST CAGR DURING FORECAST PERIOD IN TERMS OF MARKET SHIPMENTS

TABLE 15 VIRTUAL REALITY MARKET, DEVICE TYPE, 2016–2019 (THOUSAND UNITS)

TABLE 16 VIRTUAL REALITY MARKET, DEVICE TYPE, 2020–2025 (THOUSAND UNITS)

- 8.2.1 HEAD-MOUNTED DISPLAYS
- 8.2.1.1 Use of HMDs in gaming and entertainment is the major driver for growth of VR hardware devices

TABLE 17 VIRTUAL REALITY HMD MARKET, BY APPLICATION, 2016–2019 (USD MILLION)



TABLE 18 VIRTUAL REALITY HMD MARKET, BY APPLICATION, 2020–2025 (USD MILLION)

8.2.1.2 COVID-19 impact on VR HMD market

8.2.2 GESTURE-TRACKING DEVICES

8.2.2.1 Gesture-tracking devices to play a crucial role in healthcare and gaming applications

8.2.2.1.1 Data gloves

8.2.2.1.2 Others

TABLE 19 VIRTUAL REALITY MARKET FOR GESTURE-TRACKING DEVICES, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 20 VIRTUAL REALITY MARKET FOR GESTURE-TRACKING DEVICES, BY APPLICATION, 2020–2025 (USD MILLION)

8.2.2.2 Impact of COVID-19 on gesture-tracking devices market

8.2.3 PROJECTORS & DISPLAY WALLS

8.2.3.1 Projectors & display walls are new growth avenues in

VR hardware market

TABLE 21 VIRTUAL REALITY MARKET FOR PROJECTORS & DISPLAY WALLS, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 22 VIRTUAL REALITY MARKET FOR PROJECTORS & DISPLAY WALLS, BY APPLICATION, 2020–2025 (USD MILLION)

9 VIRTUAL REALITY MARKET, BY APPLICATION

9.1 INTRODUCTION

9.2 VIRTUAL REALITY APPLICATIONS

FIGURE 26 VR MARKET FOR HEALTHCARE TO REGISTER HIGHEST CAGR BETWEEN 2020 AND 2025

TABLE 23 VIRTUAL REALITY MARKET, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 24 VIRTUAL REALITY MARKET, BY APPLICATION, 2020–2025 (USD MILLION)

9.2.1 CONSUMER

9.2.1.1 Gaming and entertainment applications are major drivers for VR market growth

TABLE 25 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 26 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION)

TABLE 27 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS, BY



REGION, 2016–2019 (USD MILLION)

TABLE 28 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS, BY REGION, 2020–2025 (USD MILLION)

TABLE 29 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 30 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 31 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 32 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 33 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 34 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 35 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION)

TABLE 36 VIRTUAL REALITY MARKET FOR CONSUMER APPLICATIONS IN ROW, BY REGION, 2020–2025 (USD MILLION)

9.2.1.1.1 Gaming and entertainment

9.2.1.1.2 Sports

9.2.1.2 Use cases in consumer

9.2.2 COMMERCIAL

9.2.2.1 Retail and e-commerce to drive commercial application in VR market TABLE 37 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 38 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION)

TABLE 39 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS, BY REGION, 2016–2019 (USD MILLION)

TABLE 40 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS, BY REGION, 2020–2025 (USD MILLION)

TABLE 41 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 42 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 43 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 44 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN



EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 45 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 46 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 47 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION)

TABLE 48 VIRTUAL REALITY MARKET FOR COMMERCIAL APPLICATIONS IN ROW, BY REGION, 2020–2025 (USD MILLION)

- 9.2.2.1.1 Retail & Ecommerce
- 9.2.2.1.2 Education and training
- 9.2.2.1.3 Travel and tourism
- 9.2.2.1.4 Advertising
- 9.2.2.2 Use-cases in commercial
- 9.2.3 ENTERPRISE (MANUFACTURING)
- 9.2.3.1 Increased use of VR technology and devices in industrial facilities to drive enterprise application in VR market

TABLE 49 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 50 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION)

TABLE 51 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS, BY REGION, 2016–2019 (USD MILLION)

TABLE 52 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS, BY REGION, 2020–2025 (USD MILLION)

TABLE 53 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 54 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 55 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 56 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 57 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 58 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 59 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION)



TABLE 60 VIRTUAL REALITY MARKET FOR ENTERPRISE APPLICATIONS IN ROW, BY REGION, 2020–2025 (USD MILLION)

9.2.3.2 Use cases in enterprise (manufacturing)

9.2.4 HEALTHCARE

9.2.4.1 Patient care management and medical training & education are major applications driving the growth of VR in healthcare

TABLE 61 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 62 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION)

TABLE 63 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS, BY REGION, 2016–2019 (USD MILLION)

TABLE 64 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS, BY REGION, 2020–2025 (USD MILLION)

TABLE 65 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 66 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 67 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 68 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 69 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 70 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 71 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION)

TABLE 72 VIRTUAL REALITY MARKET FOR HEALTHCARE APPLICATIONS IN ROW, BY REGION, 2020–2025 (USD MILLION)

9.2.4.1.1 Surgery

9.2.4.1.2 Patient care management

9.2.4.1.3 Fitness management

9.2.4.1.4 Pharmacy management

9.2.4.1.5 Medical training and education

9.2.4.2 Use-cases in healthcare

9.2.5 AEROSPACE & DEFENSE

9.2.5.1 Simulation training to be major growth factor of VR in aerospace & defense



TABLE 73 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION) TABLE 74 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION) TABLE 75 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS, BY REGION, 2016-2019 (USD MILLION) TABLE 76 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS, BY REGION, 2020–2025 (USD MILLION) TABLE 77 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION) TABLE 78 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS, BY COUNTRY, 2020–2025 (USD MILLION) TABLE 79 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION) TABLE 80 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION) TABLE 81 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN APAC, BY COUNTRY, 2016-2019 (USD MILLION) TABLE 82 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION) TABLE 83 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION) TABLE 84 VIRTUAL REALITY MARKET FOR AEROSPACE & DEFENSE APPLICATIONS IN ROW, BY REGION, 2020-2025 (USD MILLION)

9.2.5.2 Use case in aerospace & defense 9.2.6 OTHERS

TABLE 85 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS, BY DEVICE TYPE, 2016–2019 (USD MILLION)

TABLE 86 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS, BY DEVICE TYPE, 2020–2025 (USD MILLION)

TABLE 87 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS, BY REGION, 2016–2019 (USD MILLION)

TABLE 88 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS, BY REGION, 2020–2025 (USD MILLION)

TABLE 89 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 90 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 91 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN EUROPE,



BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 92 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 93 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 94 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 95 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN ROW, BY REGION, 2016–2019 (USD MILLION)

TABLE 96 VIRTUAL REALITY MARKET FOR OTHER APPLICATIONS IN ROW, BY REGION, 2020–2025 (USD MILLION)

- 9.2.6.1 Automotive
- 9.2.6.2 Real estate (architecture and building design)
- 9.2.6.3 Geospatial mining
- 9.2.6.4 Use cases in other applications
- 9.2.7 COVID-19 IMPACT ON MAJOR APPLICATIONS

FIGURE 27 COVID-19 IMPACT ON CONSUMER APPLICATION

FIGURE 28 COVID-19 IMPACT ON ENTERPRISE APPLICATION

FIGURE 29 COVID-19 IMPACT ON HEALTHCARE APPLICATION

10 GEOGRAPHICAL ANALYSIS

10.1 INTRODUCTION

FIGURE 30 GEOGRAPHIC SNAPSHOT: VR MARKET IN APAC TO WITNESS HIGHEST GROWTH DURING FORECAST PERIOD

FIGURE 31 US TO HOLD LARGEST SIZE OF VR MARKET FROM 2020 TO 2025

TABLE 97 VR MARKET, BY REGION, 2016–2019 (USD MILLION)

TABLE 98 VR MARKET, BY REGION, 2020–2025 (USD MILLION)

10.2 NORTH AMERICA

FIGURE 32 NORTH AMERICA: SNAPSHOT OF VR MARKET

TABLE 99 VR MARKET IN NORTH AMERICA, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 100 VR MARKET IN NORTH AMERICA, BY APPLICATION, 2020–2025 (USD MILLION)

TABLE 101 VR MARKET IN NORTH AMERICA, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 102 VR MARKET IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

10.2.1 US



10.2.1.1 Strong presence of VR companies in the US likely to drive the market 10.2.2 CANADA

10.2.2.1 Increasing investment in cutting-edge technologies to fuel VR market growth in Canada

10.2.3 MEXICO

10.2.3.1 Evolving industries in Mexico to drive the market growth

10.3 EUROPE

FIGURE 33 EUROPE: SNAPSHOT OF VR MARKET

TABLE 103 VR MARKET IN EUROPE, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 104 VR MARKET IN EUROPE, BY APPLICATION, 2020–2025 (USD MILLION)

TABLE 105 VR MARKET IN EUROPE, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 106 VR MARKET IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

10.3.1 GERMANY

10.3.1.1 High adoption of new technologies in manufacturing to drive the market in Germany

10.3.2 FRANCE

10.3.2.1 High adoption in retail to enhance growth of VR market in France 10.3.3 UK

10.3.3.1 Continuous focus on digitalization likely to drive growth of

VR market in UK

10.3.4 REST OF EUROPE

10.3.4.1 Inflow of products and technology from UK, Germany, and France would propel VR market growth in Rest of Europe

10.4 APAC

FIGURE 34 APAC: SNAPSHOT OF VR MARKET

TABLE 107 VR MARKET IN APAC, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 108 VR MARKET IN APAC, BY APPLICATION, 2020–2025 (USD MILLION)

TABLE 109 VR MARKET IN APAC, BY COUNTRY, 2016–2019 (USD MILLION)

TABLE 110 VR MARKET IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

10.4.1 CHINA

10.4.1.1 High number of local players producing VR devices to drive growth of VR market in China

10.4.2 INDIA

10.4.2.1 Increasing awareness of advanced technology to play crucial role in the growth of VR market in India

10.4.3 JAPAN

10.4.3.1 High growth of healthcare sector in Japan to fuel growth of VR market 10.4.4 SOUTH KOREA

10.4.4.1 Digital revolution in industrial sector in South Korea would drive growth of



VR market

10.4.5 REST OF APAC

10.4.5.1 High consumer spending in Rest of APAC would boost the VR market 10.5 ROW

TABLE 111 VR MARKET IN ROW, BY APPLICATION, 2016–2019 (USD MILLION)

TABLE 112 VR MARKET IN ROW, BY APPLICATION, 2020–2025 (USD MILLION)

TABLE 113 VR MARKET IN ROW, BY REGION, 2016-2019 (USD MILLION)

TABLE 114 VR MARKET IN ROW, BY REGION, 2020–2025 (USD MILLION)

10.5.1 MIDDLE EAST & AFRICA

10.5.1.1 Oil & gas and mining to fuel growth of VR devices in the

Middle East and Africa

10.5.2 SOUTH AMERICA

10.5.2.1 Growing consumer market to drive growth of VR market in

South America

10.6 COVID-19 IMPACT ON MAJOR REGIONS

FIGURE 35 PRE-COVID-19 VS. POST-COVID-19 COMPARISON FOR NORTH

AMERICAN VIRTUAL REALITY MARKET

FIGURE 36 PRE-COVID-19 VS. POST-COVID-19 COMPARISON FOR APAC

VIRTUAL REALITY MARKET

11 COMPETITIVE LANDSCAPE

11.1 INTRODUCTION

FIGURE 37 COMPANIES ADOPTED PRODUCT LAUNCHES & DEVELOPMENTS AS KEY GROWTH STRATEGIES FROM 2017 TO 2020

11.2 RANKING FOR VIRTUAL REALITY MARKET PLAYERS

FIGURE 38 RANKING OF TOP 5 PLAYERS IN VIRTUAL REALITY MARKET

11.3 COMPETITIVE SCENARIO

11.3.1 PRODUCT LAUNCHES & DEVELOPMENTS

TABLE 115 PRODUCT LAUNCHES & DEVELOPMENTS: VIRTUAL REALITY MARKET, 2017 TO 2020

11.3.2 PARTNERSHIPS

TABLE 116 PARTNERSHIPS: VIRTUAL REALITY MARKET, 2017–2020

11.3.3 AGREEMENTS, COLLABORATIONS, AND CAPITAL FUNDING

TABLE 117 AGREEMENTS, COLLABORATIONS, AND CAPITAL FUNDING: VIRTUAL REALITY, 2017–2020

11.3.4 ACQUISITIONS AND EXPANSIONS

TABLE 118 ACQUISITIONS AND EXPANSIONS: VIRTUAL REALITY MARKET, 2017–2020



11.4 COMPETITIVE LEADERSHIP MAPPING

11.4.1 VISIONARY LEADERS

11.4.2 DYNAMIC DIFFERENTIATORS

11.4.3 INNOVATORS

11.4.4 EMERGING COMPANIES

FIGURE 39 VIRTUAL REALITY MARKET (GLOBAL) COMPETITIVE LEADERSHIP MAPPING, 2019

12 COMPANY PROFILES

12.1 INTRODUCTION

12.2 KEY PLAYERS

(Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View, and COVID-19 Updates)*

12.2.1 GOOGLE

FIGURE 40 GOOGLE: COMPANY SNAPSHOT

12.2.2 MICROSOFT

FIGURE 41 MICROSOFT: COMPANY SNAPSHOT

12.2.3 OCULUS VR (FACEBOOK)

12.2.4 SONY

FIGURE 42 SONY: COMPANY SNAPSHOT

12.2.5 SAMSUNG ELECTRONICS

FIGURE 43 SAMSUNG ELECTRONICS: COMPANY SNAPSHOT

12.2.6 HTC

FIGURE 44 HTC: COMPANY SNAPSHOT

12.2.7 EON REALITY

12.2.8 VUZIX

FIGURE 45 VUZIX: COMPANY SNAPSHOT

12.2.9 CYBERGLOVE SYSTEMS

12.2.10 LEAP MOTION (ULTRALEAP)

12.2.11 SIXENSE ENTERPRISES

* Business Overview, Products Offered, Recent Developments, SWOT Analysis, MnM View, and COVID-19 Updates might not be captured in case of unlisted companies.

12.3 KEY INNOVATORS

12.3.1 NINTENDO

12.3.2 PSIOUS

12.3.3 MINDMAZE

12.3.4 FIRSTHAND TECHNOLOGY

12.3.5 WORLDVIZ



- 12.3.6 VIRTUIX
- **12.3.7 SURVIOS**
- 12.3.8 MERGE LABS
- 12.3.9 SPACEVR
- 12.3.10 VIRTUALLY LIVE
- 12.3.11 XIAOMI CORPORATION
- 12.3.12 PANASONIC CORPORATION

13 ADJACENT MARKET

- 13.1 AUGMENTED REALITY MARKET GLOBAL TABLES
 - 13.1.1 MARKET DEFINITION
 - 13.1.2 LIMITATIONS
 - 13.1.2.1 Inclusions and exclusions

FIGURE 46 AUGMENTED REALITY MARKET, 2016–2024 (USD BILLION)

TABLE 119 AUGMENTED REALITY MARKET, BY OFFERING, 2016–2024 (USD MILLION)

TABLE 120 AUGMENTED REALITY MARKET, BY APPLICATION, 2016–2024 (USD MILLION)

TABLE 121 AUGMENTED REALITY MARKET, BY REGION, 2016–2024 (USD MILLION)

14 APPENDIX

- 14.1 INSIGHTS OF INDUSTRY EXPERTS
- 14.2 DISCUSSION GUIDE
- 14.3 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
- 14.4 AVAILABLE CUSTOMIZATIONS
- 14.5 RELATED REPORTS
- 14.6 AUTHOR DETAILS



I would like to order

Product name: Virtual Reality Market with COVID-19 Impact Analysis by Offering (Hardware and

Software), Technology, Device Type (Head-Mounted Display, Gesture-Tracking Device), Application (Consumer, Commercial, Enterprise, Healthcare) and Geography - Global

Forecast to 2025

Product link: https://marketpublishers.com/r/V84D2691948EN.html

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/V84D2691948EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html



To place an order via fax simply print this form, fill in the information below and fax the completed form to $+44\ 20\ 7900\ 3970$