

The Vertical Portal for China Business Intelligence

#### STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

#### **REPORT OBJECTIVES**

- To establish a comprehensive, factual, annually updated and costeffective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

#### **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

#### **INFORMATION SOURCES**

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

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## **Abstract**

Global and China VR and AR Industry Report, 2016-2020 by ResearchInChina highlights the followings:

- Classification, composition, operating principles, and applications of VR/AR products;
- > VR/AR industry chain, primarily four links (output & input hardware devices, components (chips & vendors, display, sensors, Pico devices), operating systems, software algorithms & contents);
- Global VR/AR market (status quo, market size, shipments, technical patent, development bottlenecks, and trends);
- Chinese VR/AR market (status quo, competitive landscape, market size, shipments, consumer environment consumer environments, and trends);
- Five foreign VR/AR companies and six domestic VR/AR players (products, VR/AR business, etc.)

VR, which provides immersive closed-loop experience, can only be used to a limited extent due to the size and weight of head-mounted devices, and will still be the main force of the market before consumer-grade AR products are achieved in the aspects of technology and prices of hardware. However, it is expected AR hardware and technology will be fully mature and quickly capture VR market in 2019 because of its wide applicability in business market. Hence, global VR/AR market will reach USD970 million and USD500 million in 2016 and USD30 billion and USD90.8 billion in 2020, respectively.

VR products can be categorized into three kinds (desktop, immersive, and distributed) and are applied to fields covering game, event live streaming, social experience, VR business, medical & healthcare, bodybuilding, advertorial & sponsored content, entertainment & film, communications, training & teaching simulation, and tourism.

Today's AR hardware is typically implemented in three ways: head-mounted displays, hand-held displays, and world-fixed displays by the distance away from eyes, with the first the most commonly seen. AR technology now is primarily applied to industrial manufacturing, repair, healthcare, military, television relaying, games entertainment, education, relic restoration, tourism exhibition, and municipal construction planning, chiefly for commercial use.

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#### **VR Trends:**

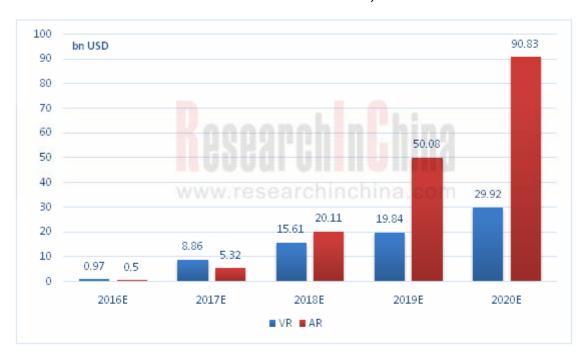
- Gradually-formed industrial standards raise access threshold, thus eliminating less competitive teams and companies;
- Large companies gradually build perfect VR ecosystem;
- •PC VR products, primarily games and movies, will be targeted at expert players and game enthusiasts;
- •Mobile VR products gradually move into business fields like education and tourism;
- •The number of content development teams will increase, and the scope of VR contents will broaden.

#### **AR Trends:**

- •Display devices become smaller, and any plane can be bent into a screen;
- Fusion of AR technology and 3D visualization technology and projection technology brings about disruptive changes to navigation;
- •Seamless docking between data visualization and users' wearable devices;
- •Gesture interaction becomes more mature; the relationship between human and technology will be redefined; human body language will interact well with technology products;
- •Touch technology will usher in great progress and get applied to national defense, administration and law enforcement, and healthcare;
- •Smart showroom, smart tourism, and AR theme park will develop or be presented before target audiences on the original basis;
- •Intelligent glasses will be the mainstream trend of AR hardware, bracing the upcoming era of "de-cellphone-ization";
- •AR software will be more oriented toward consumer groups, growing daily in the aspects of shopping, entertainment, and education.

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#### Global VR/AR Market Size, 2016-2020



Source: ResearchInChina

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Room 509, Building 1+1, No.10, Caihefang Road, Haidian District, Beijing, 100080

Phone: +86 10 82600828 ● Fax: +86 10 82601570 ● www.researchinchina.com ● report@researchinchina.com

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