

Indecomm Technology

DIGITAL ENGINEERING AND ENGAGEMENT

Immersive Experience



Intelligent



AI Foundations



Intelligent Apps
and Analytics



Intelligent Things



Digital



Digital Twins



Cloud to the Edge



Conversational
Platform



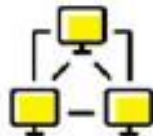
Immersive
Experience



Mesh



Blockchain



Event-Driven



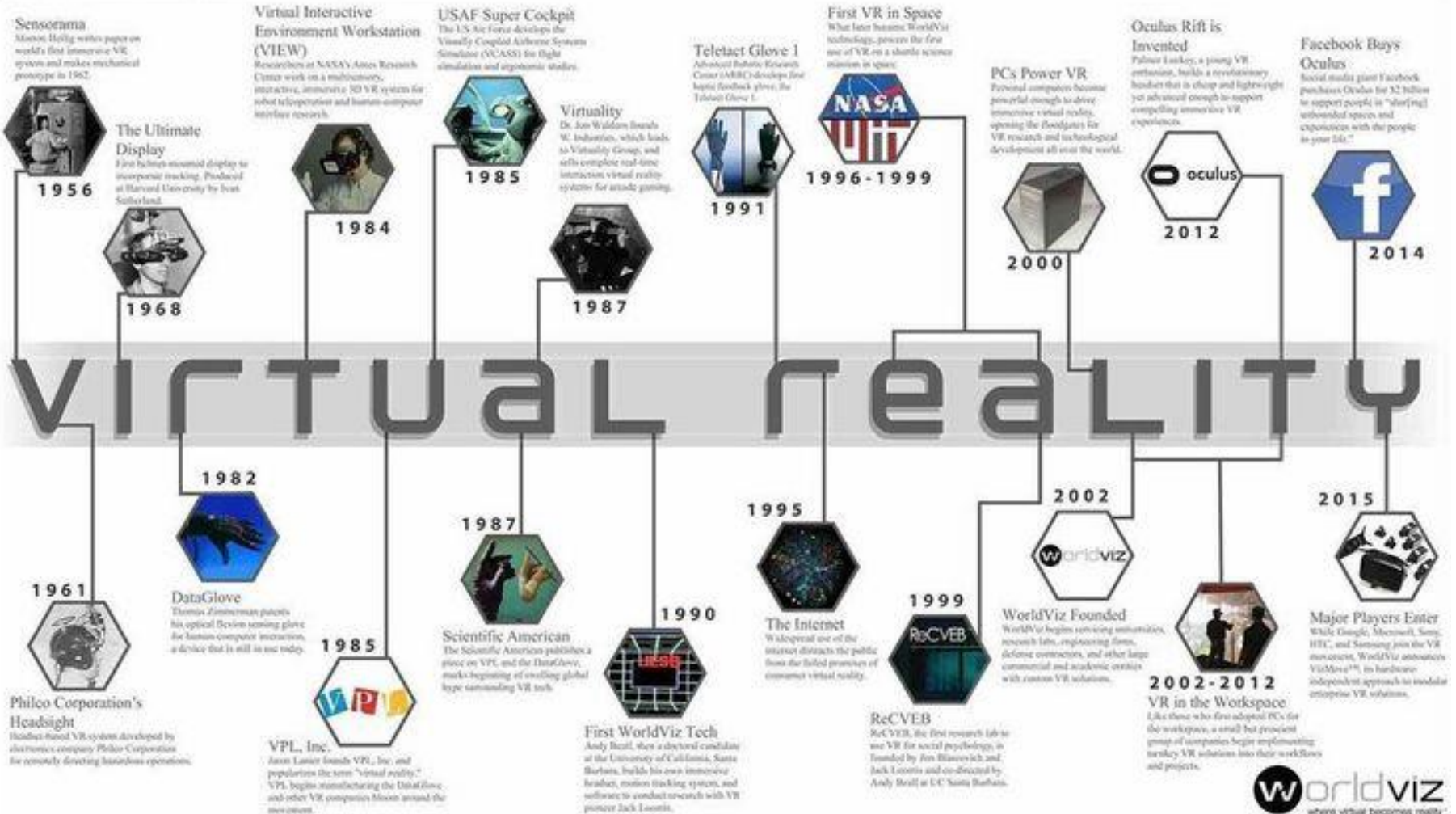
Continuous Adaptive
Risk and Trust

Augmented reality (AR), virtual reality (VR) and mixed reality are changing the way that people perceive and interact with the digital world.

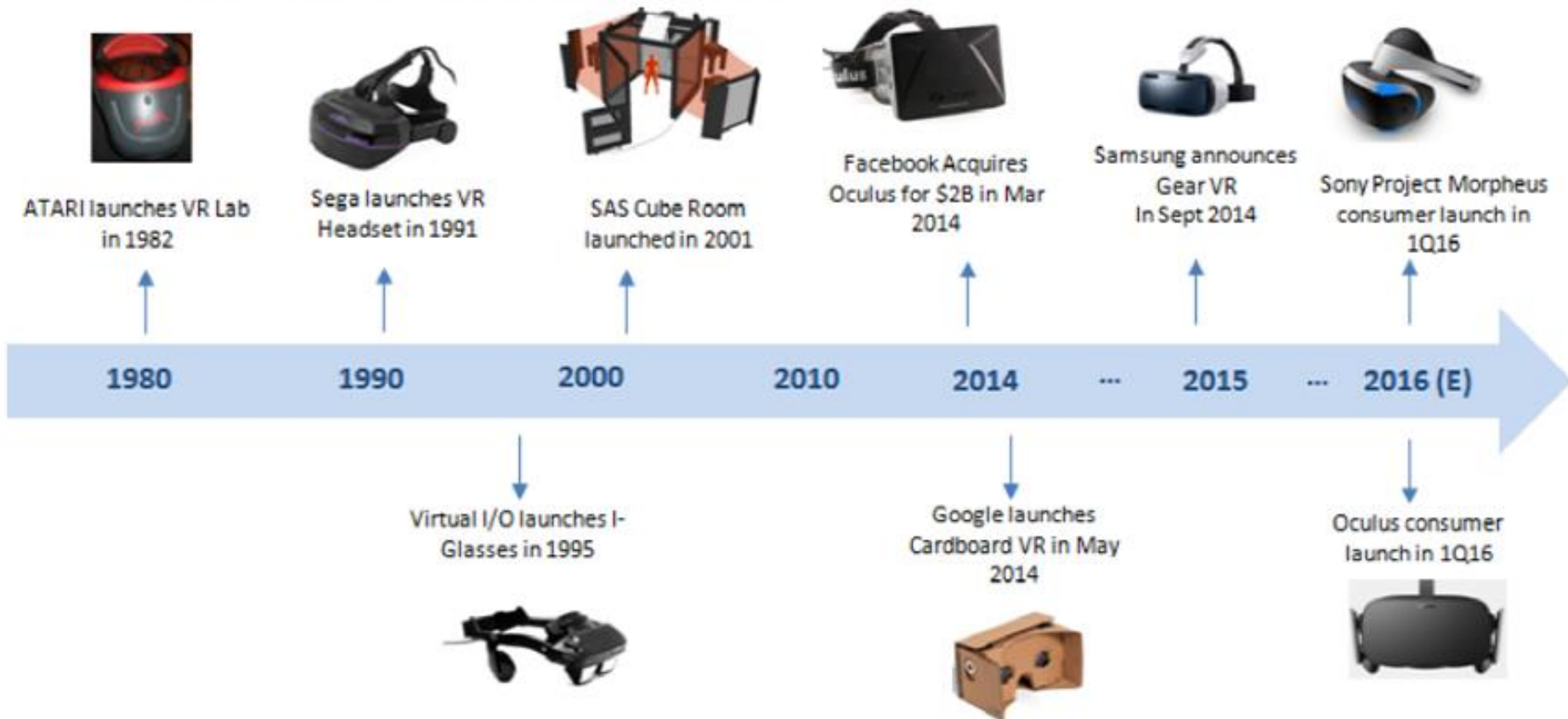
Over the next five years the focus will be on mixed reality, which is emerging as the immersive experience of choice, where the user interacts with digital and real-world objects while maintaining a presence in the physical world.

~ Gartner Top 10 Strategic Technology Trends for 2018

Virtual Reality has come a long way. From the world's top R&D facilities to the nostalgic days of plastic-cased digital entertainment in the 1980s, virtual reality has been through quite a bit to get to where it is now. It took some refining, now VR is poised to revolutionize the way we do just about everything, including the way we work...



Key events in the evolution of virtual reality hardware devices



Source: Deutsche Bank, Company Reports

QUICK FACTS

GLOBAL INTERACTIVE MEDIA MARKET

\$105B

2017

GLOBAL MARKET GROWTH

+12%

2016-2017

MOBILE AUDIENCE (ACTIVE USERS)

2.9B

2017

VIRTUAL REALITY MARKET, HARDWARE + SOFTWARE

\$28.3B

2020

LARGEST DIGITAL PLATFORM

Mobile

2017

% OF US GAMING VIDEO AUDIENCE THAT IS FEMALE

46%

2017

PEOPLE WHO WATCH VIDEOS ONLINE ABOUT GAMES

665M

2017

BIGGEST GAME OF 2017 SO FAR

*League of
Legends*

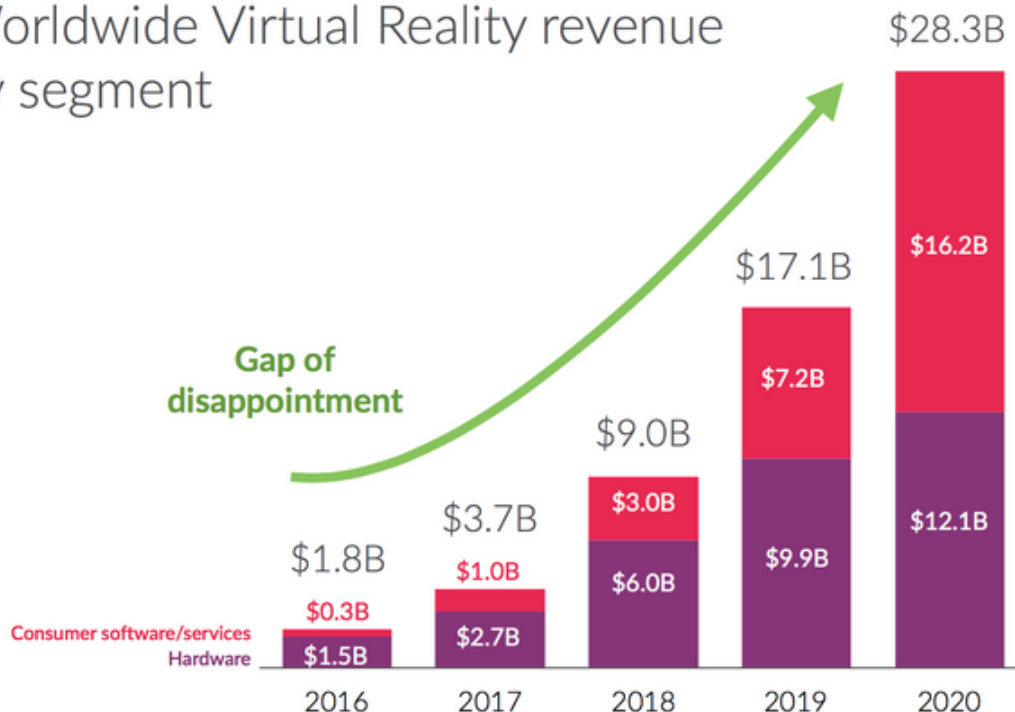
THROUGH JUNE 2017

★**SUPERDATA**

TRENDS AND INSIGHTS ON GAMES AND INTERACTIVE MEDIA | © 2017 SuperData Research. All rights reserved.

VR revenue will total almost \$30B by 2020 – 15 times what it was in 2016

Worldwide Virtual Reality revenue
by segment

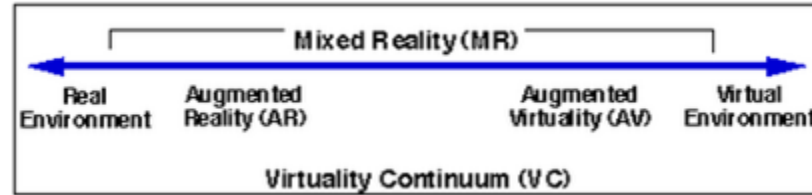


Total earnings will rise 104% from 2016 to 2017, helping to pull the industry out of the gap of disappointment.

VR software revenue will reach \$16.2B by 2020, surpassing hardware earnings for the first time.

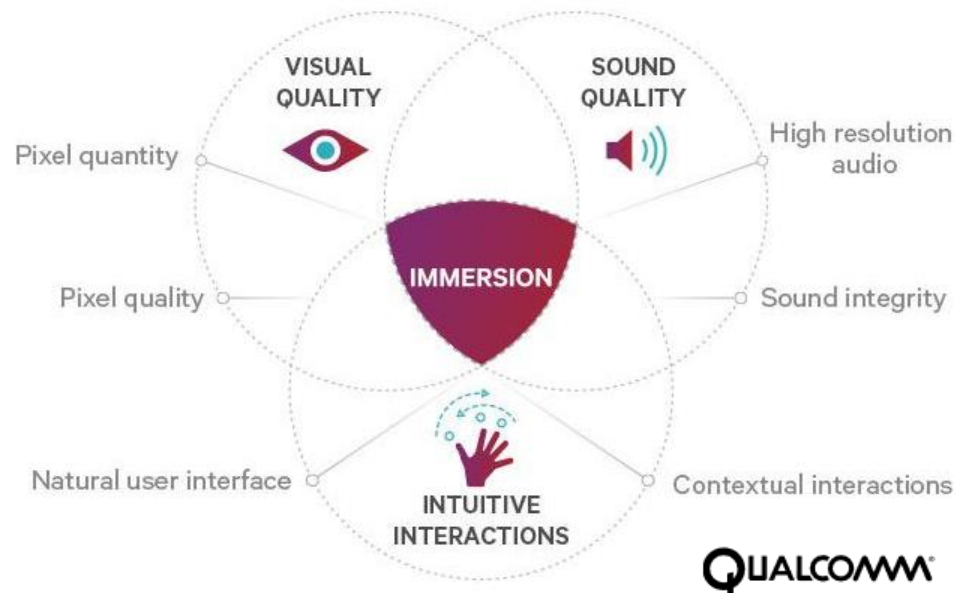
Gaming has become the primary use for VR, but location-based experiences are gaining traction and will be a gateway to adoption.

Video content will become the second highest-grossing software segment by 2020, earning \$3.3B.



Full immersion requires broader dimensions.

The three pillars of immersive experiences are visual quality, sound quality, and intuitive interactions. Full immersion can only be achieved by simultaneously focusing on the broader dimensions of these pillars.



Experiences in VR

Play

Immersive movies and shows

Live concerts, sports, and other events

Interactive gaming and entertainment

Learn

Immersive education

Training and demos

3D design and art

Communicate

Social interactions

Shared personal moments

Empathetic storytelling



Immersion enhances everyday experiences across devices

Unity Framework:

Unity is a cross-platform game engine developed by Unity Technologies, primarily used to develop both 3 dimensional and 2 dimensional video games and simulations for computers, consoles, and mobile devices. First announced only for OS X at Apple's Worldwide Developers Conference in 2005, it has since been extended to target 27 platforms. Unity is a multipurpose game engine that supports 2D and 3D graphics, drag and drop functionality and scripting using C#.

Vuforia Framework:

Vuforia is an Augmented Reality Software Development Kit (SDK) for mobile devices that enables the creation of Augmented Reality applications. It uses Computer Vision technology to recognize and track planar images (Image Targets) and simple 3D objects, such as boxes, in real-time. Vuforia provides Application Programming Interfaces (API) in C++, Java, Objective-C++(a language utilizing a combination of C++ and Objective-C syntax)

Apple ARKit:

iPhone X and ARKit enable a revolutionary capability for robust face tracking in augmented reality apps. Using the TrueDepth camera, your app can detect the position, topology, and expression of the user's face, all with high accuracy and in real time, making it easy to apply live selfie effects or use facial expressions to drive a 3D character.

- Demo Survival Shooter built for Oculus Rift
- MIT's take on VR [MIT Explains: How Does Virtual Reality Work?](#)

<https://www.superdataresearch.com/market-data/market-brief-year-in-review/>

<https://www.immersiveanalytics.com/vision/what-is-immersive/>

<http://iurbanteen.org/2016/09/evolution-of-the-virtual-reality-experience/>

<https://developer.apple.com/arkit/>

[https://en.wikipedia.org/wiki/Unity_\(game_engine\)](https://en.wikipedia.org/wiki/Unity_(game_engine))

<https://unity3d.com/>

<https://developer.oculus.com/>