

GLOBAL AUGMENTED REALITY AND VIRTUAL REALITY MARKET IN 6 COUNTRIES

(US, UK, China, Japan, Vietnam & Thailand)



TABLE OF CONTENTS

1 BASIC RESEARCH CONTENTS

- 1.1 BASIC CONCEPTS OF NEW CONTENTS (VR, AR, MR, AI)
 - 1.1.1 CONCEPT OF NEW CONTENTS
 - 1.1.1.1 VIRTUAL REALITY
 - 1.1.1.2 AUGMENTED REALITY
 - 1.1.2 HISTORY AND RECENT TREND OF NEW CONTENTS
 - 1.1.2.1 VIRTUAL REALITY
 - 1.1.2.2 AUGMENTED REALITY
 - 1.1.3.1 SOUTH KOREA
 - 1.1.3.1.1 VIRTUAL REALITY
 - 1.1.3.1.2 AUGMENTED REALITY
 - 1.1.3.2 USA
 - 1.1.3.2.1 VIRTUAL REALITY
 - 1.1.3.2.2 AUGMENTED REALITY
 - 1.1.3.3 CHINA
 - 1.1.3.3.1 VIRTUAL REALITY
 - 1.1.3.3.2 AUGMENTED REALITY
 - 1.1.3.4 JAPAN
 - 1.1.3.4.1 VIRTUAL REALITY
 - 1.1.3.4.2 AUGMENTED REALITY
 - 1.1.3.5 ENGLAND
 - 1.1.3.5.1 VIRTUAL REALITY
 - 1.1.3.5.2 AUGMENTED REALITY
 - 1.1.3.6 VIETNAM/ THAILAND
 - 1.1.3.6.1 VIRTUAL REALITY
 - 1.1.3.6.2 AUGMENTED REALITY
 - 1.1.4 GLOBAL MARKET TRENDS
 - 1.1.4.1 VIRTUAL REALITY
 - 1.1.4.2 AUGMENTED REALITY

2 STATUS OF NEW CONTENTS INDUSTRY (VR, AR, MR)

- 2.1 MARKET SIZE OF NEW CONTENTS MARKET, USD (2018-2020) (VR, AR, MR)
 - 2.1.1 COUNTRY WISE MARKET SIZE
 - 2.1.1.1 VIRTUAL REALITY MARKET SIZE, BY COUNTRY, 2016-2020 (USD MILLION)
 - 2.1.1.2 AUGMENTED REALITY MARKET SIZE, BY COUNTRY, 2016-2020 (USD MILLION)
 - 2.1.2 GLOBAL MARKET SIZE
 - 2.1.2.1 GLOBAL VR, AR & MR MARKET SIZE, BY TYPE, 2016-2020 (USD MILLION)
- 2.2 STATUS OF NEW CONTENTS RELATED ORGANIZATIONS AND INSTITUTIONS
 - 2.2.1 LIST OF NEW CONTENTS ORGANIZATIONS AND INSTITUTIONS (BY EACH COUNTRY)
 - 2.2.1.1 UNITED STATES
 - 2.2.1.1.1 IOWA STATE UNIVERSITY
 - 2.2.1.1.2 UNIVERSITY OF ADVANCING TECHNOLOGY
 - 2.2.1.1.3 VR/AR ASSOCIATION
 - 2.2.1.1.4 UNIVERSITY OF NEBRASKA MEDICAL CENTER
 - 2.2.1.1.5 UNIVERSITY OF SOUTHERN CALIFORNIA
 - 2.2.1.1.6 UNIVERSITY OF MINNESOTA
 - 2.2.1.1.7 UNIVERSITY OF NORTH CAROLINA
 - 2.2.1.1.8 XR ASSOCIATION
 - 2.2.1.1.9 HARVARD UNIVERSITY
 - 2.2.1.2 CHINA
 - 2.2.1.2.1 PEKING UNIVERSITY
 - 2.2.1.2.2 TSINGHUA UNIVERSITY
 - 2.2.1.2.3 SHANGHAI JIAO TONG UNIVERSITY
 - 2.2.1.2.4 ZHEJIANG UNIVERSITY
 - 2.2.1.2.5 WUHAN UNIVERSITY
 - 2.2.1.3 JAPAN
 - 2.2.1.3.1 KEIO UNIVERSITY
 - 2.2.1.3.2 UNIVERSITY OF TOKYO
 - 2.2.1.3.3 OSAKA UNIVERSITY
 - 2.2.1.3.4 LABORATORY FOR IMAGE AND MEDIA UNDERSTANDING (LIMU)
 - 2.2.1.3.5 RITSUMEIKAN UNIVERSITY
 - 2.2.1.3.6 ANIME NEWS NETWORK
 - 2.2.1.3.7 UNIVERSITY OF TSUKUB
 - 2.2.1.3.8 TOYOHASHI UNIVERSITY OF TECHNOLOGY

- 2.2.1.4 ENGLAND
 - 2.2.1.4.1 OXFORD UNIVERSITY
 - 2.2.1.4.2 STAFFORDSHIRE UNIVERSITY
 - 2.2.1.4.3 UNIVERSITY ARTS LONDON
 - 2.2.1.4.4 UWE BRISTOL
 - 2.2.1.4.5 UNIVERSITY OF PORTSMOUTH
 - 2.2.1.4.6 UNIVERSITY OF CAMBRIDGE
 - 2.2.1.4.7 CARDIFF UNIVERSITY
 - 2.2.1.4.8 UNIVERSITY OF EAST ANGLIA SPANNING
- 2.2.1.5 THAILAND
 - 2.2.1.5.1 CHULALONGKORN UNIVERSITY
 - 2.2.1.5.2 KASETSART UNIVERSITY
 - 2.2.1.5.3 MAHIDOL UNIVERSITY
 - 2.2.1.5.4 NARESUAN UNIVERSITY
- 2.2.1.6 SOUTH KOREA
 - 2.2.1.6.1 KOREA VR•AR INDUSTRY ASSOCIATION (KOVRA)
 - 2.2.1.6.2 KOREA ADVANCED INSTITUTE OF SCIENCE & TECHNOLOGY (KAIST)
 - 2.2.1.6.3 VIRTUAL REALITY LABORATORY IN POHANG UNIVERSITY OF SCIENCE & TECHNOLOGY
 - 2.2.1.6.4 COMPUTER GRAPHICS LABORATORY IN CHOONGANG UNIVERSITY
 - 2.2.1.6.5 ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE (ETRI)
 - 2.2.1.6.6 YONSEI UNIVERSITY
 - 2.2.1.6.7 KYUNG HEE UNIVERSITY
 - 2.2.1.6.8 COMPUTER ANIMATION AND VR LABORATORY IN SEOUL NATIONAL UNIVERSITY
 - 2.2.1.6.9 HANYANG UNIVERSITY
- 2.2.2 TOP 5 GLOBAL NEW CONTENTS ORGANIZATIONS AND INSTITUTIONS
 - 2.2.2.1 UCSIM- CENTER FOR SIMULATIONS & VIRTUAL ENVIRONMENTS RESEARCH
 - 2.2.2.1.1 OVERVIEW
 - 2.2.2.1.2 MAJOR ACTIVITIES IN RECENT 2 YEARS
 - 2.2.2.1.3 FUTURE PLANS
 - 2.2.2.2 STANFORD UNIVERSITY
 - 2.2.2.2.1 OVERVIEW
 - 2.2.2.2.2 MAJOR ACTIVITIES IN RECENT 2 YEARS

- 2.2.2.2.3 FUTURE PLANS
 - 2.2.2.3 IOWA STATE UNIVERSITY
 - 2.2.2.3.1 OVERVIEW
 - 2.2.2.3.2 MAJOR ACTIVITIES IN RECENT 2 YEARS
 - 2.2.2.4 NEARPOD
 - 2.2.2.4.1 OVERVIEW
 - 2.2.2.4.2 MAJOR ACTIVITIES IN RECENT 2 YEARS
 - 2.2.2.5 ALLEN INSTITUTE FOR ARTIFICIAL INTELLIGENCE
 - 2.2.2.5.1 OVERVIEW
 - 2.2.2.5.2 MAJOR ACTIVITIES IN RECENT 2 YEARS
 - 2.2.2.5.3 FUTURE PLAN
 - 2.2.2.6 ASSOCIATION FOR THE ADVANCEMENT OF ARTIFICIAL INTELLIGENCE (ORGANIZATION)
 - 2.2.2.6.1 OVERVIEW
 - 2.2.2.6.2 MAJOR ACTIVITIES IN RECENT 2 YEARS
 - 2.2.2.6.3 FUTURE PLAN
- 2.3 RESEARCH ON STATUS OF NEW CONTENTS DEVICES & EQUIPMENT
 - 2.3.1 LIST OF NEW CONTENTS DEVICES & EQUIPMENT (GLOBAL MARKET)
 - 2.3.1.1 VIRTUAL REALITY DEVICE
 - 2.3.1.2 VIRTUAL REALITY EQUIPMENT
 - 2.3.1.3 AUGMENTED REALITY
 - 2.3.1.4 AUGMENTED REALITY DEVICE AND EQUIPMENT
 - 2.3.1.5 MIXED REALITY
 - 2.3.2 SUMMARY OF TOP 5 NEW CONTENTS DEVICES & EQUIPMENT BY VR, AR, & MR
 - 2.3.2.1 VIRTUAL REALITY
 - 2.3.2.2 AUGMENTED REALITY
 - 2.3.2.3 MIXED REALITY
 - 2.3.3 SALES FIGURES OF NEW CONTENTS DEVICES AND EQUIPMENT BY EACH COUNTRY 2016 & 2017 (USD)
 - 2.3.3.1 VIRTUAL REALITY SALES FIGURES BY EACH COUNTRY 2016 & 2017 (USD)
 - 2.3.3.2 AUGMENTED REALITY SALES FIGURES BY EACH COUNTRY 2016 & 2017 (USD)
 - 2.3.3.3 MIXED REALITY SALES FIGURES BY EACH COUNTRY, 2016 & 2017 (USD)
 - 2.3.4 NUMBER OF NEW CONTENTS DEVICES AND EQUIPMENT SOLD BY EACH COUNTRY 2016 & 2017 (NO. OF UNITS SHIPPED)
 - 2.3.4.1 VIRTUAL REALITY NEW CONTENTS DEVICES AND EQUIPMENT SOLD BY EACH COUNTRY, 2016 & 2017 (NO. OF UNITS SHIPPED)

	2.3.4.2	AUGMENTED REALITY NEW CONTENTS DEVICES AND EQUIPMENT SOLD BY EACH COUNTRY, 2016 & 2017 (NO. OF UNITS SHIPPED)
	2.3.4.3	MIXED REALITY NEW CONTENTS DEVICES AND EQUIPMENT SOLD BY EACH COUNTRY, 2016 & 2017 (NO. OF UNITS SHIPPED)
2.3.5		GLOBAL SALES FIGURES OF NEW CONTENTS DEVICES AND EQUIPMENT, 2016 & 2017 (USD MILLION)
	2.3.5.1	GLOBAL SALES FIGURES OF NEW CONTENTS DEVICES AND EQUIPMENT, 2016 & 2017 (USD MILLION)
	2.3.5.2	GLOBAL NUMBER OF NEW CONTENTS DEVICES AND EQUIPMENT SOLD, 2016 & 2017 (NO. OF UNITS SHIPPED)
2.4		CONTENTS STATUS BY EACH NEW CONTENT
	2.4.1	MARKET SIZE BY EACH NEW CONTENT, BY EACH COUNTRY, 2016 & 2017
	2.4.1.1	VIRTUAL REALITY MARKET SIZE, BY COUNTRY, 2016-2020 (USD MILLION)
	2.4.1.2	AUGMENTED REALITY MARKET SIZE, BY COUNTRY, 2016-2020 (USD MILLION)
	2.4.1.3	MIXED REALITY MARKET SIZE, BY COUNTRY, 2016-2020 (USD MILLION)
2.4.2		OVERVIEW OF TOP 10 CONTENTS BY EACH NEW CONTENT
	2.4.2.1	VIRTUAL REALITY
	2.4.2.1.1	USA
		2.4.2.1.1.1 COLOSSE
		2.4.2.1.1.2 GOOGLE EARTH VR
		2.4.2.1.1.3 KINGSPRAY GRAFFITI VR
		2.4.2.1.1.4 CEAN RIFT
		2.4.2.1.1.5 VIRTUAL DESKTOP PLATFORM
	2.4.2.1.2	ENGLAND
		2.4.2.1.2.1 ADOBE CAPTIVATE
		2.4.2.1.2.2 GOOGLE CARDBOARD
		2.4.2.1.2.3 GOOGLE DAYDREAM
		2.4.2.1.2.4 SAMSUNG GEAR VR
	2.4.2.1.3	CHINA
		2.4.2.1.3.1 RELAX VR
		2.4.2.1.3.2 VIRTUAL REALITY XTREMATI+9 D
	2.4.2.1.4	JAPAN
		2.4.2.1.4.1 VR ZONE SHINJUKU
		2.4.2.1.4.2 ZERO LATENCY VR
		2.4.2.1.4.3 VR PARK TOKYO
	2.4.2.1.5	KOREA
		2.4.2.1.5.1 SOL VR360 SDK

		2.4.2.1.5.2	SOL LOUDNESS SDK
		2.4.2.1.5.3	POLARIANT'S POL
2.4.2.2	AUGMENTED REALITY		
	2.4.2.2.1	USA	
		2.4.2.2.1.1	LIVETOUR
		2.4.2.2.1.2	HOLOBUILDER
		2.4.2.2.1.3	HP REVEAL
		2.4.2.2.1.4	ARTOOLKIT
	2.4.2.2.2	ENGLAND	
		2.4.2.2.2.1	SEPHORA VIRTUAL ARTIST AND ROLEX
		2.4.2.2.2.2	ACCUVEIN
		2.4.2.2.2.3	IKEA PLACE APP
	2.4.2.2.3	CHINA	
		2.4.2.2.3.1	INGRESS
		2.4.2.2.3.2	GENESIS AUGMENTED REALITY
		2.4.2.2.3.3	QUIVER
	2.4.2.2.4	JAPAN	
		2.4.2.2.4.1	BROADCAST AR
		2.4.2.2.4.2	MOBILE AR
		2.4.2.2.4.3	HERO MIRROR
	2.4.2.2.5	KOREA	
		2.4.2.2.5.1	CREATOR AVR
		2.4.2.2.5.2	AR ASSIST
2.4.2.3	MIXED REALITY		
	2.4.2.3.1	USA	
		2.4.2.3.1.1	STEAM VR
		2.4.2.3.1.2	HALO RECRUIT
		2.4.2.3.1.3	AMAZE 3D VIDEOS
		2.4.2.3.1.4	SPACE PIRATE TRAINER
	2.4.2.3.2	ENGLAND	
		2.4.2.3.2.1	TUBECAST VR
		2.4.2.3.2.2	ARIZONA SUNSHINE
		2.4.2.3.2.3	SPACE PIRATE TRAINER
	2.4.2.3.3	JAPAN	
		2.4.2.3.3.1	REMOTE ATTENDANCE
		2.4.2.3.3.2	REMOTE INTERACTION

- 2.4.2.3.3 FOOLING TASTE BUDS
- 2.4.2.3.3.4 PHOTO OPS
- 2.4.2.3.4 CHINA
 - 2.4.2.3.4.1 VEER
 - 2.4.2.3.4.2 AUGMENTED REALITY IN 3D
 - 2.4.2.3.4.3 SUN-SEEKER
- 2.4.3 TOP 10 USER PREFERRED CONTENTS AND REASONS BY EACH NEW CONTENT
 - 2.4.3.1 VIRTUAL REALITY
 - 2.4.3.1.1 USA
 - 2.4.3.1.1.1 LLUMETTE
 - 2.4.3.1.1.2 COLOSSE
 - 2.4.3.1.1.3 GOOGLE EARTH VR
 - 2.4.3.1.1.4 KINGSPRAY GRAFFITI VR
 - 2.4.3.1.1.5 LITTLSTAR
 - 2.4.3.1.1.6 CEAN RIFT
 - 2.4.3.1.2 ENGLAND
 - 2.4.3.1.2.1 ADOBE CAPTIVATE
 - 2.4.3.1.2.2 HOLOME CREATIVE
 - 2.4.3.1.2.3 GOOGLE CARDBOARD
 - 2.4.3.1.2.4 GOOGLE DAYDREAM
 - 2.4.3.1.2.5 SAMSUNG GEAR VR
 - 2.4.3.1.2.6 HOLOME
 - 2.4.3.1.3 CHINA
 - 2.4.3.1.3.1 RELAX VR
 - 2.4.3.1.3.2 VIRTUAL REALITY XTREMATI+9 D
 - 2.4.3.1.3.3 WIRELESS SPEAKERS
 - 2.4.3.1.3.4 DONGDAEMUN FANTA VR
 - 2.4.3.1.4 JAPAN
 - 2.4.3.1.4.1 VR ZONE SHINJUKU
 - 2.4.3.1.4.2 ZERO LATENCY VR
 - 2.4.3.1.4.3 VR PARK TOKYO
 - 2.4.3.1.5 KOREA
 - 2.4.3.1.5.1 SOL VR360 SDK
 - 2.4.3.1.5.2 POLARIANT'S POL

2.4.3.2	AUGMENTED REALITY
2.4.3.2.1	USA
2.4.3.2.1.1	LIVETOUR
2.4.3.2.1.2	HOLOBUILDER
2.4.3.2.1.3	HP REVEAL
2.4.3.2.1.4	ARTOOLKIT
2.4.3.2.1.5	INCEPTION VR
2.4.3.2.2	ENGLAND
2.4.3.2.2.1	MOVESTUDIO
2.4.3.2.2.2	SEPHORA VIRTUAL ARTIST AND ROLEX
2.4.3.2.2.3	ACCUVEIN
2.4.3.2.2.4	IKEA PLACE APP
2.4.3.2.3	CHINA
2.4.3.2.3.1	INGRESS
2.4.3.2.3.2	GENESIS AUGMENTED REALITY
2.4.3.2.3.3	QUIVER
2.4.3.2.4	JAPAN
2.4.3.2.4.1	BROADCAST AR
2.4.3.2.4.2	HOLOGRAMS
2.4.3.2.4.3	MOBILE AR
2.4.3.2.4.4	HERO MIRROR
2.4.3.2.5	KOREA
2.4.3.2.5.1	CREATOR AVR
2.4.3.2.5.2	BURGER FLIP
2.4.3.2.5.3	AR ASSIST
2.4.3.2.5.4	ANGEST
2.4.3.3	MIXED REALITY
2.4.3.3.1	USA
2.4.3.3.1.1	STEAM VR
2.4.3.3.1.2	HALO RECRUIT
2.4.3.3.1.3	AMAZE 3D VIDEOS
2.4.3.3.1.4	SPACE PIRATE TRAINER
2.4.3.3.2	ENGLAND
2.4.3.3.2.1	TUBECAST VR
2.4.3.3.2.2	ARIZONA SUNSHINE
2.4.3.3.2.3	FORM DEMO EXPERIENCE

- 2.4.3.3.3 JAPAN
 - 2.4.3.3.3.1 REMOTE ATTENDANCE
 - 2.4.3.3.3.2 REMOTE INTERACTION
 - 2.4.3.3.3.3 FOOLING TASTE BUDS
 - 2.4.3.3.3.4 PHOTO OPS
- 2.4.3.3.4 CHINA
 - 2.4.3.3.4.1 VEER
 - 2.4.3.3.4.2 AUGMENTED REALITY IN 3D
 - 2.4.3.3.4.3 SUN-SEEKER
- 2.4.3.3.5 KOREA
 - 2.4.3.3.5.1 EDUCATION
 - 2.4.3.3.5.2 ENGINEERING
 - 2.4.3.3.5.3 ENTERTAINMENT
- 2.5 CURRENT OVERSEAS STATUS OF SOUTH KOREAN CONTENTS BY EACH NEW CONTENT
 - 2.5.1 SIZE OF SOUTH KOREAN EXPORTS BY EACH SOUTH KOREAN NEW CONTENT, 2016 & 2017 (USD)
 - 2.5.2 MAJOR EXPORT COUNTRIES BY EACH OF SOUTH KOREAN NEW CONTENT, AND STATUS SIZE BY REGION, 2016&2017 (USD)
 - 2.5.3 TOP SOUTH KOREAN EXPORT NEW CONTENTS DEVICES AND OVERVIEW OF EACH CONTENT

3 APPEDIX