MERGED REALITY

How virtual and augmented reality will transform the everyday

ERICSSON

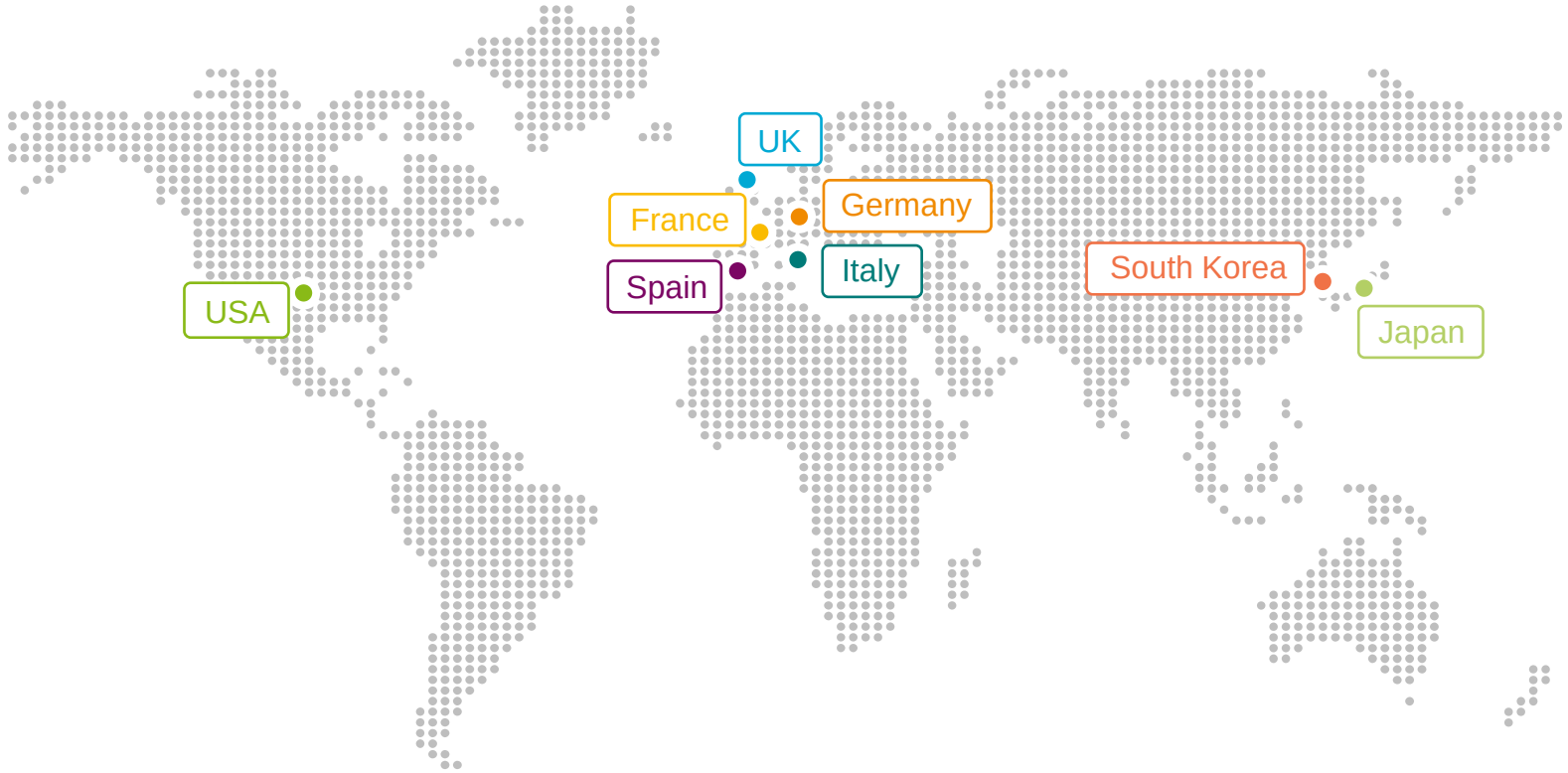
Ericsson ConsumerLab

METHODOLOGY

Qualitative research

VR focus groups in a VR environment – a world first

VR nausea-inducing lag tests



Quantitative research

Online survey of 9,200 consumers aged 15-69

These respondents represent only **51 million smartphone users aware of VR out of 800 million** living in these 8 markets

KEY FINDINGS

We explore the impact of AR and VR as we move towards a merged reality, where the boundaries of real and virtual worlds begin to blur

1. 7 out of 10 early adopters expect VR/AR to change everyday life fundamentally in 6 domains: media, education, work, social interaction, travel and retail

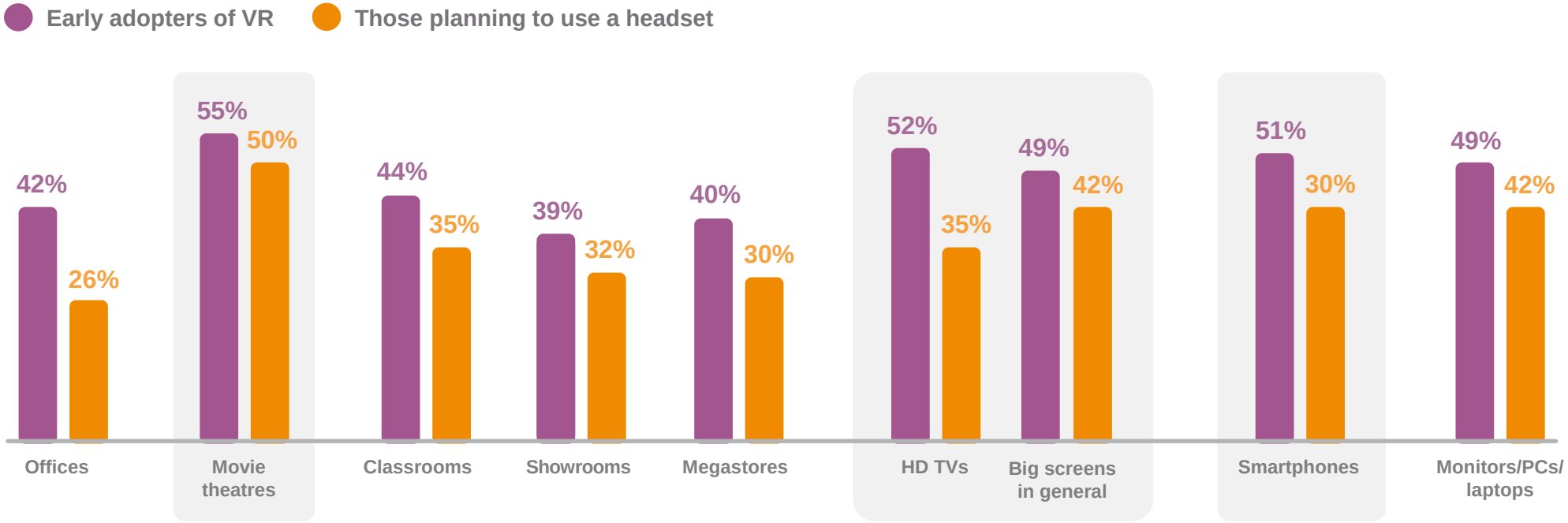
2. Media is already being transformed. Consumers expect virtual screens to start replacing televisions and theaters in less than a year

3. Lack of mobility, bulky headsets and network lag keep merged reality at bay

4. For merged reality to become mainstream, 5G is central to provide mobility, improve social experiences and address nausea

VR REPLACES PHYSICAL SPACES

Integration of VR and AR with everyday life means the way we live, work and consume information and media may fundamentally change



Source: Ericsson ConsumerLab, Merged Reality, 2017
Base: Smartphone users aged 15-69 across 8 markets who currently use tethered VR headsets at least several times a week

AR/VR WILL CHANGE DAILY LIFE BEYOND RECOGNITION

7 out of 10 early adopters expect these 6 domains to fundamentally change:

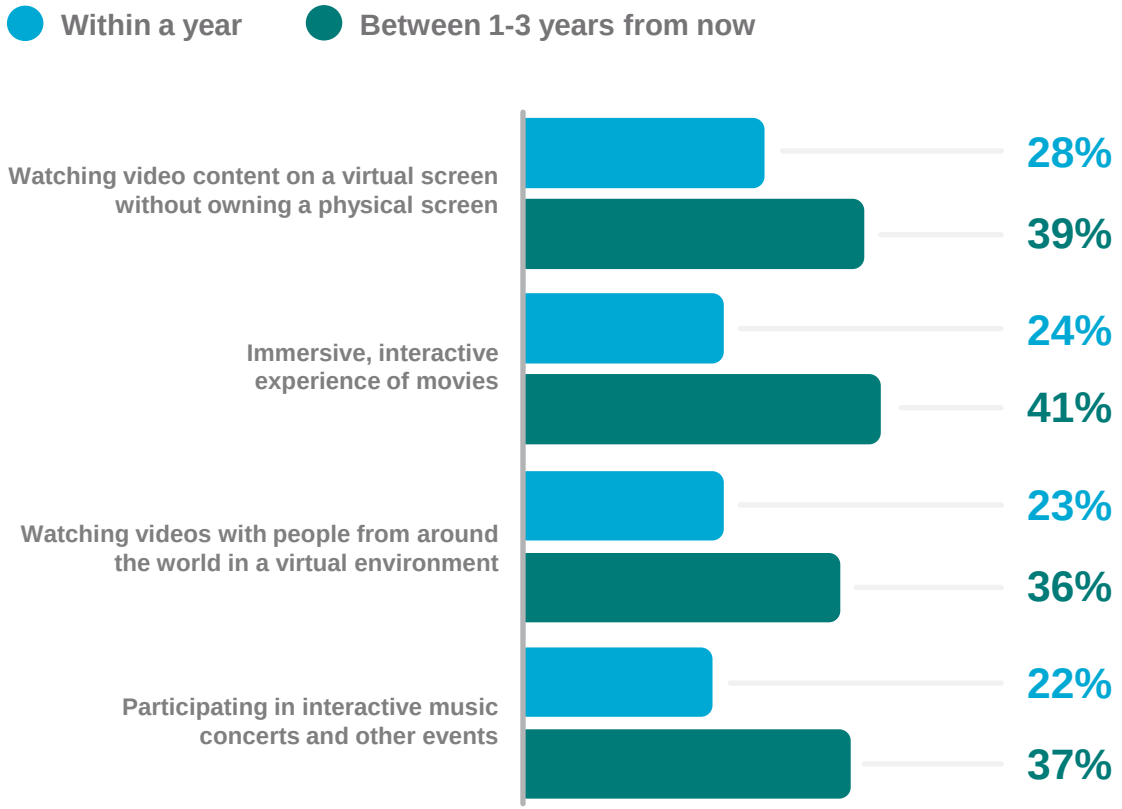
- Media
- Social interaction
- Education
- Tourism
- Work
- Retail

VR ALREADY TRANSFORMING MEDIA

Nearly half of early adopters have increased their VR video usage

A quarter of early adopters expect to be watching movies on a virtual screen within a year

60 percent of early adopters expect that interactive music concerts and events in VR will be mainstream in the next 3 years



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EDUCATION AND TOURISM – ALL IN VR

EDUCATION

VR will transform education and learning say:

61 percent of early adopters

49 percent of consumers who are planning to use a headset

25 percent of laggards, who are particularly open to the use of VR training in medicine and surgery

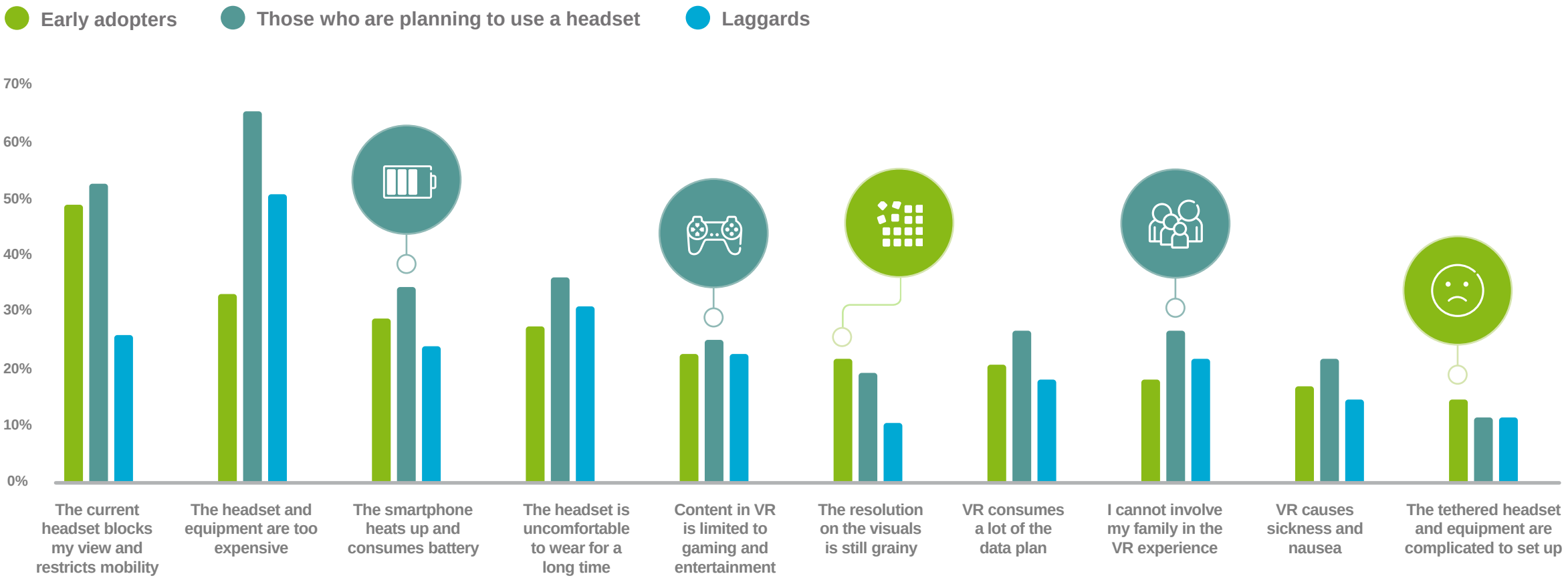
TOURISM

VR could give rise to a new concept of tourism and adventure:

25 percent of early adopters believe that we will be exploring destinations through AR-enabled information and maps overlaid onto the physical environment

23 percent of early adopters believe that we will be virtually travelling with others within a year

CHALLENGES FOR VR



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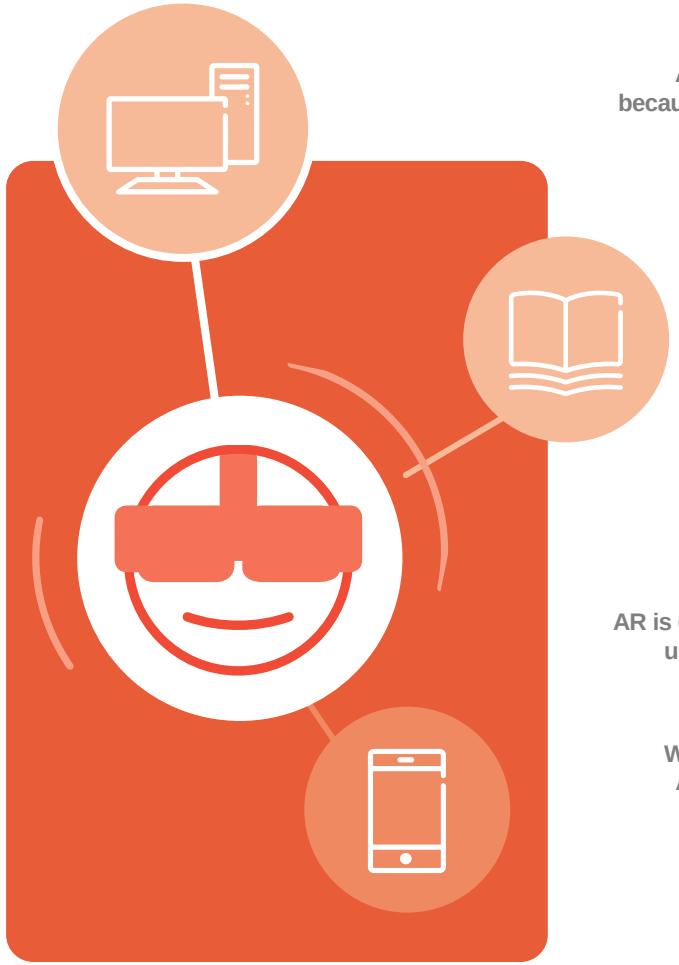
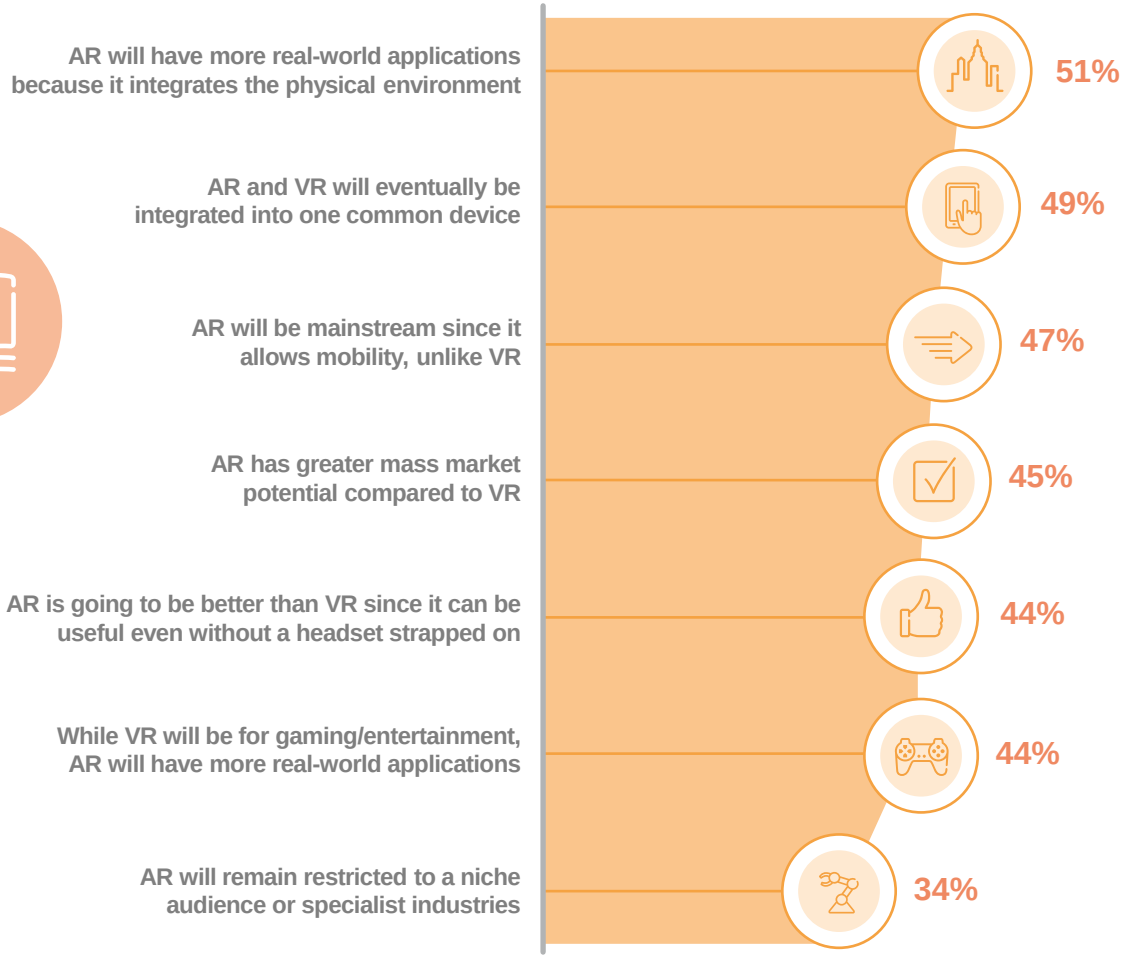
MIXED REALITY PARADOXES

1. The paradox of mobility – VR lets you go anywhere but you can't go anywhere with it
2. The paradox of isolation – VR lets you socialize remotely with people from around the globe but isolates you from your physical environment
3. The social paradox of integration – those who are socially challenged in the real world are the ones who are more socially oriented in VR

AR WILL INTEGRATE WITH VR





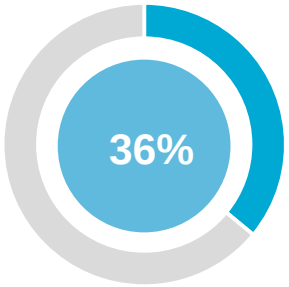
Source: Ericsson ConsumerLab, Merged Reality, 2017
Base: Smartphone users aged 15-69 across 8 markets who are aware of VR

> “Eventually VR and AR hardware will merge and you will be able to do both from a single device.”

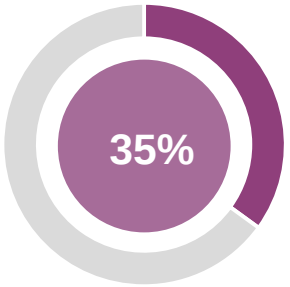
Miku, Japan, traditional focus group discussion

CONSUMER EXPECTATIONS OF 5G

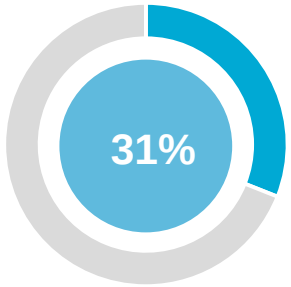
5G is expected to play a central role in meeting many of the challenges VR and AR currently face; enabling mobility and improving merged reality



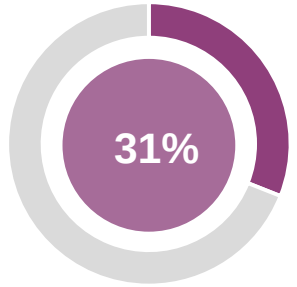
Expect 5G will provide mobility through a stable, fast, and high-bandwidth network



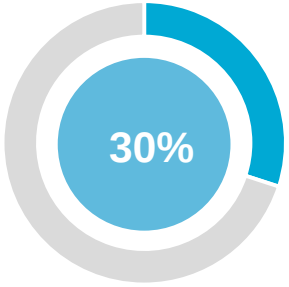
Expect 5G will improve the viewing experience in VR with better resolution



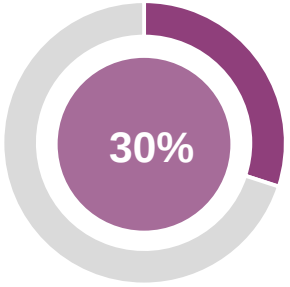
Expect 5G will increase the efficiency of devices by consuming less battery power



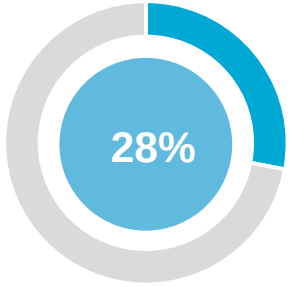
Expect 5G will enable more shared experiences through a less-lag network



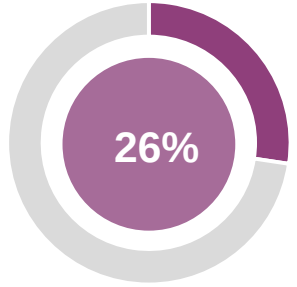
Expect 5G will make VR and AR more accessible through cheaper data plans



Expect 5G will enable tethered VR headsets to become wireless by providing a high-bandwidth, less-lag network



Expect 5G will enable haptic feedback on VR devices



Expect 5G will address the nausea and sickness in VR

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