



# CES 2022 DECODED

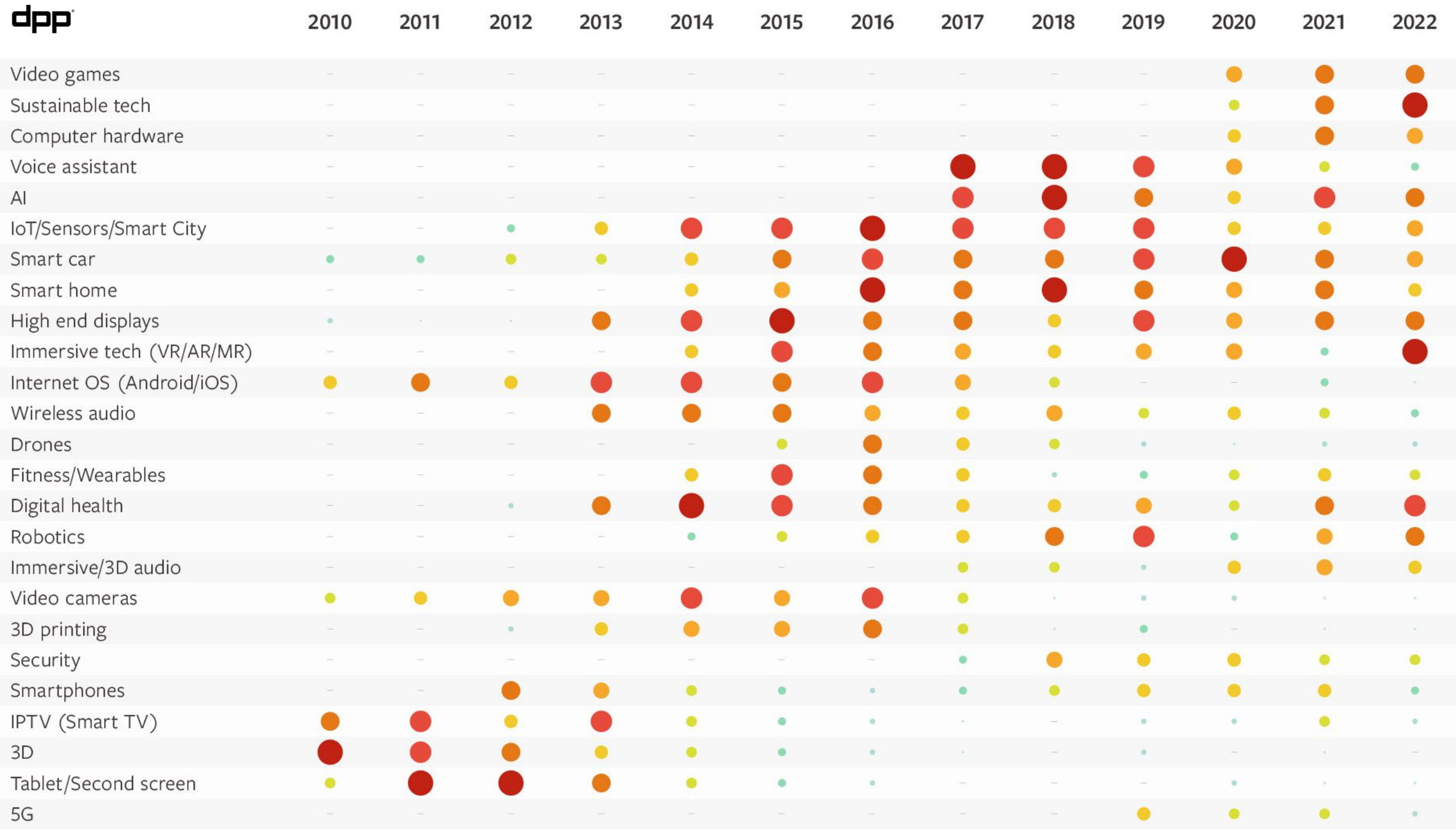
The consumer trends  
that will impact the  
media industry

Mark Harrison, CEO, DPP

Enabled by

**DELL** Technologies







1

# Sustainability goes into production

The drive to zero emissions  
is transforming the  
tech supply chain



TO ENHANCE THE WELL-BEING  
OF PEOPLE AND SOCIETY

# COMING CLEAN

# Panasonic

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Use of their products  
creates x40 emissions  
than making them

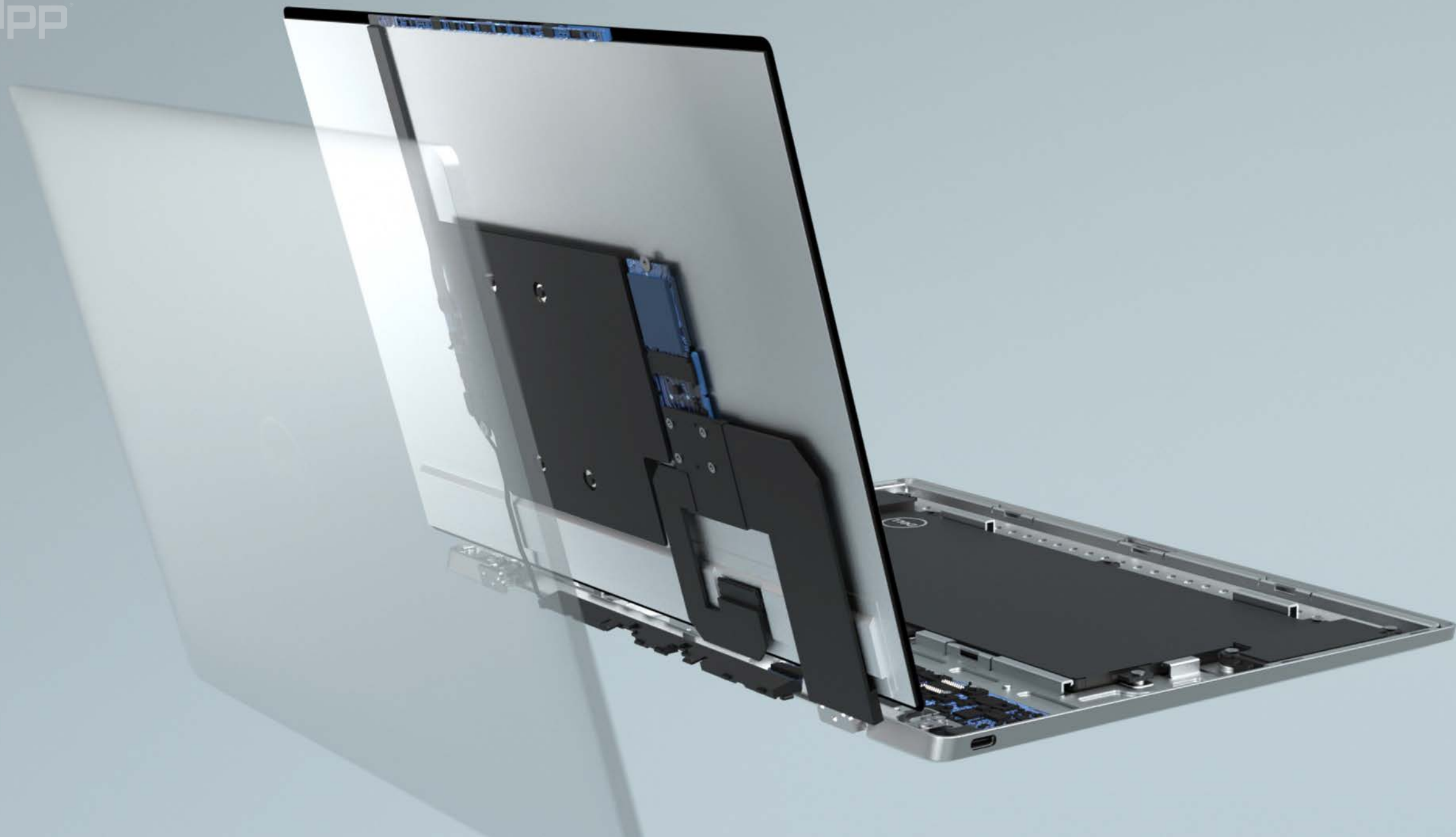
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Responsible for 1%  
of global electricity  
consumption

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Zero emissions by 2030





# Tech for a responsible future

[www.ces2022.nl](http://www.ces2022.nl)

**NL** Netherlands

Accelerate the  
change

Investment in  
climate-tech startups

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H1 2020	<b>\$20bn</b>
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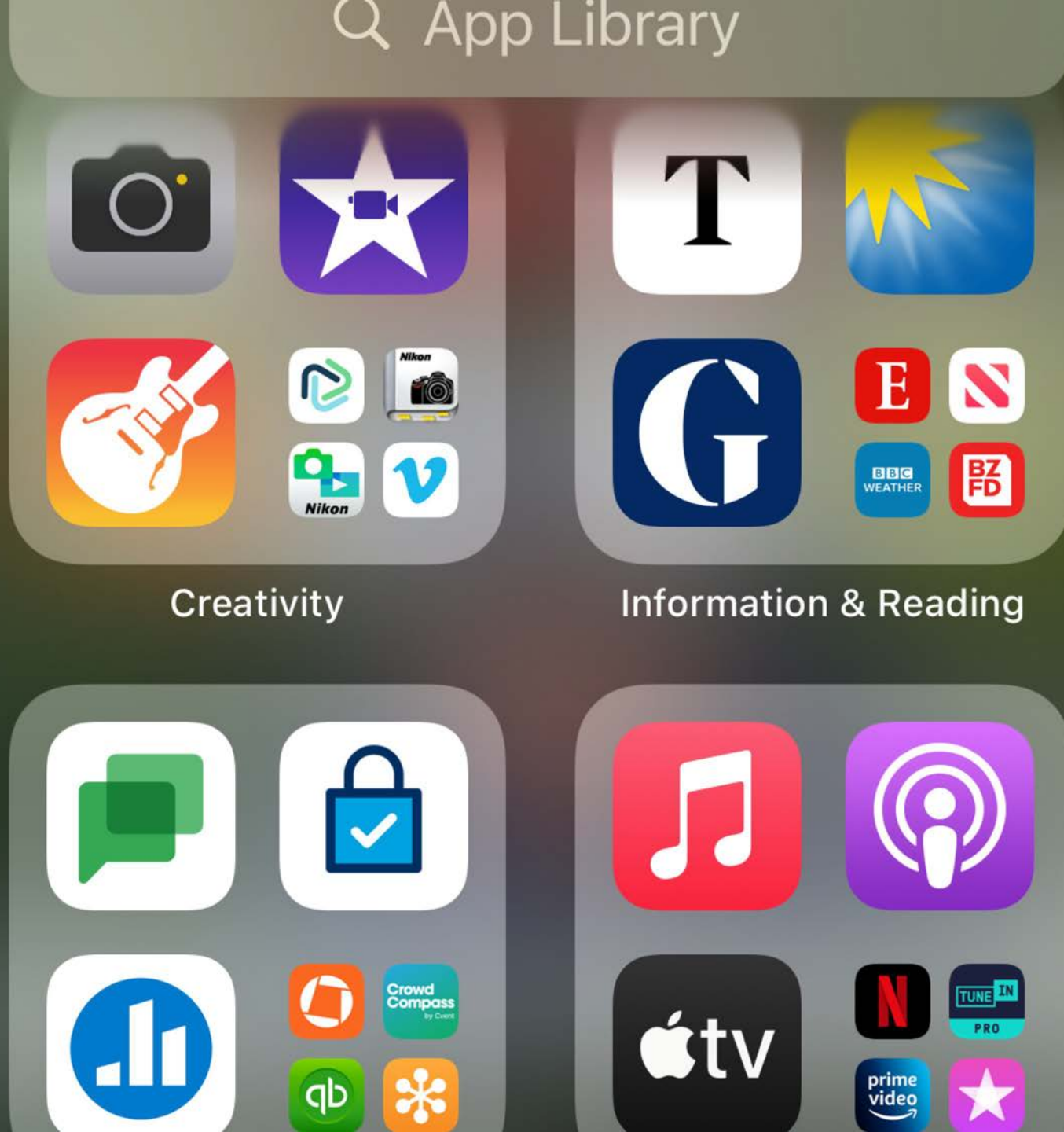
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H1 2021	<b>\$60bn</b>
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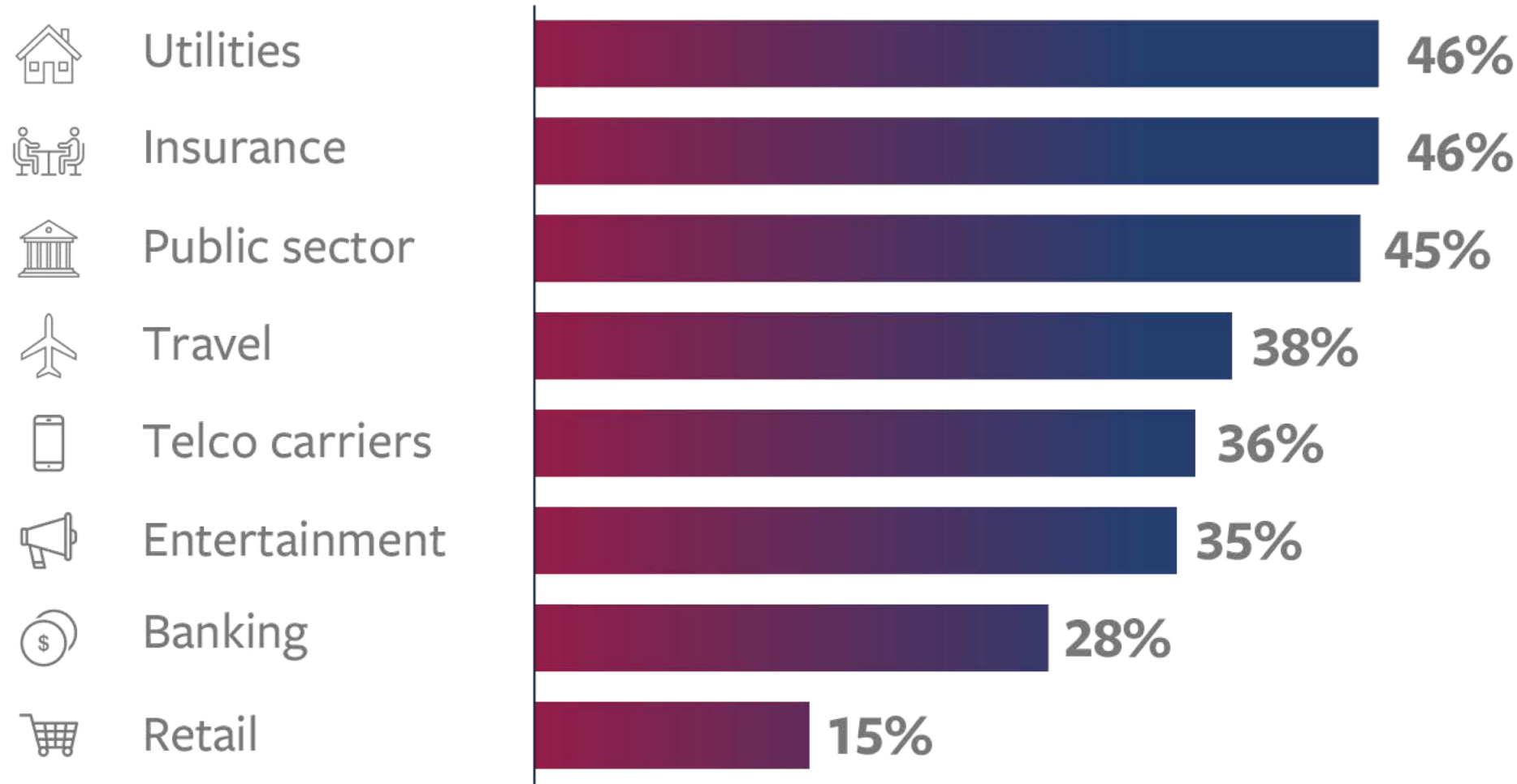
## 2

## Consumers have gone to the cloud

Consumer behaviour changes  
dramatically when tech becomes  
about services, not devices

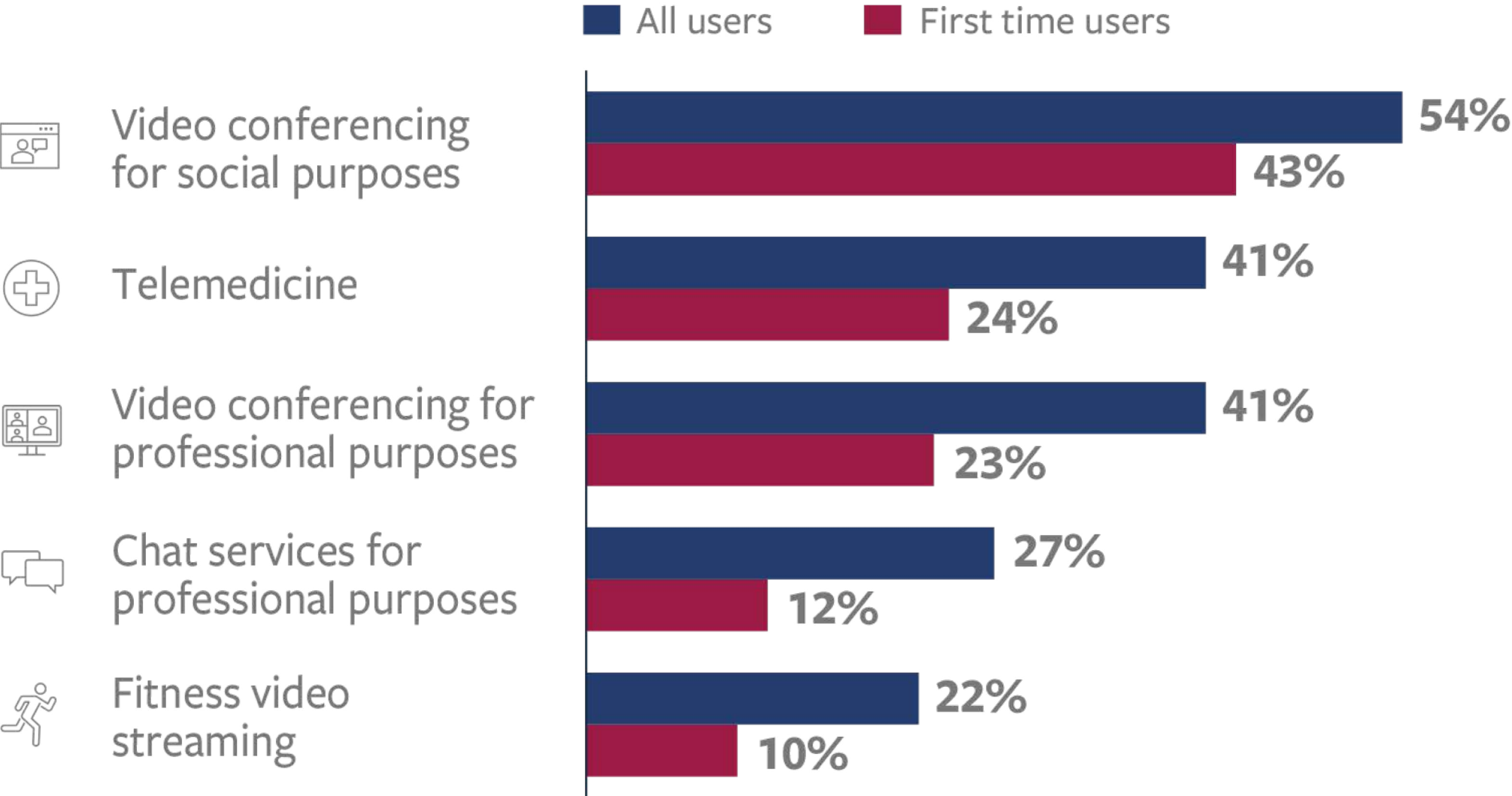


Increase in digital adoption by consumers for selected industries from 2020 to 2021 (US and Europe)

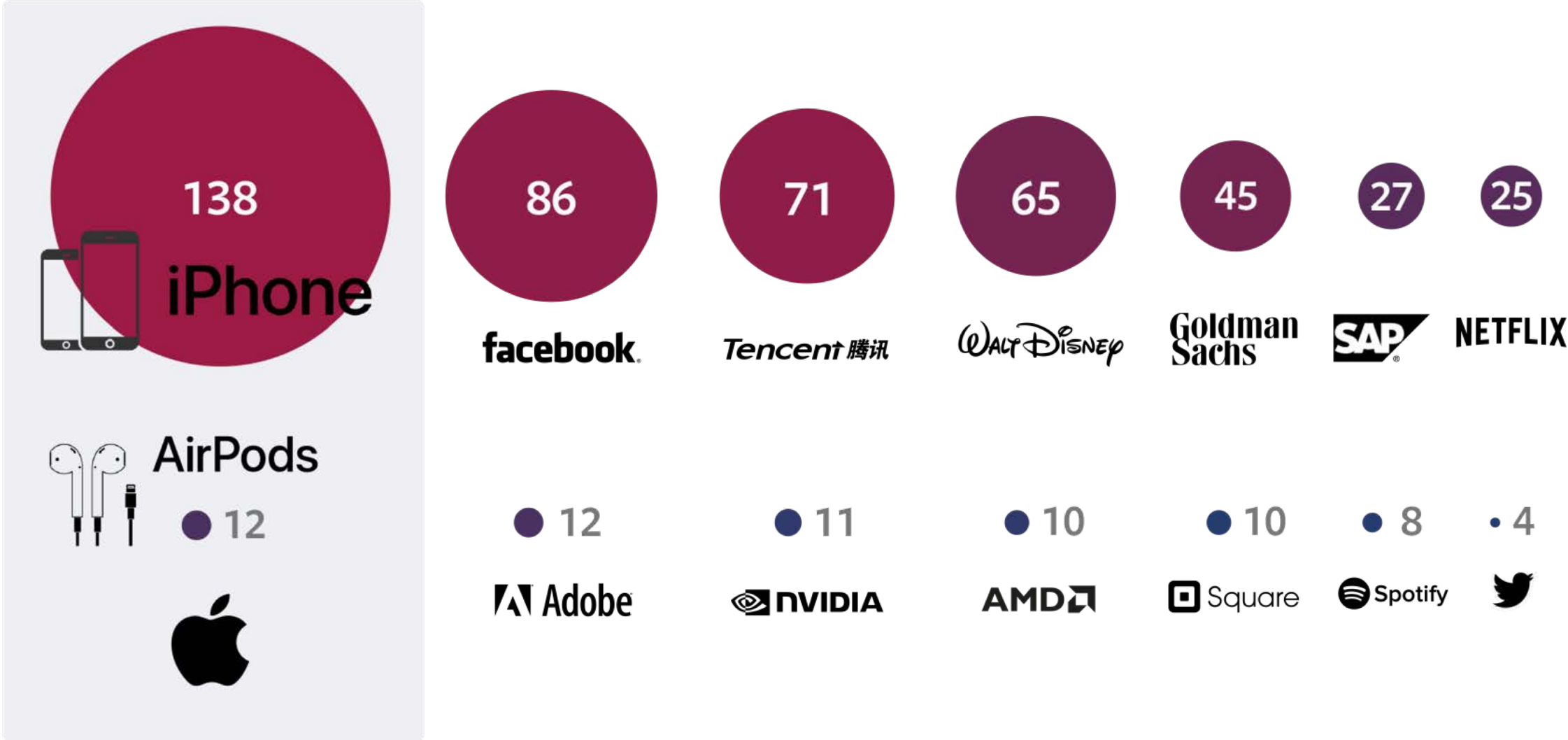




# Share of US adults using selected services in 2021



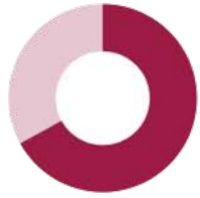
Apple iPhone and AirPods revenue compared to selected companies in billion US\$ in 2020





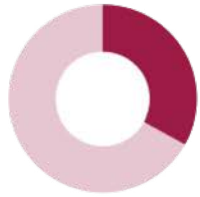
**60%**

of consumers find the process of navigating different streaming services ‘a little’ or ‘very’ frustrating



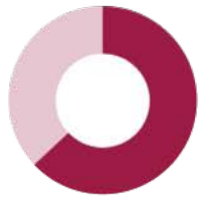
**67%**

regard a cross-service search engine, or aggregator, as a good idea



**33%**

plan to reduce their spend on media and entertainment subscriptions in the year ahead



**63%**

regard streaming subscriptions as too expensive for them to get what they want

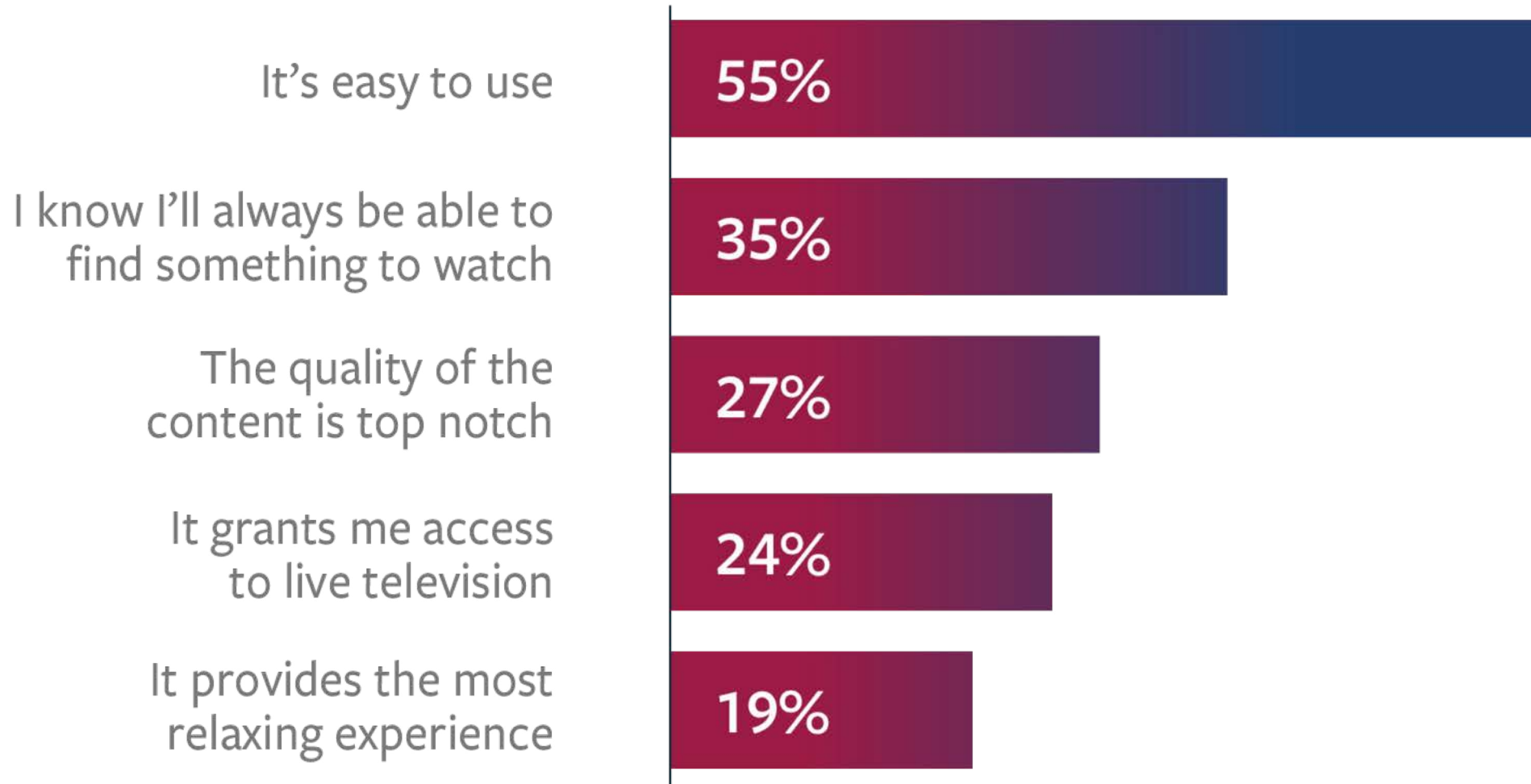


**56%**

would like to be able to take their profile from one service to another to better personalise content



## What factors attract consumers to streaming services?



3

## The virtual has been lost in translation

Hype about the metaverse is  
distracting from the everyday  
revolution in virtual tech

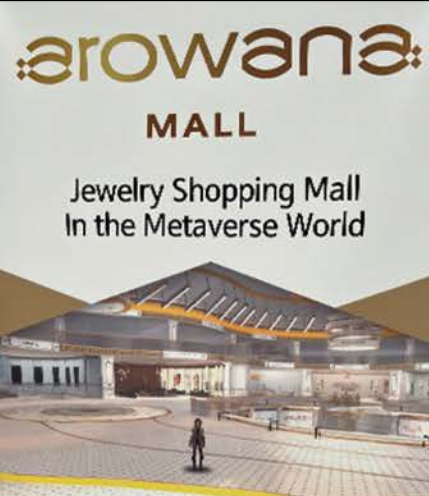




**mytaverse**  
Your world beyond reality

Let Us Open the  
Business Metaverse  
for You!

Ask about Your  
Personalized Avatar



## AI Meets VR

Welcome to the future  
of **AI Experiences**.



Accelerated by **SAMSUNG**

## Metaverse Music

From the music you listen  
to the music you touch & feel and play with

## Metaverse Gesture Recognition Solution

Unique Patented  
Technology with AI Model

Open SDK for 3<sup>rd</sup>  
Party Hardware

Compact and Flexible

Modularized and  
Customizable Design



"Welcome to  
Lotte Metaverse"



# NFTs DONE RIGHT

WHAT IS YOUR NFT STRATEGY?

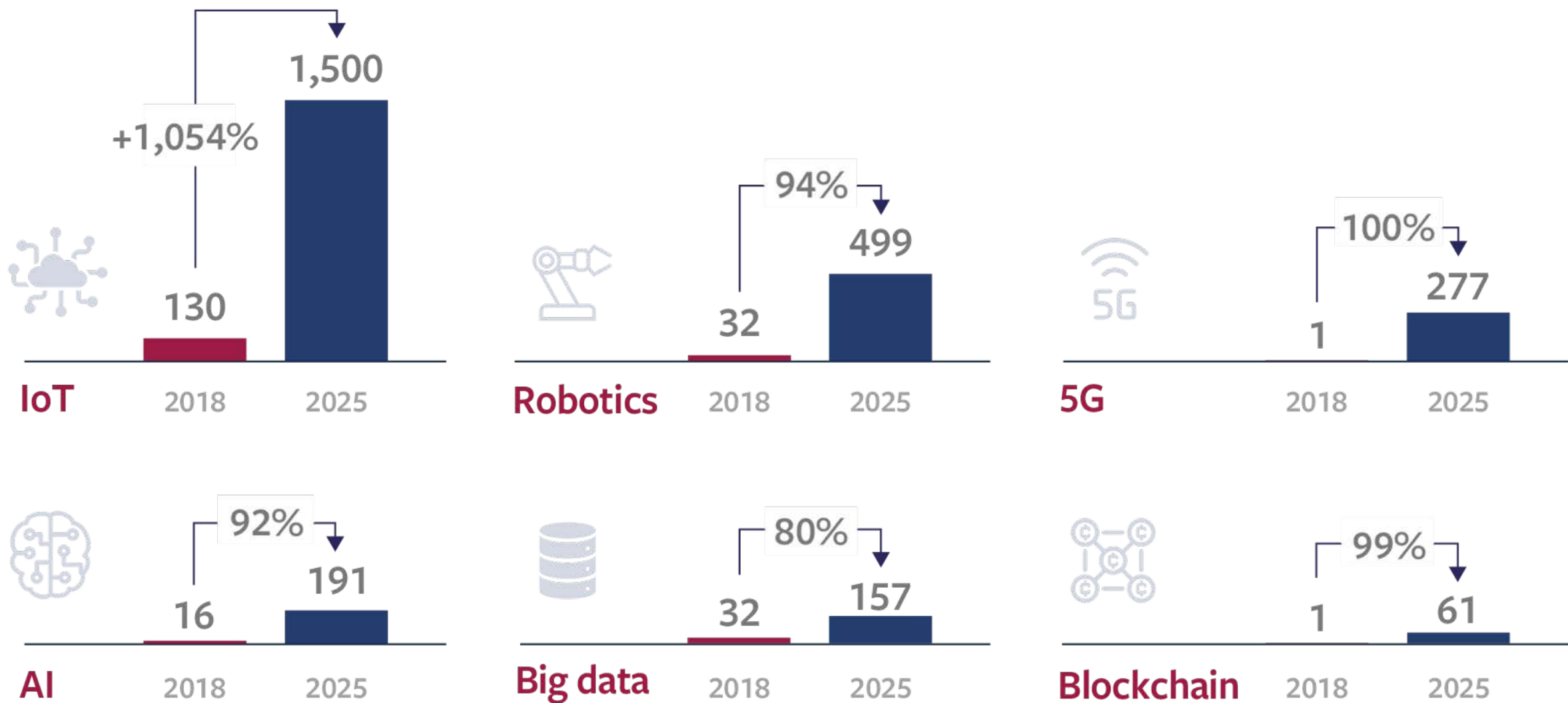




Unparalleled interactive AI HUMAN Solution  
Various Industry Applications and Professions

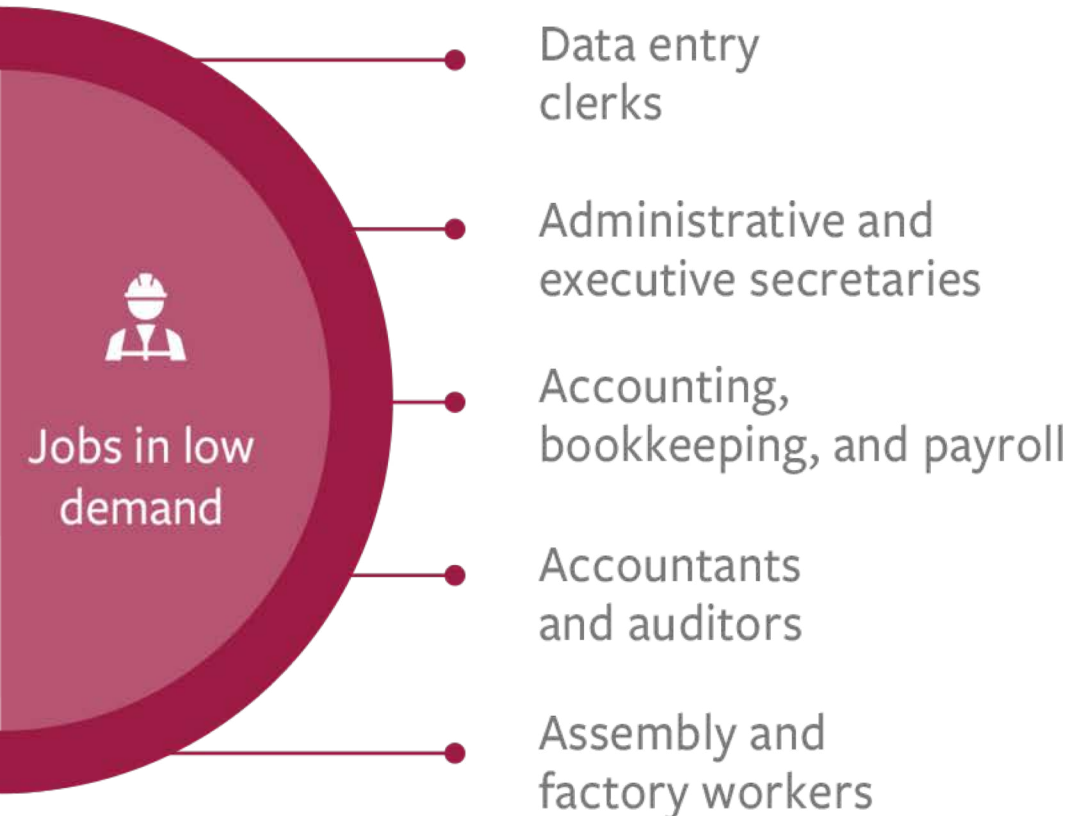
# AI HUMAN

Market size estimations of frontier technologies in billion US\$ and CAGR%

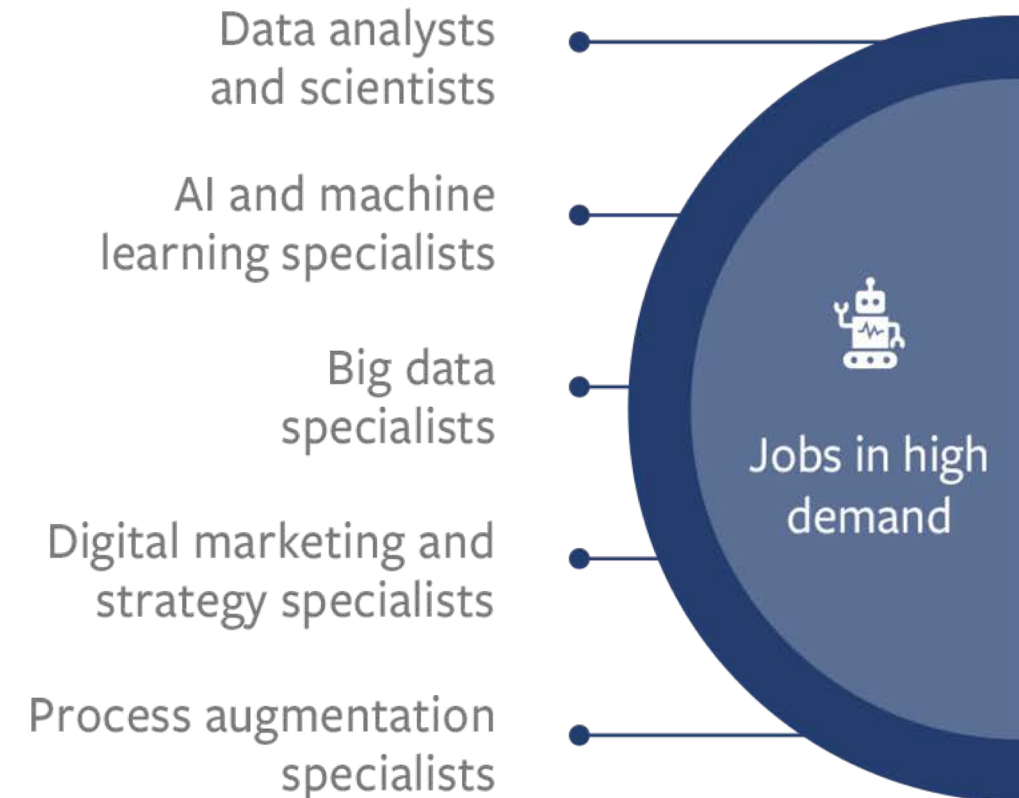


## Top five jobs that are most positively and negatively affected by automation in 2020

85m jobs carried out by humans  
will be done by machines  
between 2020 and 2025



97m jobs will be created  
by machines between  
2020 and 2025





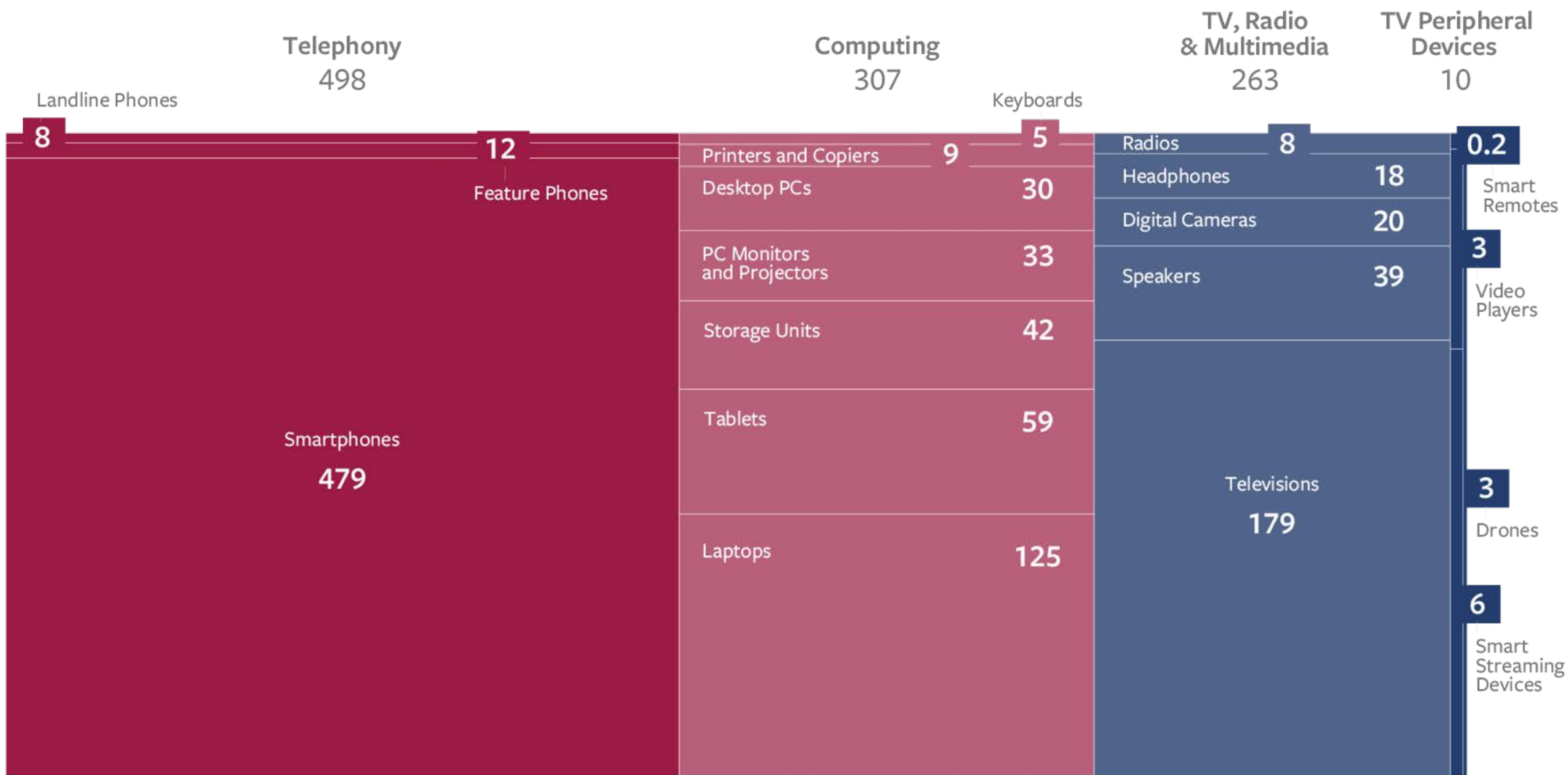
4

## The bigger picture

Screens are getting bigger, better, ubiquitous — and least of all about TV



# Global Consumer Electronics market revenue in billion US\$ in 2020











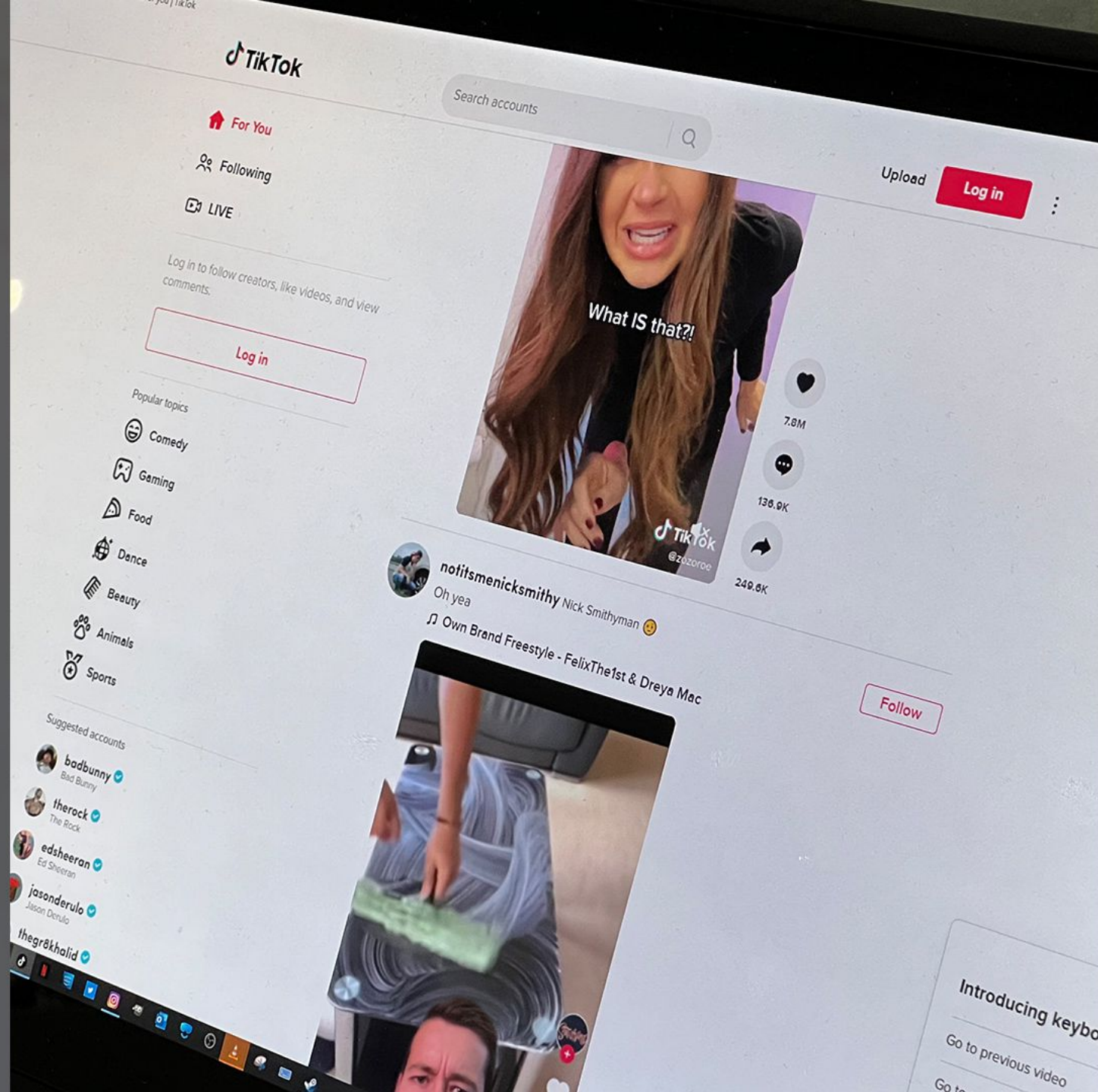


5

## It's all media now

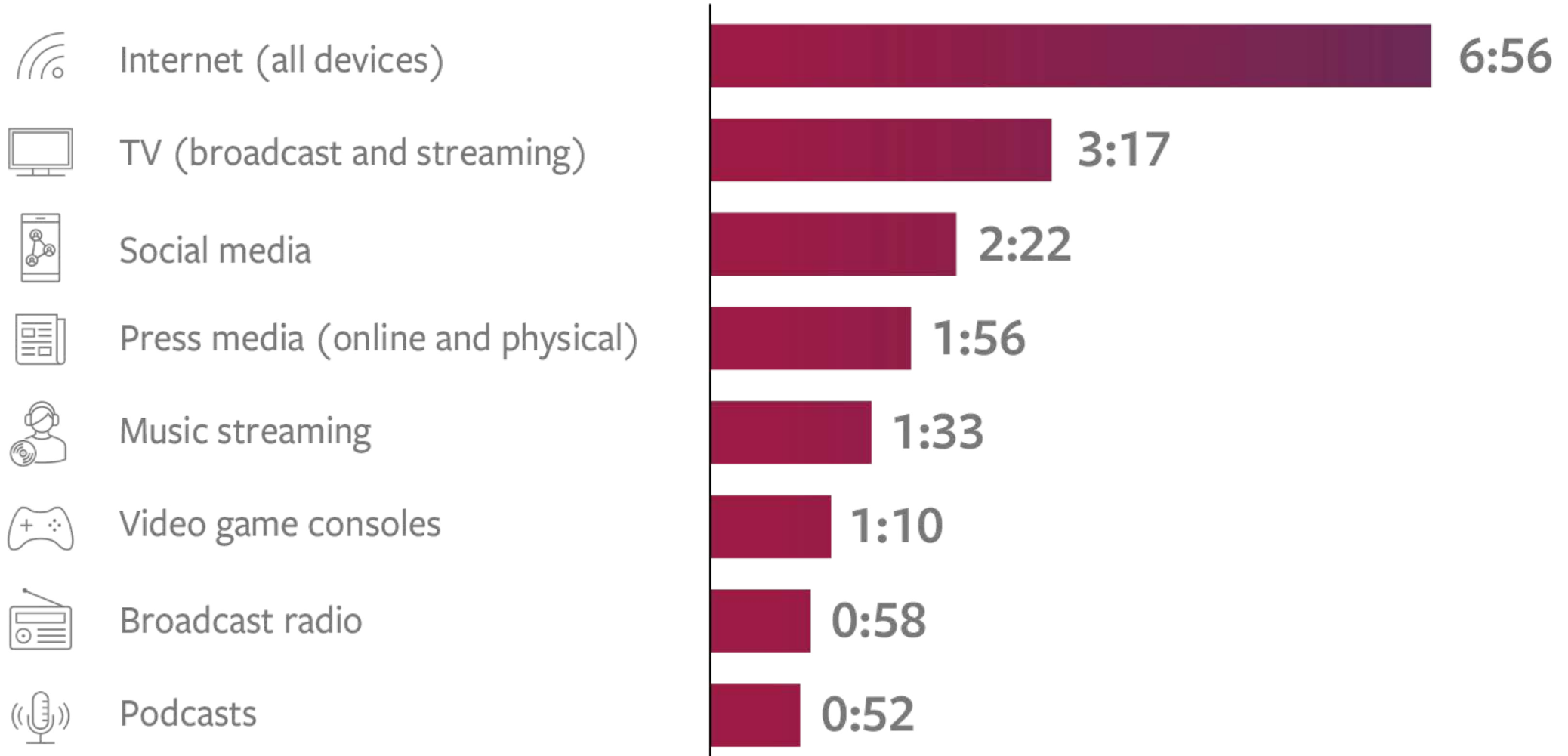
Traditional ideas of  
content no longer define  
the media industry



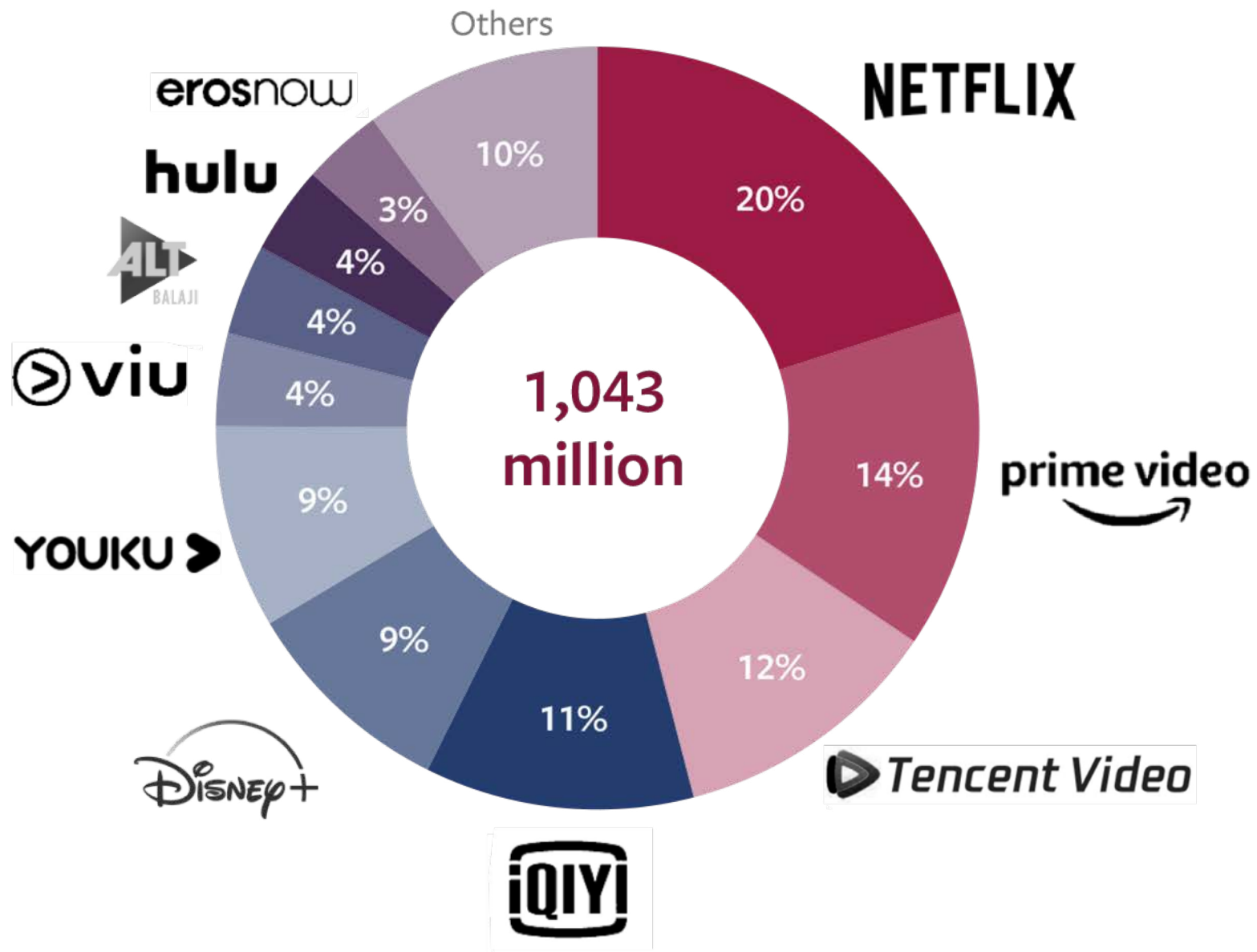




## Average daily amount of time spent (hh:mm) on selected types of media in 2021



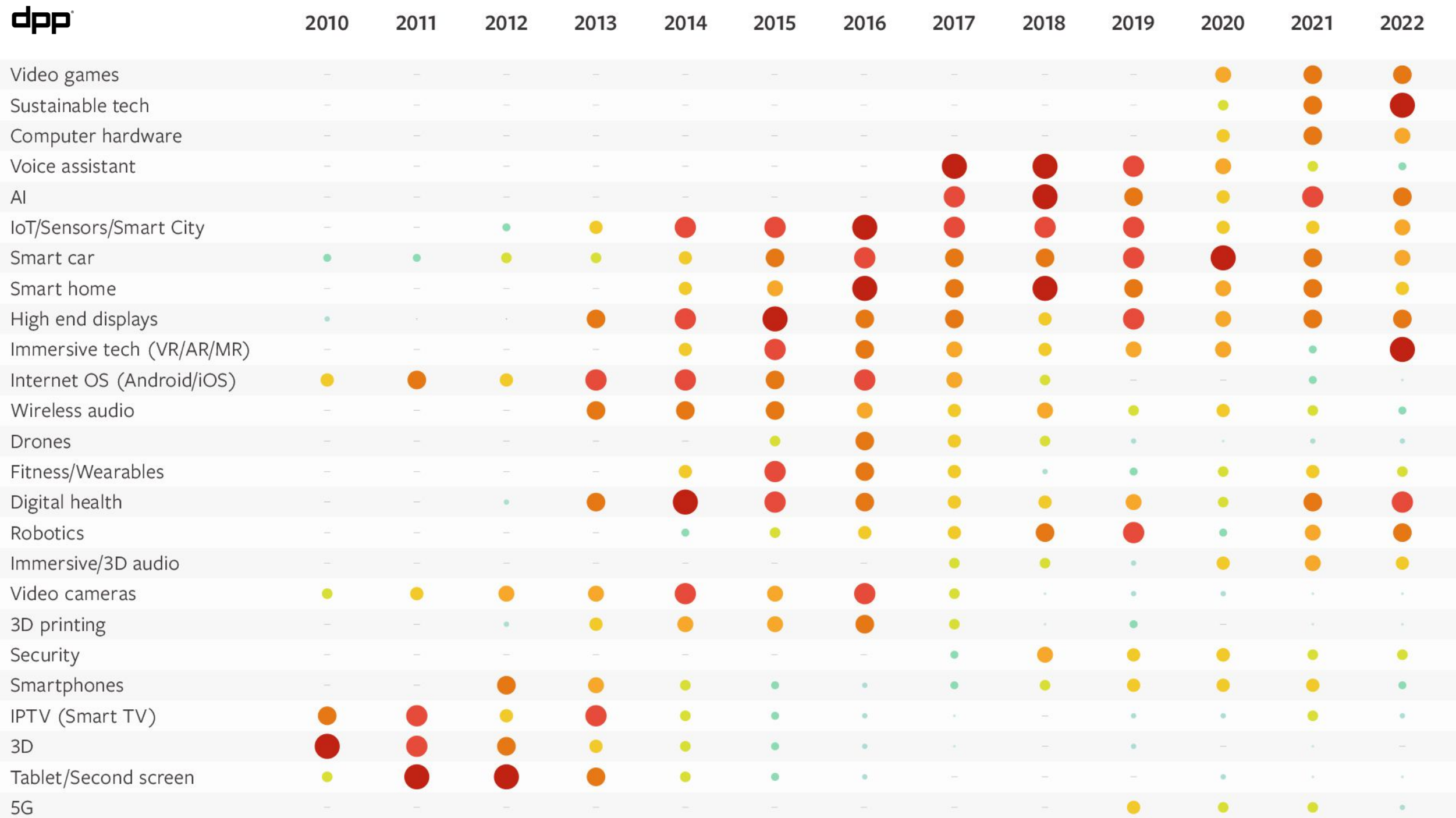
Worldwide paid video streaming subscriptions in Q1 2021





# **The DPP CES Heat Map**





dpp <sup>®</sup>	2010–2013 The TV Years				2014	2015	2016	2017	2018	2019	2020	2021	2022
Video games	–	–	–	–	–	–	–	–	–	–	●	●	●
Sustainable tech	–	–	–	–	–	–	–	–	–	–	●	●	●
Computer hardware	–	–	–	–	–	–	–	–	–	–	●	●	●
Voice assistant	–	–	–	–	–	–	–	●	●	●	●	●	●
AI	–	–	–	–	–	–	–	●	●	●	●	●	●
IoT/Sensors/Smart City	–	–	●	●	●	●	●	●	●	●	●	●	●
Smart car	●	●	●	●	●	●	●	●	●	●	●	●	●
Smart home	–	–	–	–	●	●	●	●	●	●	●	●	●
High end displays	●	–	–	●	●	●	●	●	●	●	●	●	●
Immersive tech (VR/AR/MR)	–	–	–	–	●	●	●	●	●	●	●	●	●
Internet OS (Android/iOS)	●	●	●	●	●	●	●	●	●	–	–	●	–
Wireless audio	–	–	–	●	●	●	●	●	●	●	●	●	●
Drones	–	–	–	–	–	●	●	●	●	●	●	●	●
Fitness/Wearables	–	–	–	–	●	●	●	●	●	●	●	●	●
Digital health	–	–	●	●	●	●	●	●	●	●	●	●	●
Robotics	–	–	–	–	●	●	●	●	●	●	●	●	●
Immersive/3D audio	–	–	–	–	–	–	–	●	●	●	●	●	●
Video cameras	●	●	●	●	●	●	●	●	●	●	●	●	●
3D printing	–	–	●	●	●	●	●	●	●	●	–	–	–
Security	–	–	–	–	–	–	–	●	●	●	●	●	●
Smartphones	–	–	●	●	●	●	●	●	●	●	●	●	●
IPTV (Smart TV)	●	●	●	●	●	●	●	–	–	●	●	●	●
3D	●	●	●	●	●	●	●	–	–	●	–	–	–
Tablet/Second screen	●	●	●	●	●	●	●	–	–	–	●	–	–
5G	–	–	–	–	–	–	–	–	–	●	●	●	●

dpp <sup>®</sup>	2010–2013 The TV Years				2014–2016 The IoT Years			2017	2018	2019	2020	2021	2022
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Tablet/Second screen	●	●	●	●	●	●	●	–	–	–	●	–	–
5G	–	–	–	–	–	–	–	–	–	●	●	●	●

dpp®	2010–2013 The TV Years				2014–2016 The IoT Years			2017–2019 The AI Years			2020–2022 The Service Years		
Video games	–	–	–	–	–	–	–	–	–	–	●	●	●
Sustainable tech	–	–	–	–	–	–	–	–	–	–	●	●	●
Computer hardware	–	–	–	–	–	–	–	–	–	–	●	●	●
Voice assistant	–	–	–	–	–	–	–	●	●	●	●	●	●
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