



# DIGITAL ECONOMY COMPASS 2018

Digital technologies simplify our lives and open doors to unprecedented business opportunities. Innovative companies disrupt traditional industries and challenge their incumbents. This transformative power involves both opportunities and risks – for all of us. Regardless of whether we are eager or reluctant: We have to keep pace, otherwise we will be left behind.

For the second time now, Statista has compiled the most relevant and recent data on the entire digital economy – a comprehensive overview of one of the hottest topics of our time. Since accurate data is a critical factor to decision-making processes in business, we have gathered a set of stunning facts, which are meant to inform and also to entertain.

For the first time, our 2018 version features data from the biggest market research project Statista has ever conducted: The Global Consumer Survey. These insights clarify to what extent people love, adopt, or avoid the digital world.

The Digital Economy Compass presents facts about what we consider the industries' most relevant topics and trends at the moment.

In the first part, we cover global trends: Is voice control going to replace smartphones and touch-controlled

devices? How do digital giants like Google, Amazon or Tencent actually make money? What role does social media play? How can vertical platforms form new markets? – to mention only a few of our key issues.

The second part covers all relevant digital markets, their sizes, and business models.

The result of our research is more than 200 slides on the global digital economy. In addition, we also provide a printer-friendly version of our slide deck.

We are convinced that you will enjoy reading our Digital Economy Compass.

Download your printer-friendly version here:

[www.statista.io/decprinter](http://www.statista.io/decprinter)

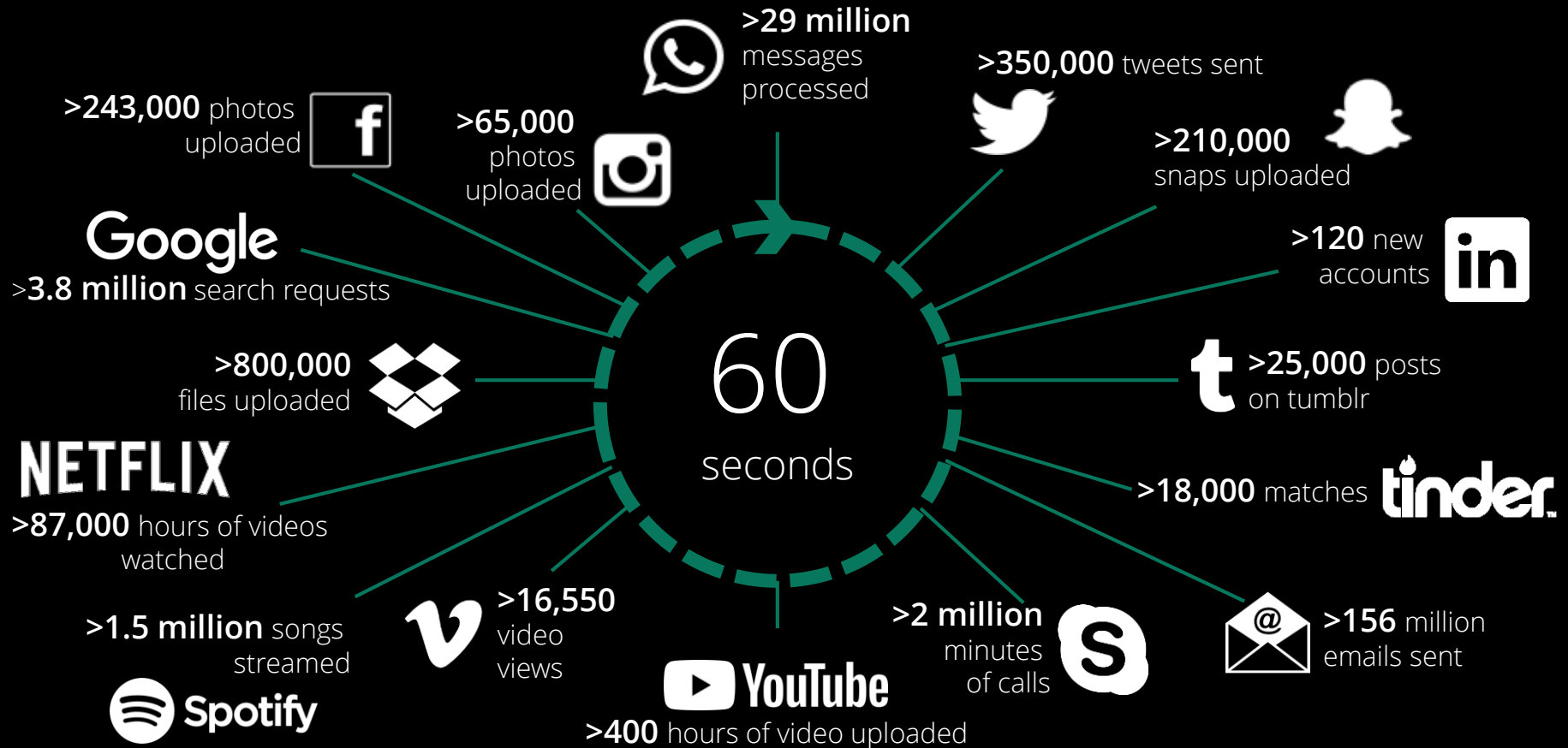


A handwritten signature in black ink, which appears to read "Dr. Friedrich Schwandt". The signature is fluid and cursive.

Dr. Friedrich Schwandt (CEO)

# So much happened in our digitalized world in 2017 – and we have the numbers behind it

Things that happened online in 2017 within 60 seconds



# Table of Contents: Global Trends

## Part 1

- › **Hardware:** Smartphones are the present but the future is beyond touch..... 6
- › **Social Media:** Users, influencers and advertisers are keen on one rising star..... 23
- › **The 3-Trillion-Dollar Quintet:** U.S. tech leaders by their stunning numbers..... 41
- › **Vertical Platforms:** Everything that can become a platform, will become a platform..... 82
- › **Digital China:** Two players do it all – explaining Chinese “Everything Companies” ..... 110



# Table of Contents: Statista's Digital Market Outlook

Part 2 – exclusive Statista content

› eCommerce .....	129
› eServices .....	146
› eTravel .....	159
› Digital Media .....	169
› FinTech .....	178
› Digital Advertising .....	189
› Smart Home .....	199
› Connected Car .....	208

## Global Trend

# Hardware

Smartphones are the present but the future is beyond touch

In 2017, more than 3.5 billion people were connected to the internet – thanks to mobile devices. However, the stunning rise of smartphones is coming to an end. The number of shipments remained practically unchanged between 2016 and 2017: 1,472 billion vs. 1,473 billion.

Most devices were sold in China, which accounted for about one in three smartphone purchases. As the Chinese market has constantly been growing over the past years, incumbent manufacturers like Samsung and Apple face a huge threat: Chinese producers, who are rapidly expanding their share in the home market. The top 4 vendors (Xiaomi, Oppo, Vivo and Huawei) together accounted for 67% of the domestic

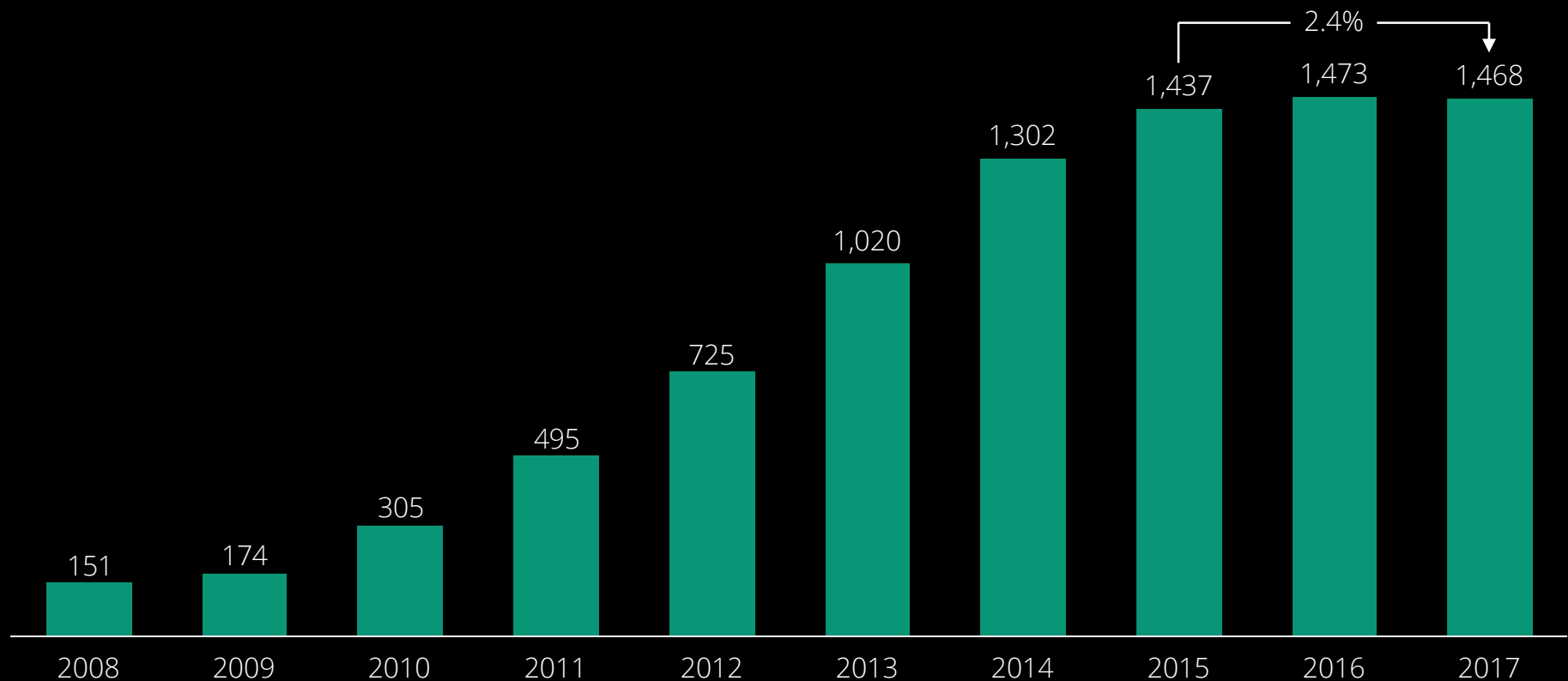
smartphone market in Q4, 2017.

Next to smartphones, more and more other mobile devices are equipped with a permanent internet connection, like smartwatches or fitness trackers. When integrated with a smartphone, a complete ecosystem emerges, which makes it possible to be online at all times.

Manufacturers have already found the next big hit in the hardware market, which goes one step beyond touch control: smart speakers. Although the market is still small, customers are eager for these new devices, and mass market adoption is only a matter of time.

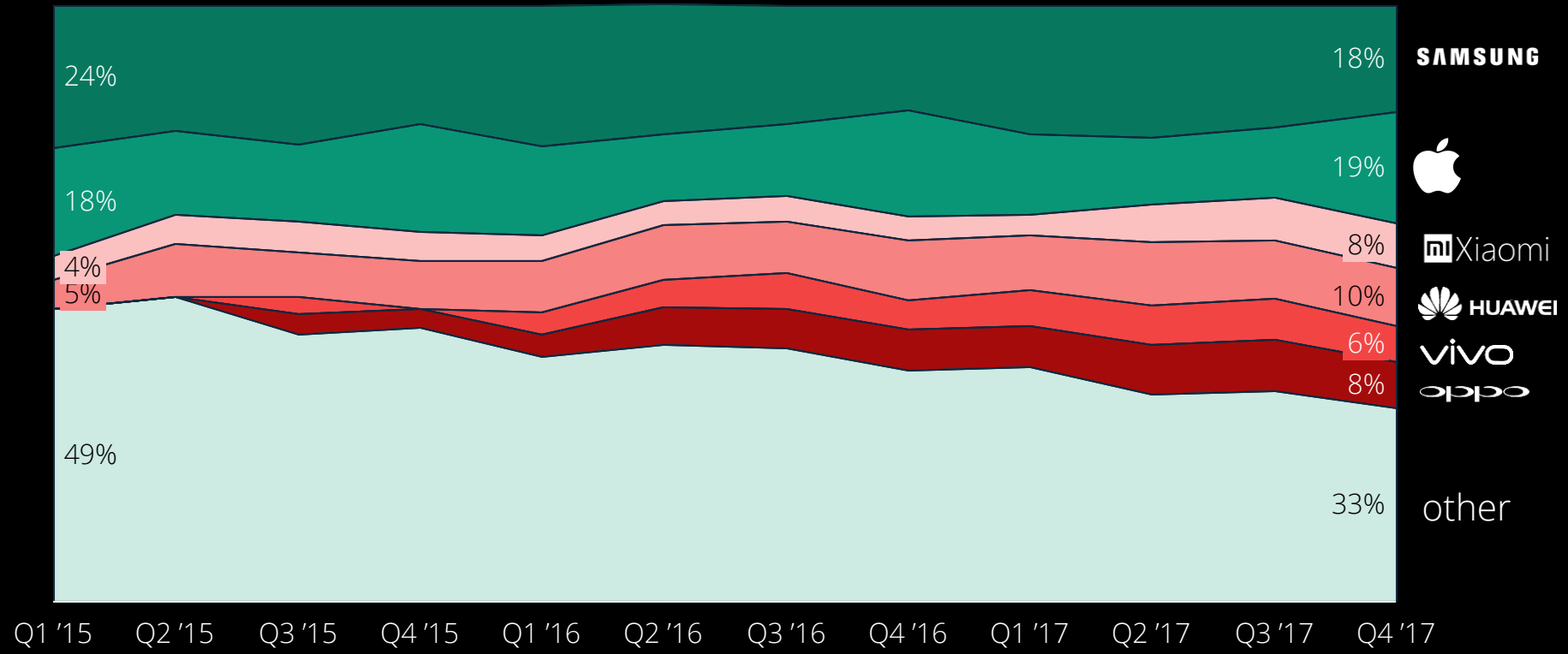
# Smartphone sales plateaued at around 1.4bn units

Global smartphone shipments in million units



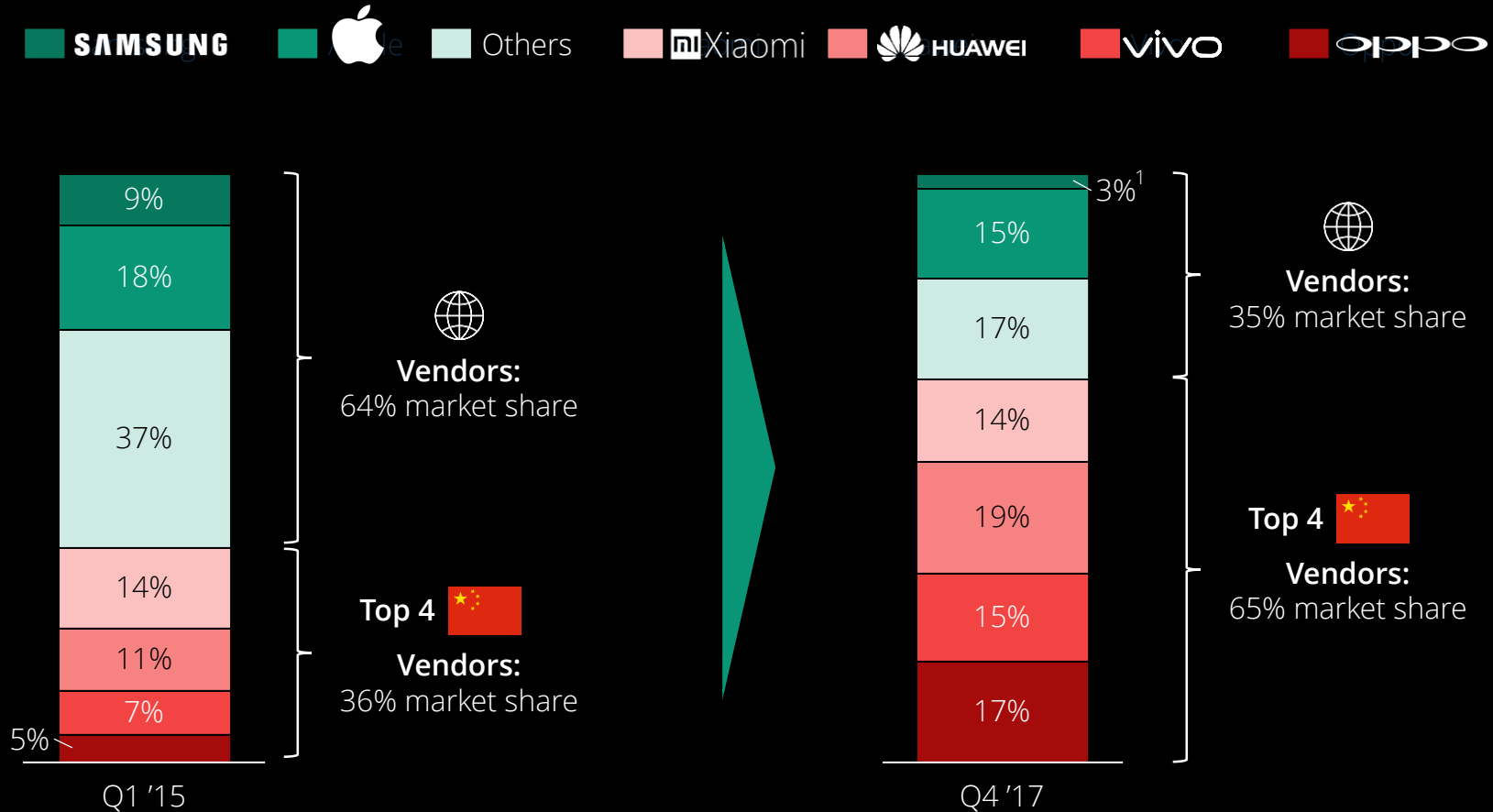
# Apple & Samsung stay the biggest smartphone manufacturers – but Samsung has lost 25% of its share

Share of global smartphone shipments



# In China, domestic vendors have already taken over and account for 65% of smartphone shipments

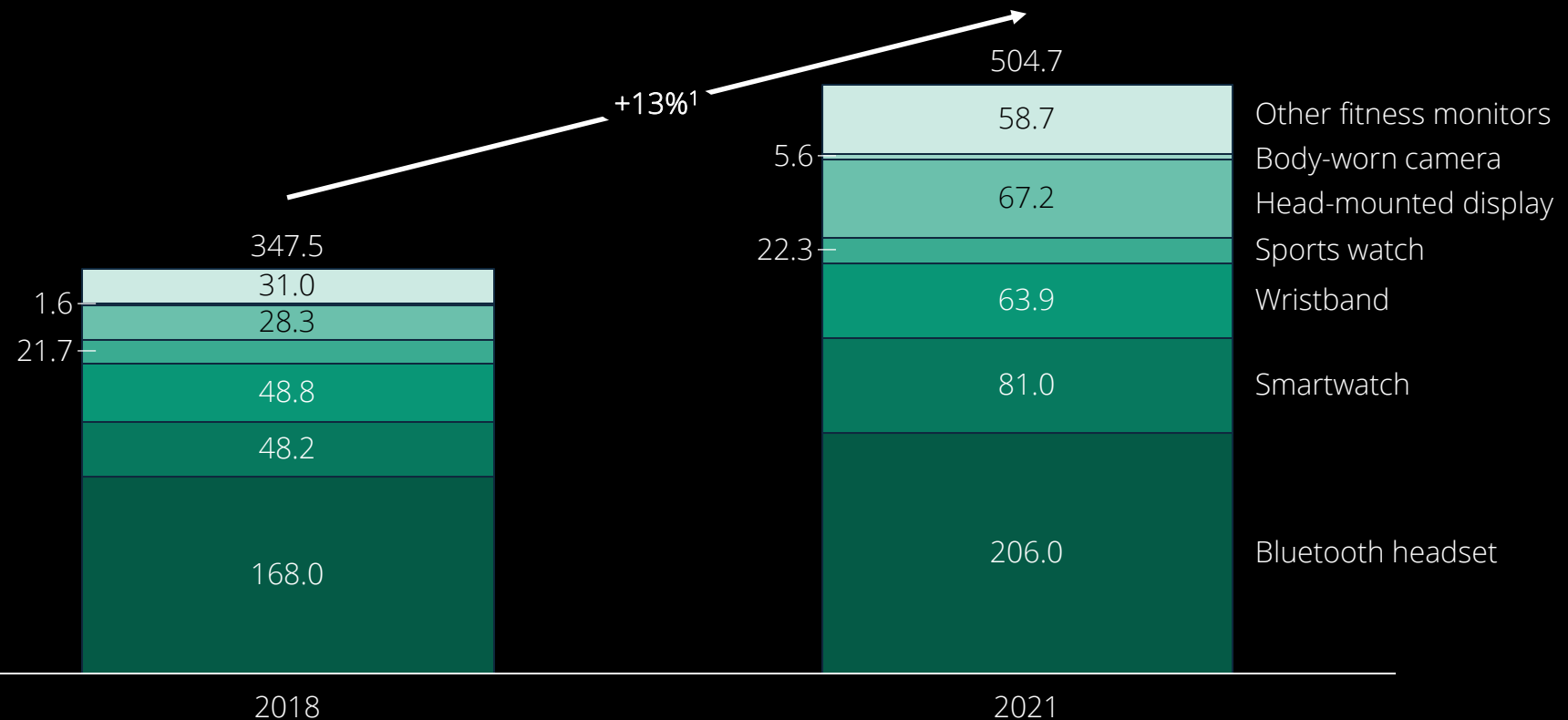
Share of smartphone shipments in China



1: Statista estimates for 4Q '17 are based on prior years  
 Note: Numbers may not add up to 100% due to rounding  
 Source: Counterpoint Research

# While smartphone sales stagnate, wearables sales are expected to grow by 13% annually<sup>1</sup>

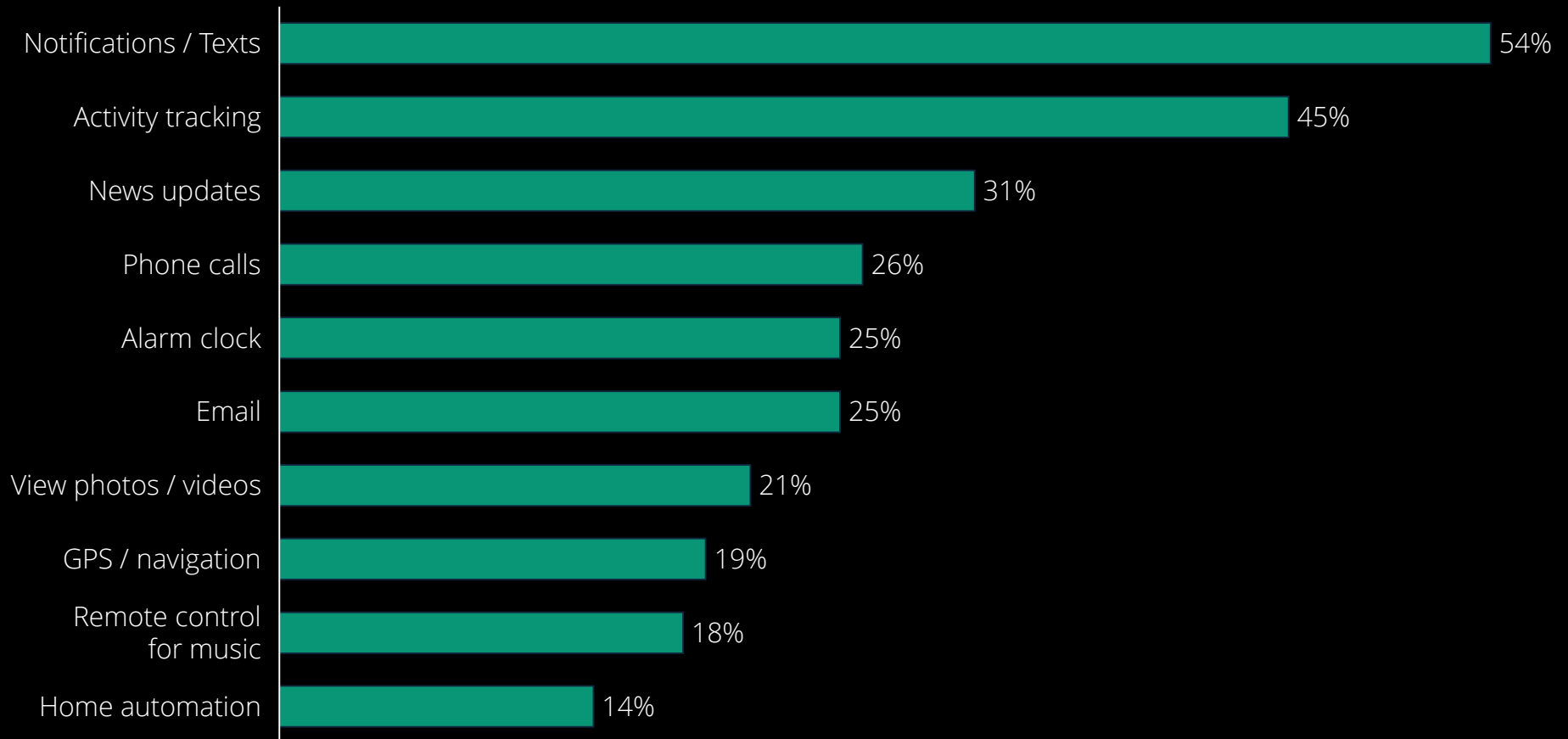
Forecast of global wearables sales in million devices



1: CAGR: Compound Annual Growth Rate / average growth rate per year

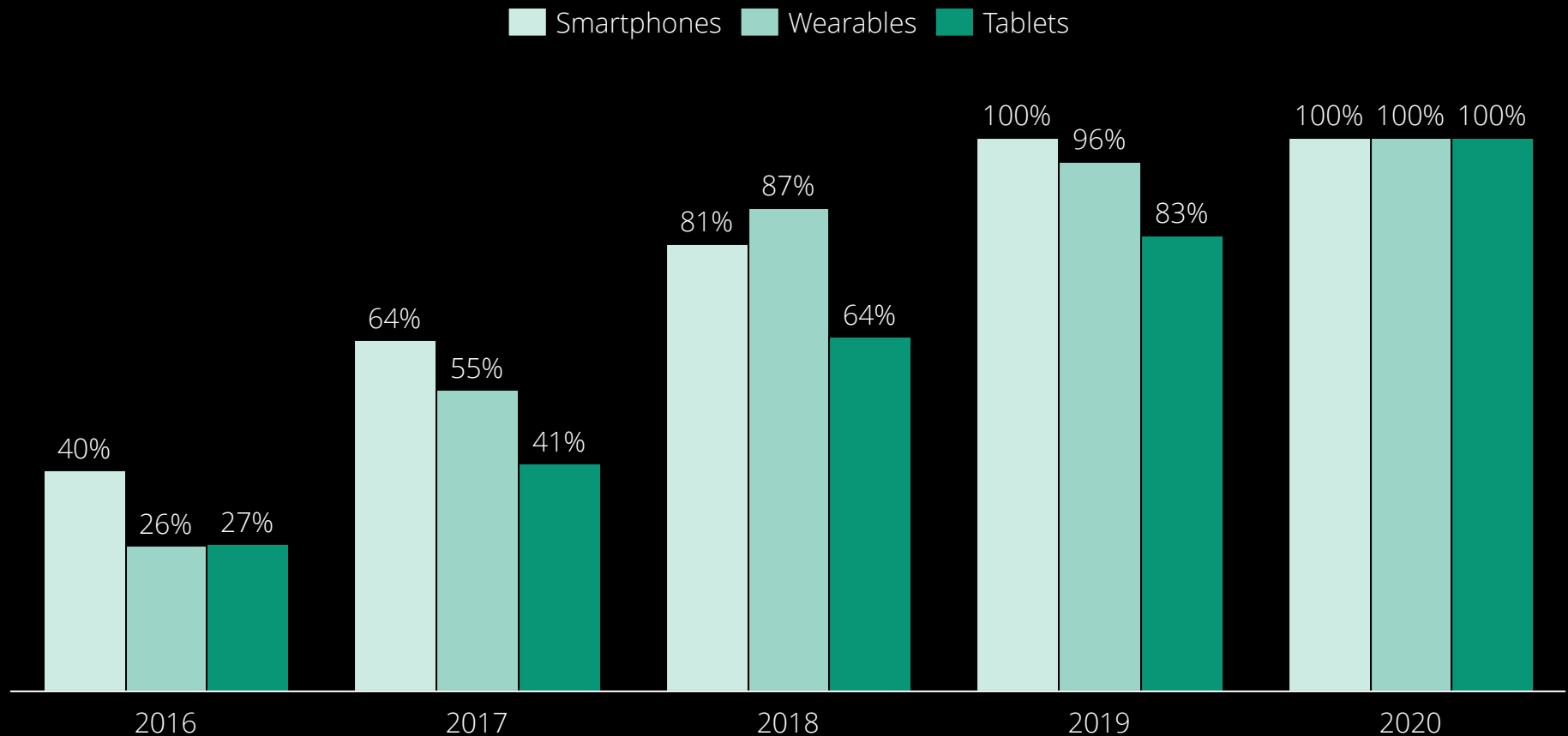
# Wrist notifications and activity tracking are the most relevant smartwatch use cases

Smartwatch owners that use the following functions daily



# By 2020 all mobile devices are expected to contain biometric technology<sup>1</sup>

Forecast share of devices sold worldwide with biometric technology<sup>1</sup>



<sup>1</sup>: Sensors that measure body data, e.g. fingerprint scan, facial recognition





“ [...] We believe voice is the most natural user interface and can really improve the way people interact with technology.

**Dawn Brun**  
*Public relations Senior Manager at Amazon*

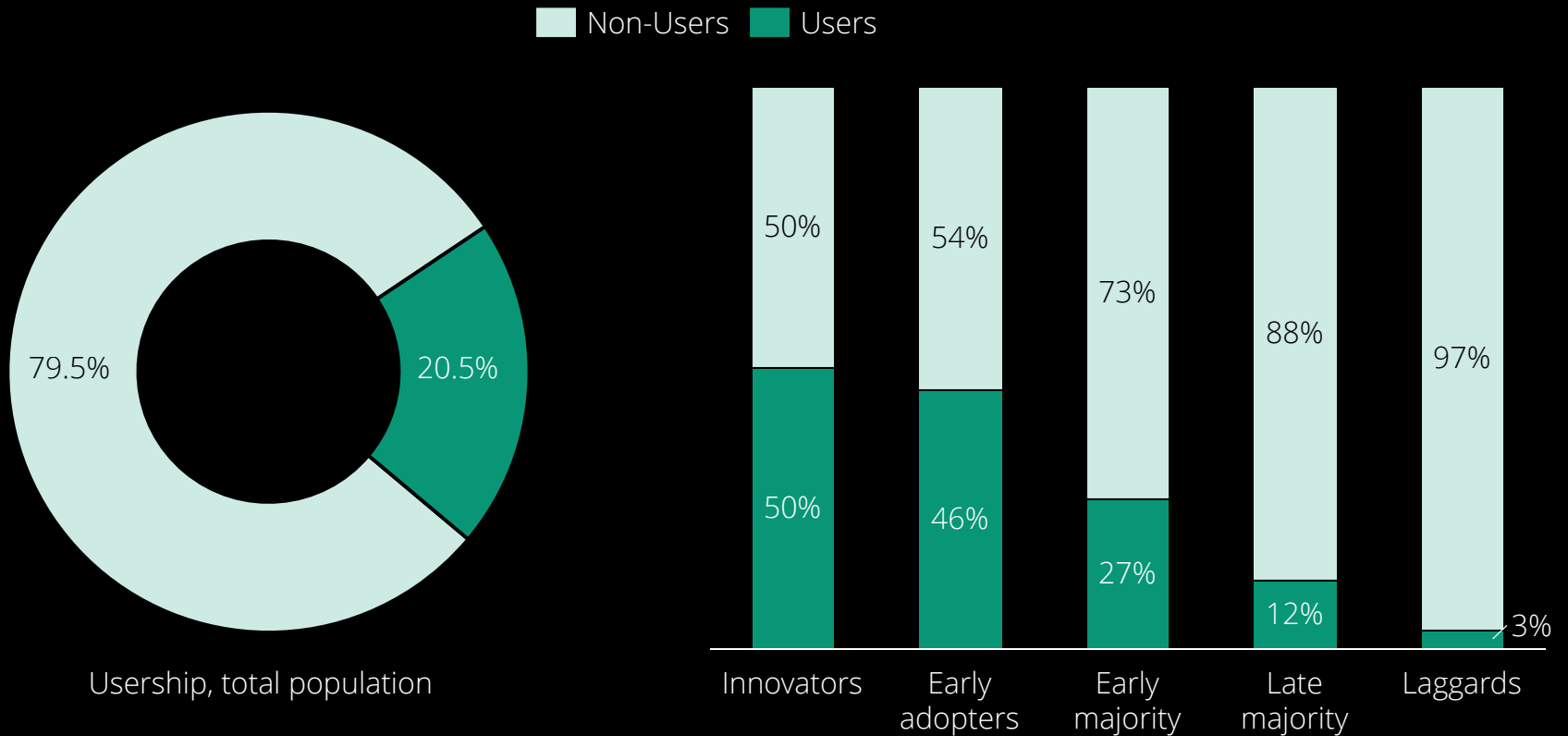
# 20% already use smart speakers in the U.S.

Usership and adoption of smart speakers in the U.S.



Usership of smart speakers

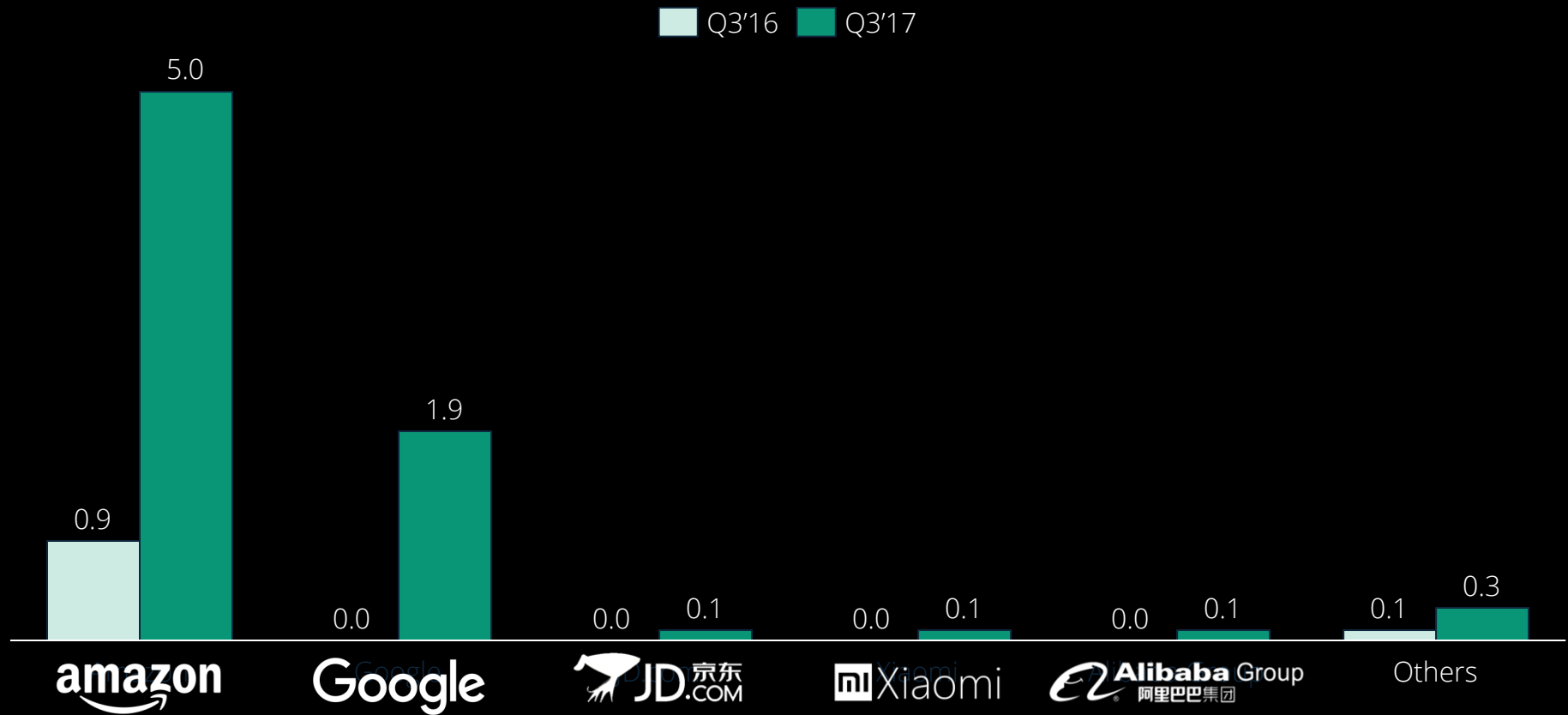
Split by innovator adoption type<sup>1</sup>



14 "Do you own Smart Home devices – i.e. devices that you can control via a smartphone / an internet connection?"; Multiple response; n= 2,027  
 1: Respondents were categorized by the five innovator adoption types based on self-assessment in the Global Consumer Survey  
 Source: Statista Global Consumer Survey 2018

# Google is the only considerable competitor for top dog Amazon

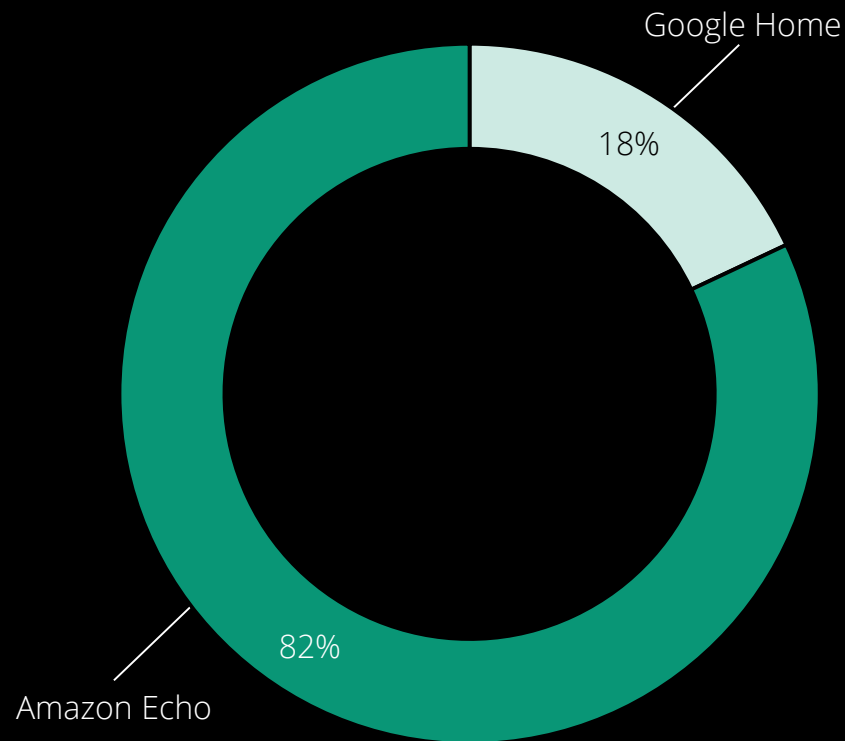
Global smart speaker shipments in million devices



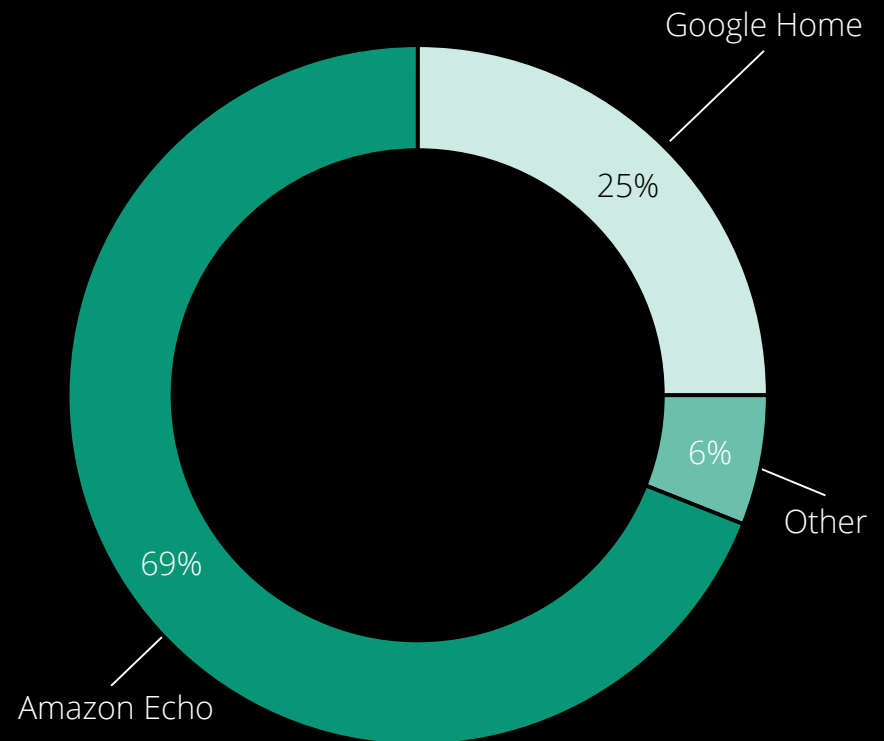
# Google is eating away at Amazon Echo's monopoly and has already reached a market share of 25%

U.S. Smart Speaker market shares

U.S. Smart Speaker market share in Jun '17

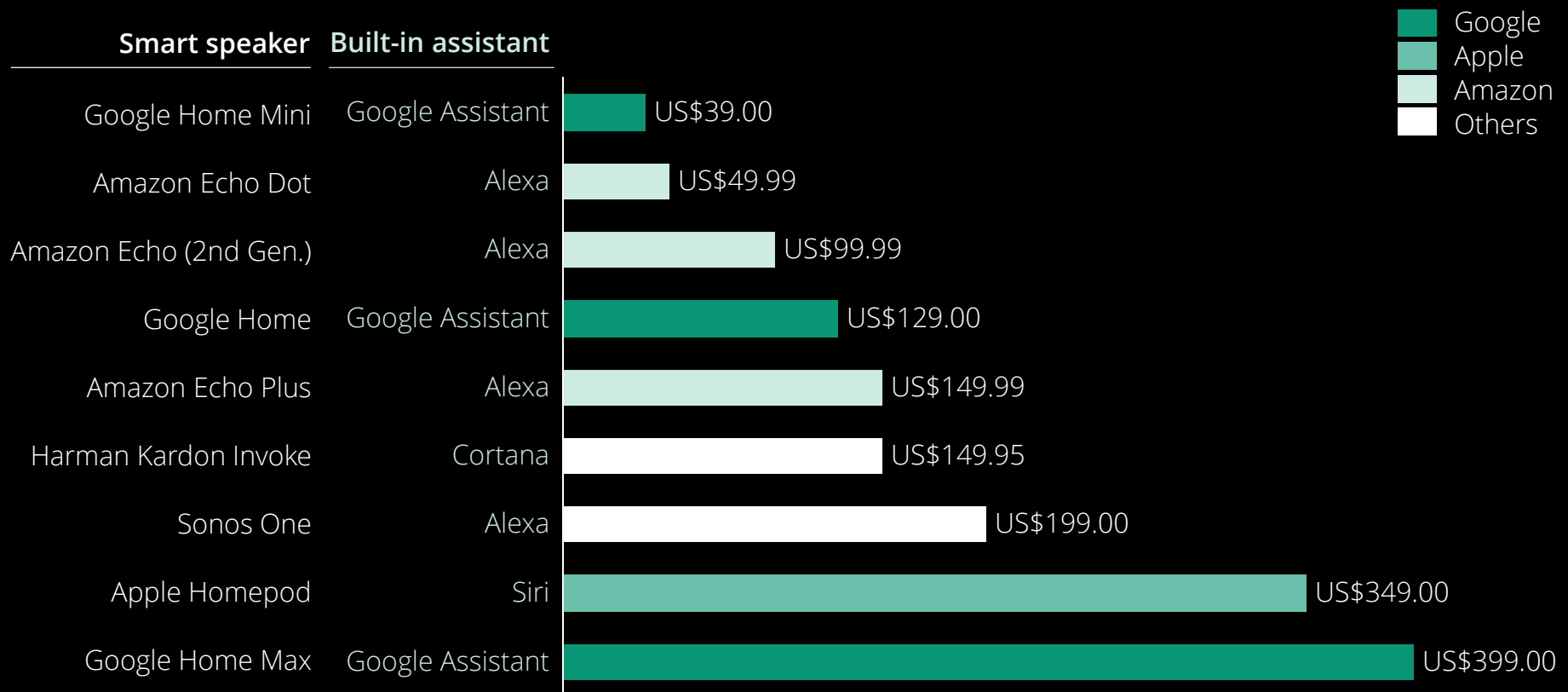


U.S. Smart Speaker market share in Dec '17



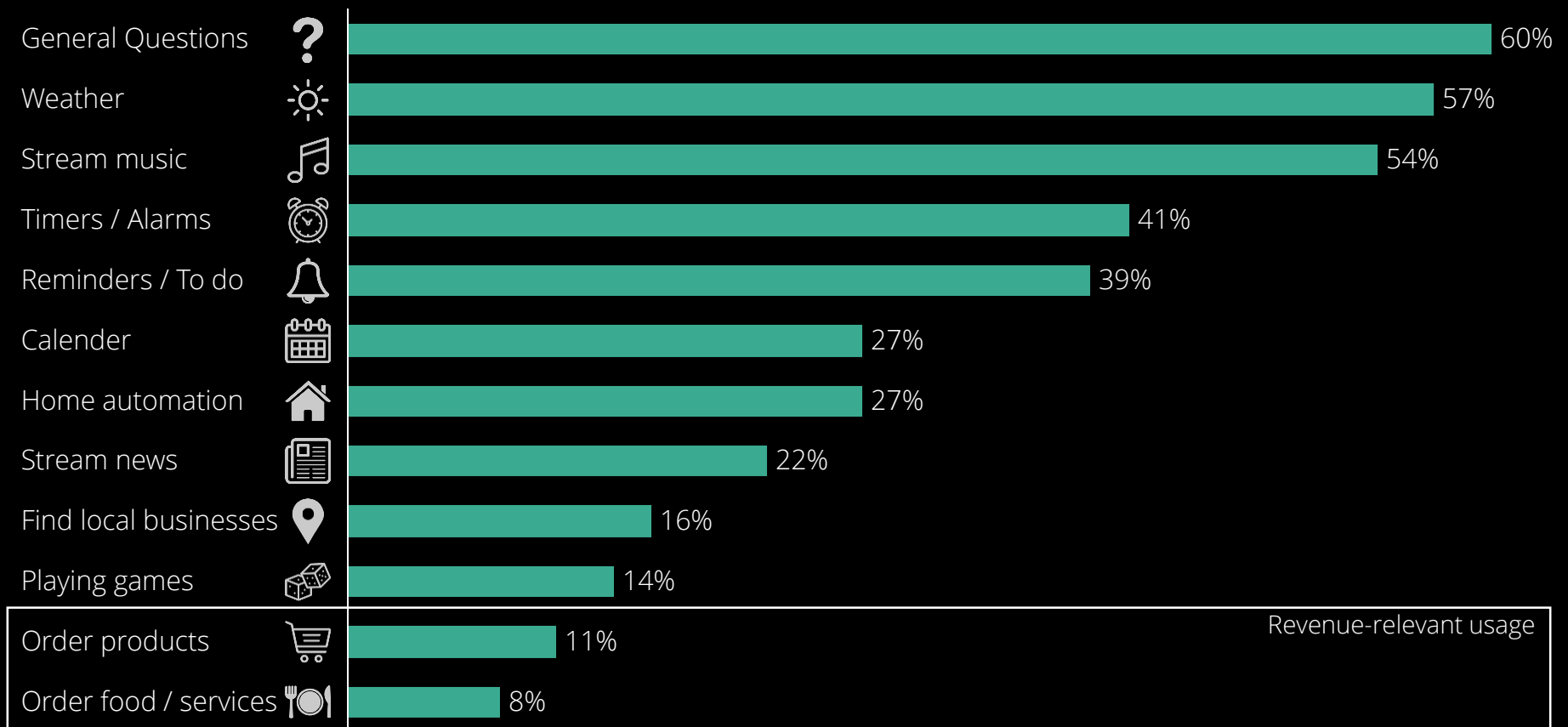
# Product prices for smart speakers range from US\$39 to US\$399

U.S. retail prices of selected voice-enabled smart speakers



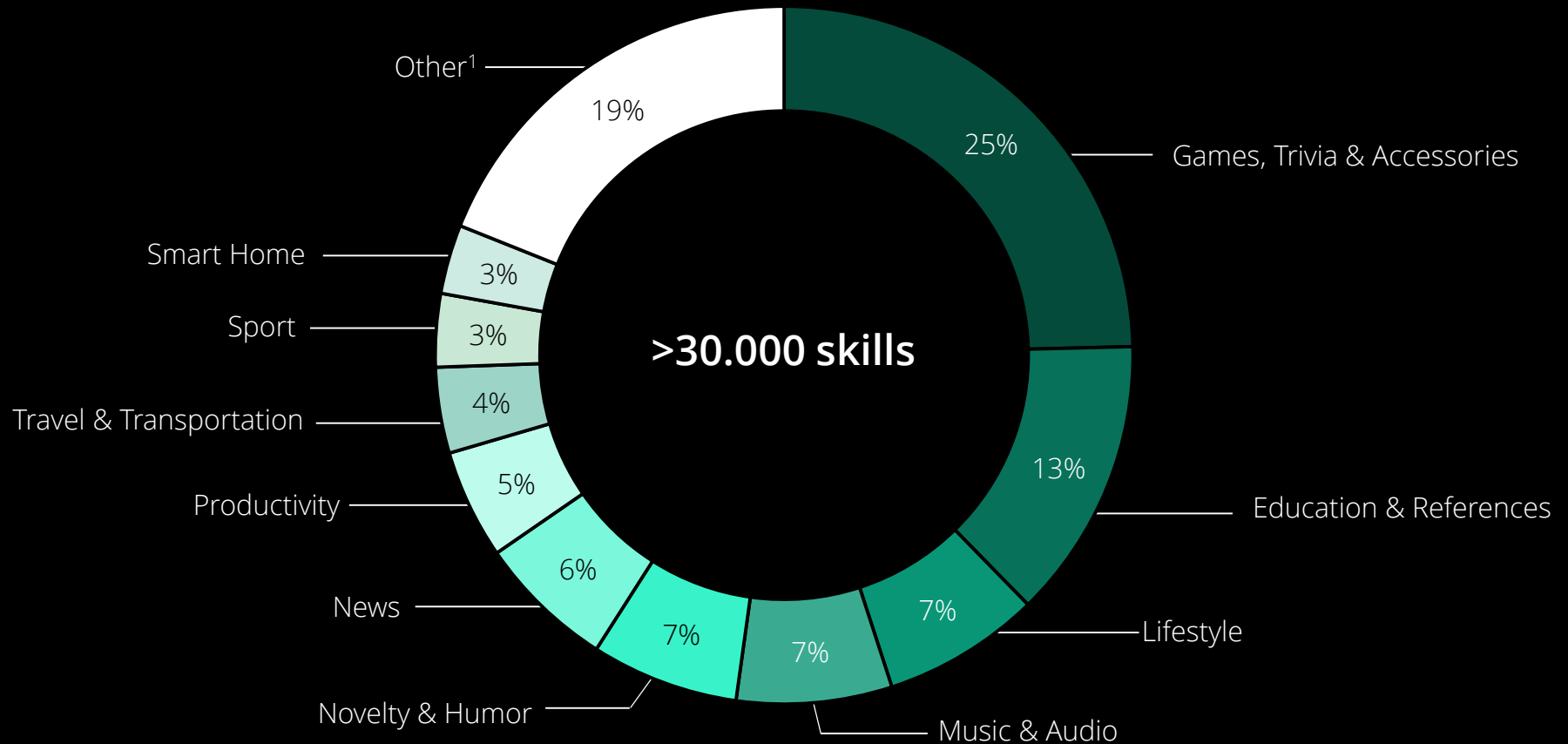
# Smart speakers do not primarily serve as direct sales channels – yet

Smart speaker owners in the U.S. who use the device to do the following



# Amazon's Alexa has more than 30,000 skills, many focusing on games and education

Share of Amazon Alexa skills



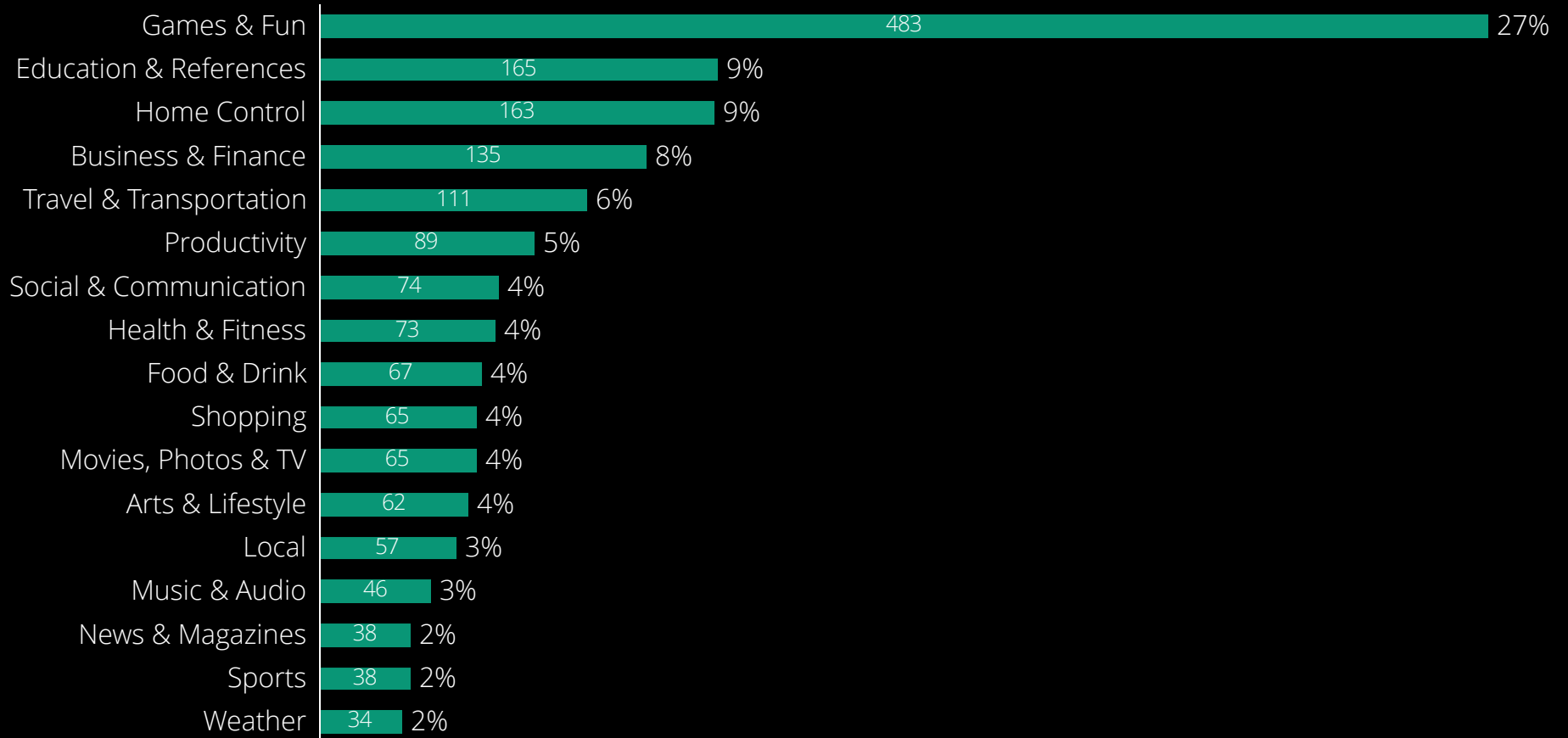
1: Other includes: Health & Fitness, Local, Food & Drink, Business & Finance, Utilities, Movies & TV, Weather, Social, Shopping, Communication, Connected Car, Home Services

Based on data from February 2018

Source: Amazon, Statista Estimates

# 27% of Google assistant apps focus on Games & Fun

Number of Google Assistant apps by category



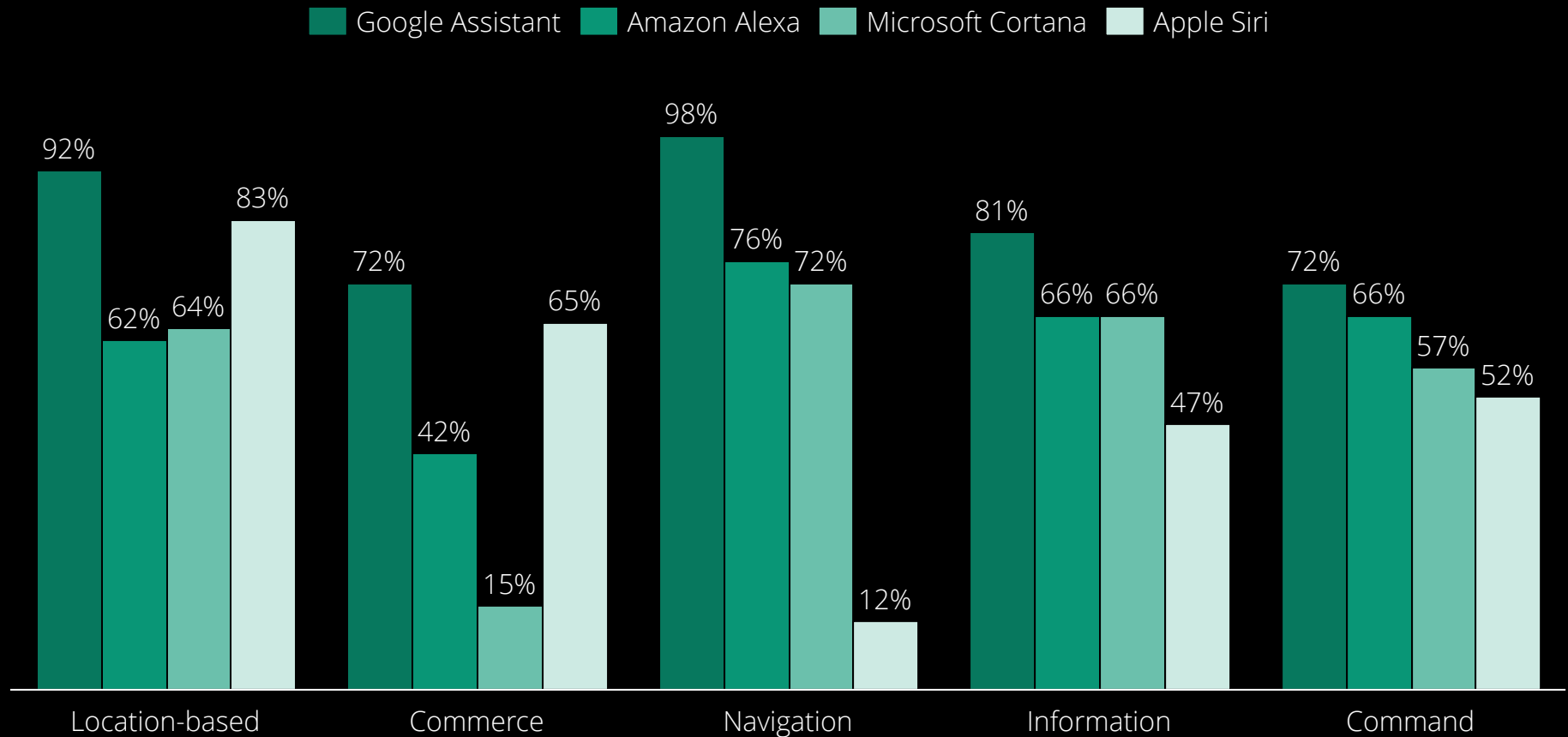
Based on data from December 2017, total number of apps at the time: 1,766

Source: Voicebot.ai



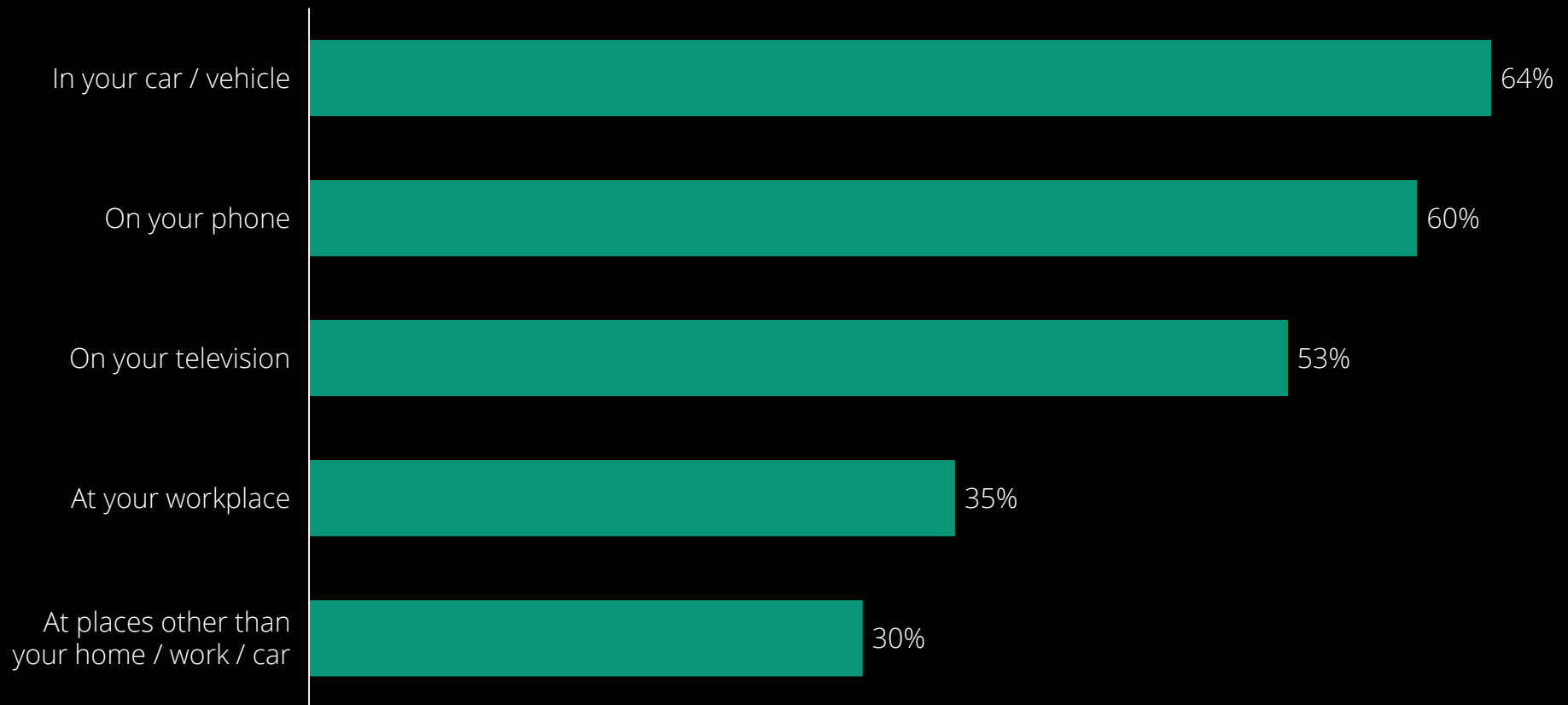
# Google Assistant outperforms competitors in all categories in terms of correctly answered queries

Share of correctly answered questions by smart speakers from different categories



# More than 50% of smart speaker owners would appreciate the technology also in other situations

Smart speaker owners interested in using the technology in other areas



"How interested would you be in having the smart speaker technology...?", Answers "very interested" & "interested" considered; n= 1816 respondents who own a smart speaker

## Global Trends

# Social Media

Users, influencers and advertisers are keen on one rising star

In 2004, Mark Zuckerberg started Facebook as a social network for Harvard students – a very exclusive club of people could communicate through the new service. Fourteen years later, a whole new industry has emerged, which changed the way we consume media, talk, chat and stay in touch with friends.

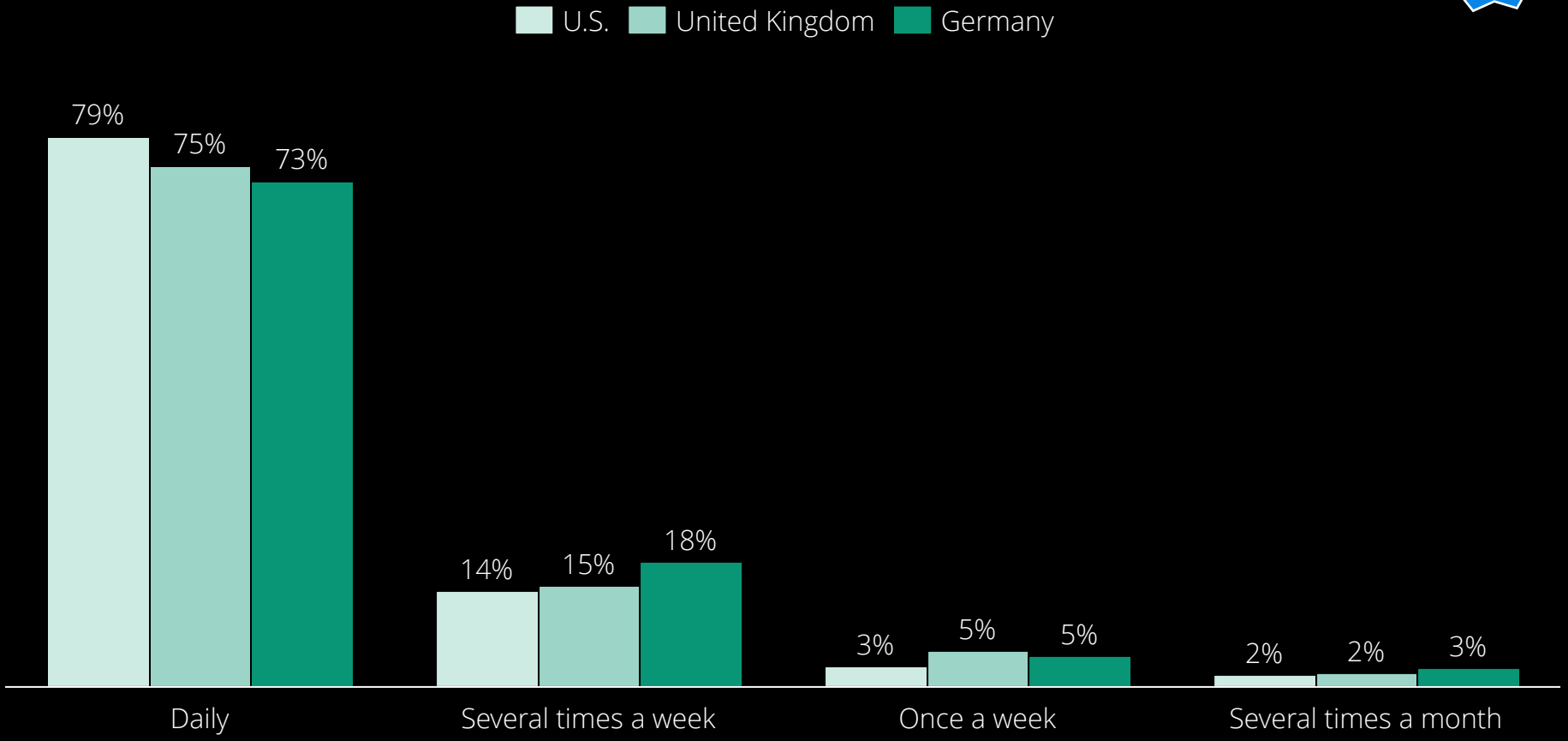
Without doubt, Facebook is the most important player in this field, but by far not the only one. Similar platforms have developed, which address different kinds of purposes: business networks, instant messaging or photo sharing.

In the past year, it was especially Snapchat and Instagram that dominated the media: Snapchat caused a stir when Snap Inc. announced their IPO in March 2017, which raised expectations of shareholders as well as investors. Instagram for its part developed into the number one platform for influencers, with user numbers surging: It has become the rising social media star.

We analyzed overall social media consumption and how people really use the services. Who are the users? How many of them actually like and share at all and how many just get their daily news?

# Most people use social media on a daily basis

Frequency of social network usage in the U.S., the United Kingdom and Germany



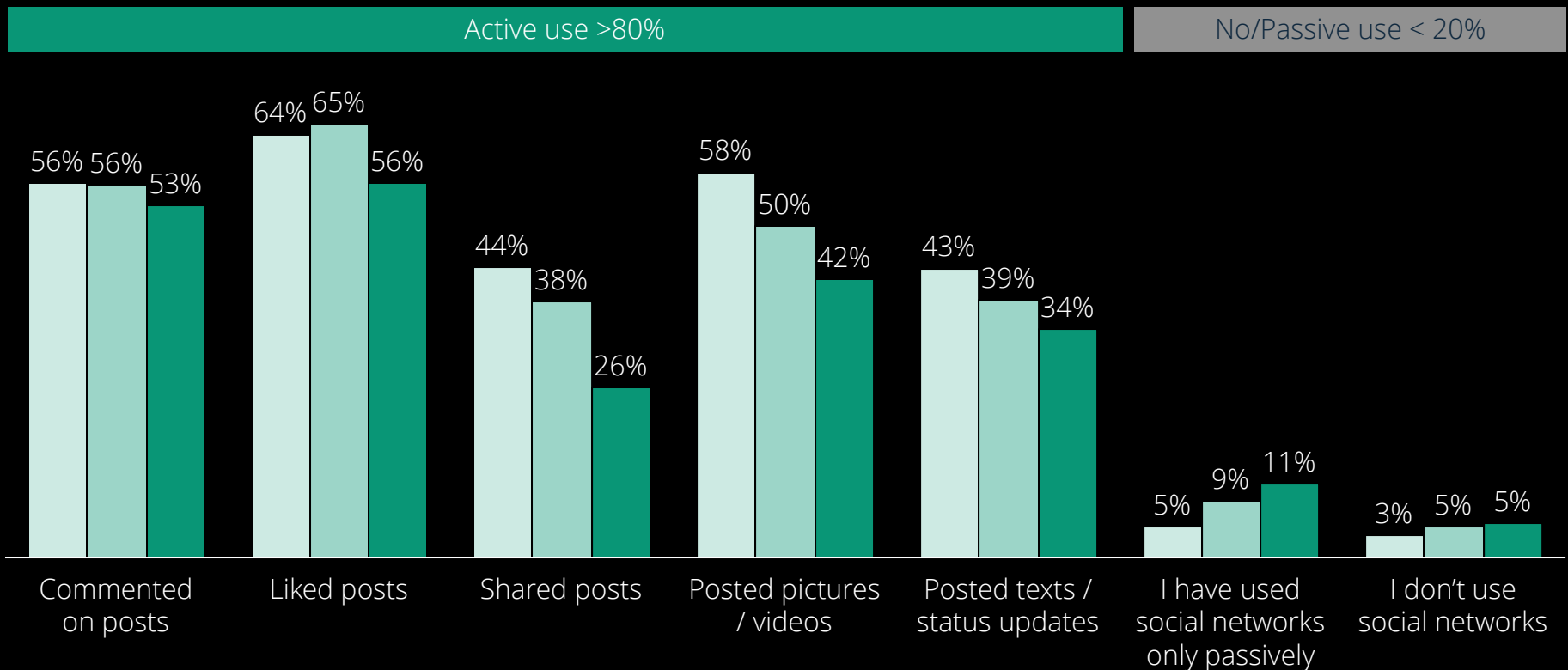
24 "How often do you use social networks like Facebook or Instagram?"; U.S. n=1,789, United Kingdom n=1,688, Germany n=1,427; respondents who use business networks, foto sharing, microblogging services and social networks regularly  
Source: Statista Global Consumer Survey 2018

# More than 80% of millennials use social media actively

Social media activities of internet users aged 18-29 in the past four weeks



U.S. United Kingdom Germany

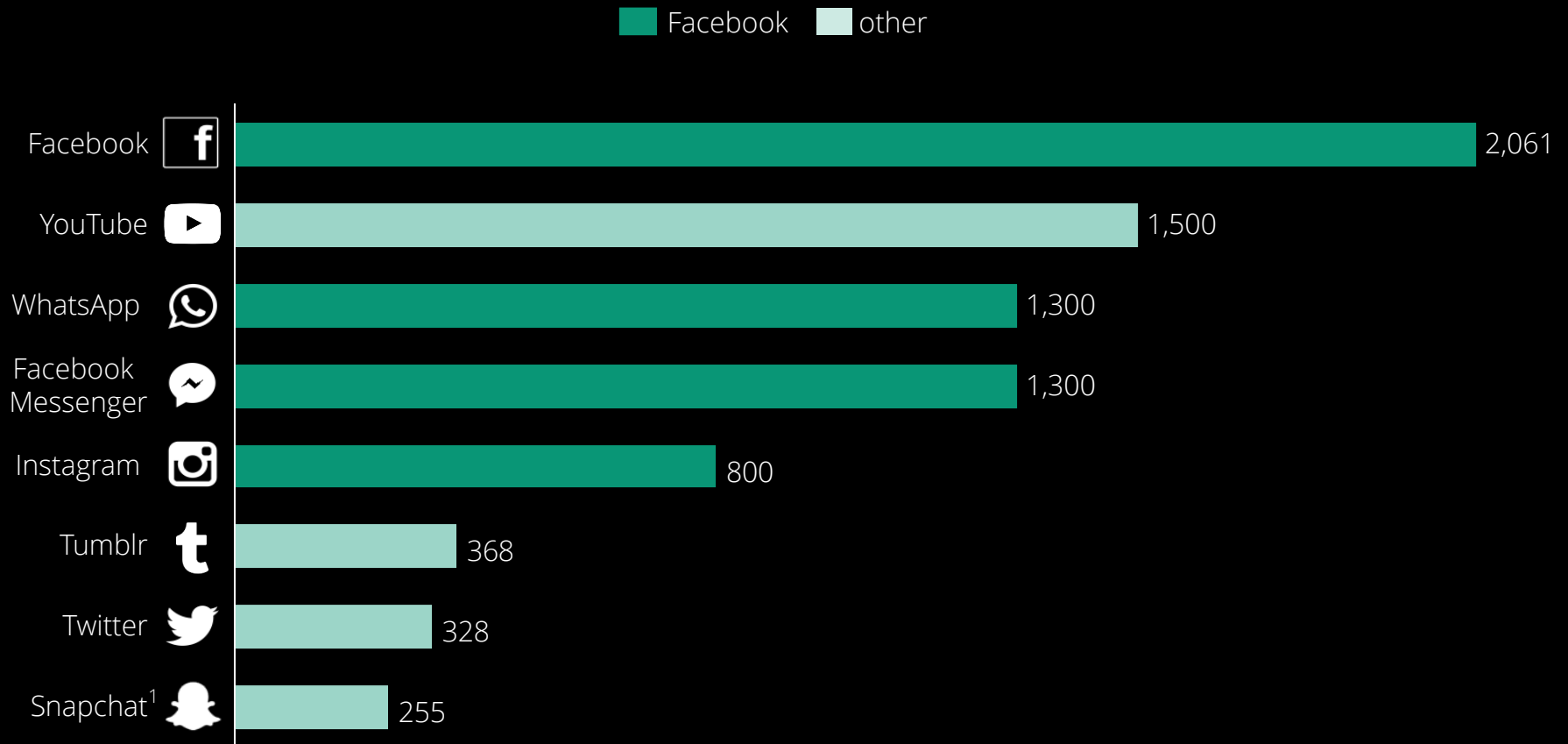


"Which of these things have you done on social networks in the past 4 weeks?"; Multiple response; U.S.: n=10,150, United Kingdom n=10,129, Germany n=10,379

25 Source: Statista Global Consumer Survey 2018

# Facebook dominates the social media landscape

Largest U.S.-based social media networks and messengers by monthly active users in million



<sup>1</sup>: Snap does not publish monthly active user numbers; figures are calculated based on the number of daily active users  
Based on data from August 2017

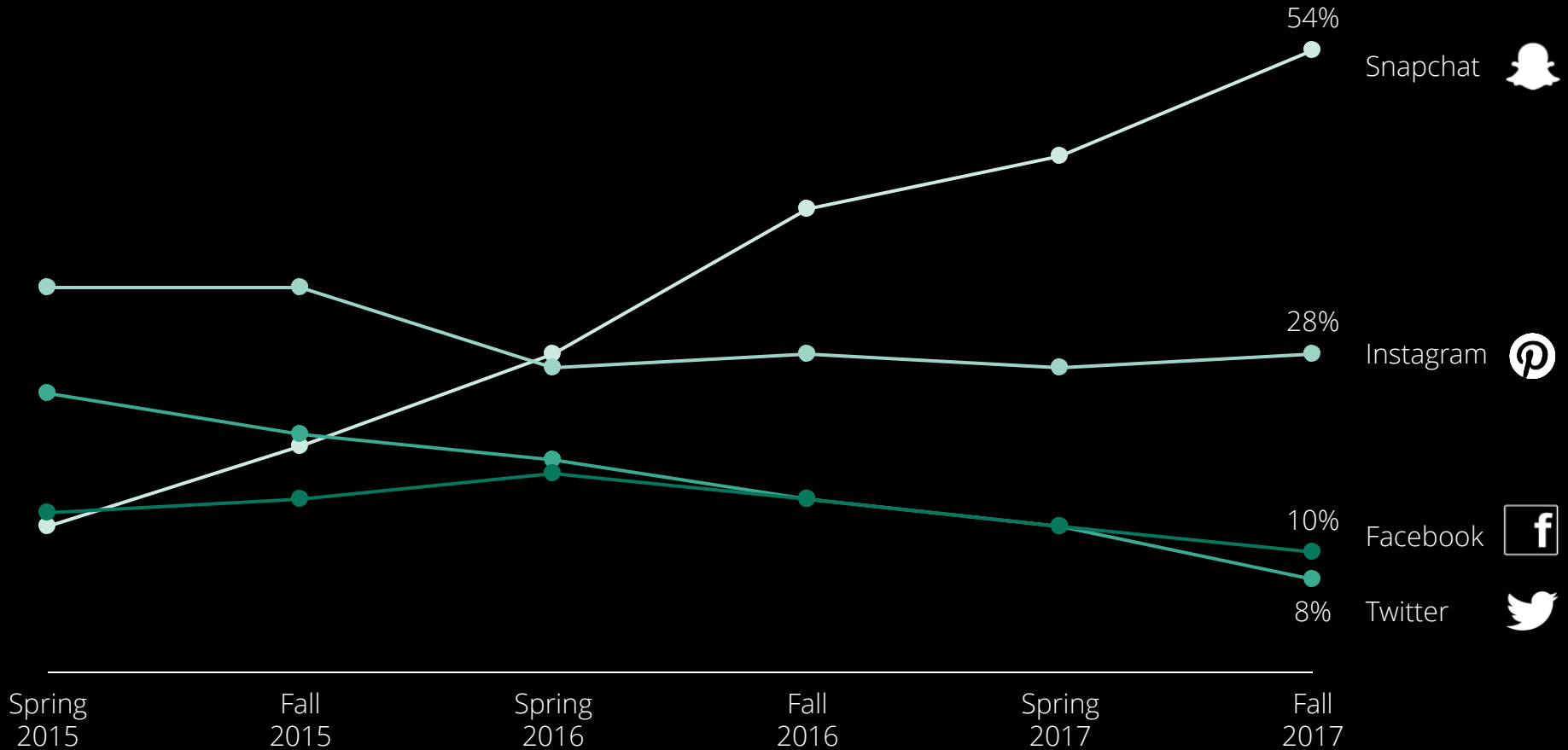


“ There is a real value  
in *sharing moments that  
don't live forever.*

**Evan Spiegel**  
Founder and CEO Snap Inc.

# Snapchat is the favorite social network for 54% of U.S. teenagers

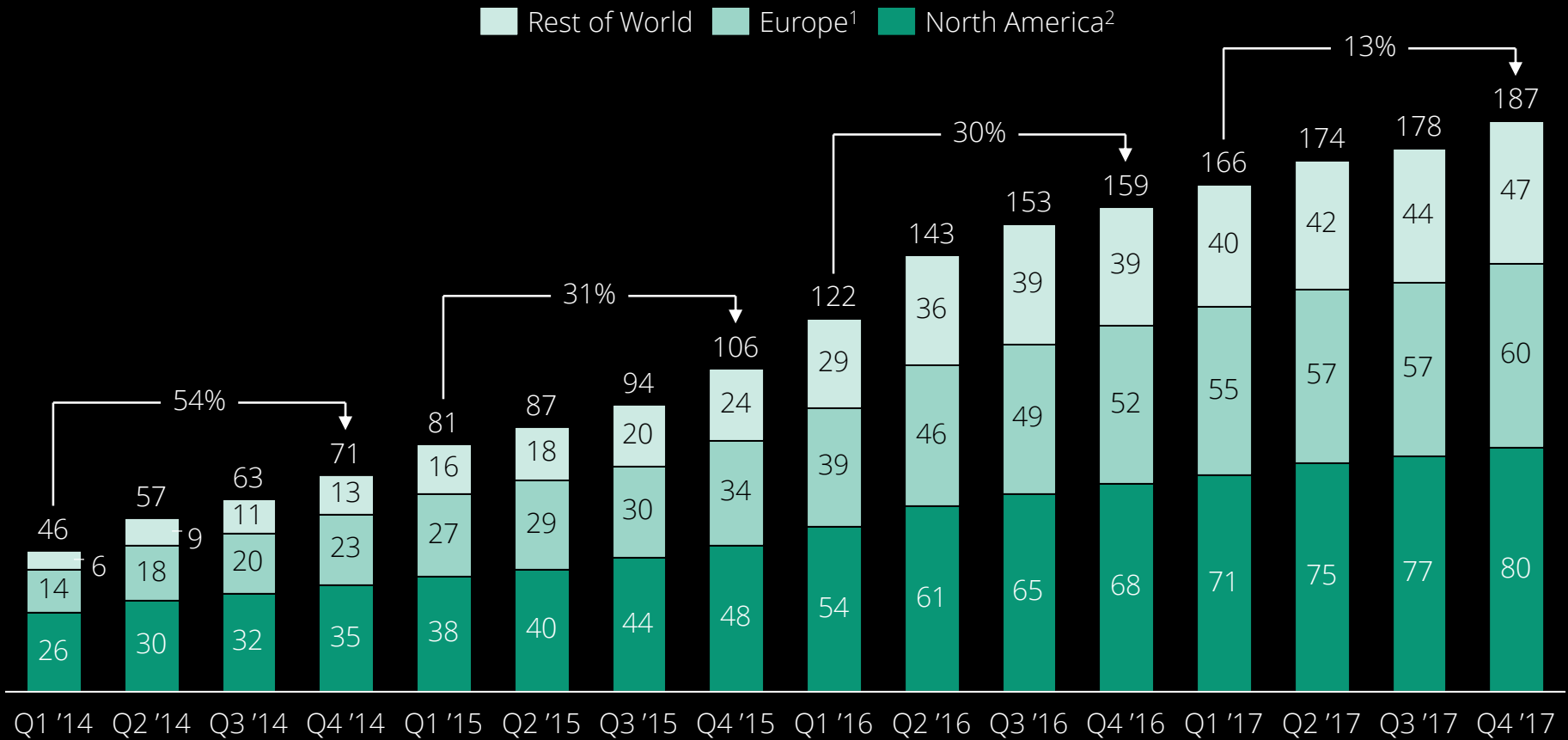
Share of U.S. teenagers who consider the following social networks their favorite





# Snapchat is still growing, yet the increase in daily active users slowed down considerably in 2017

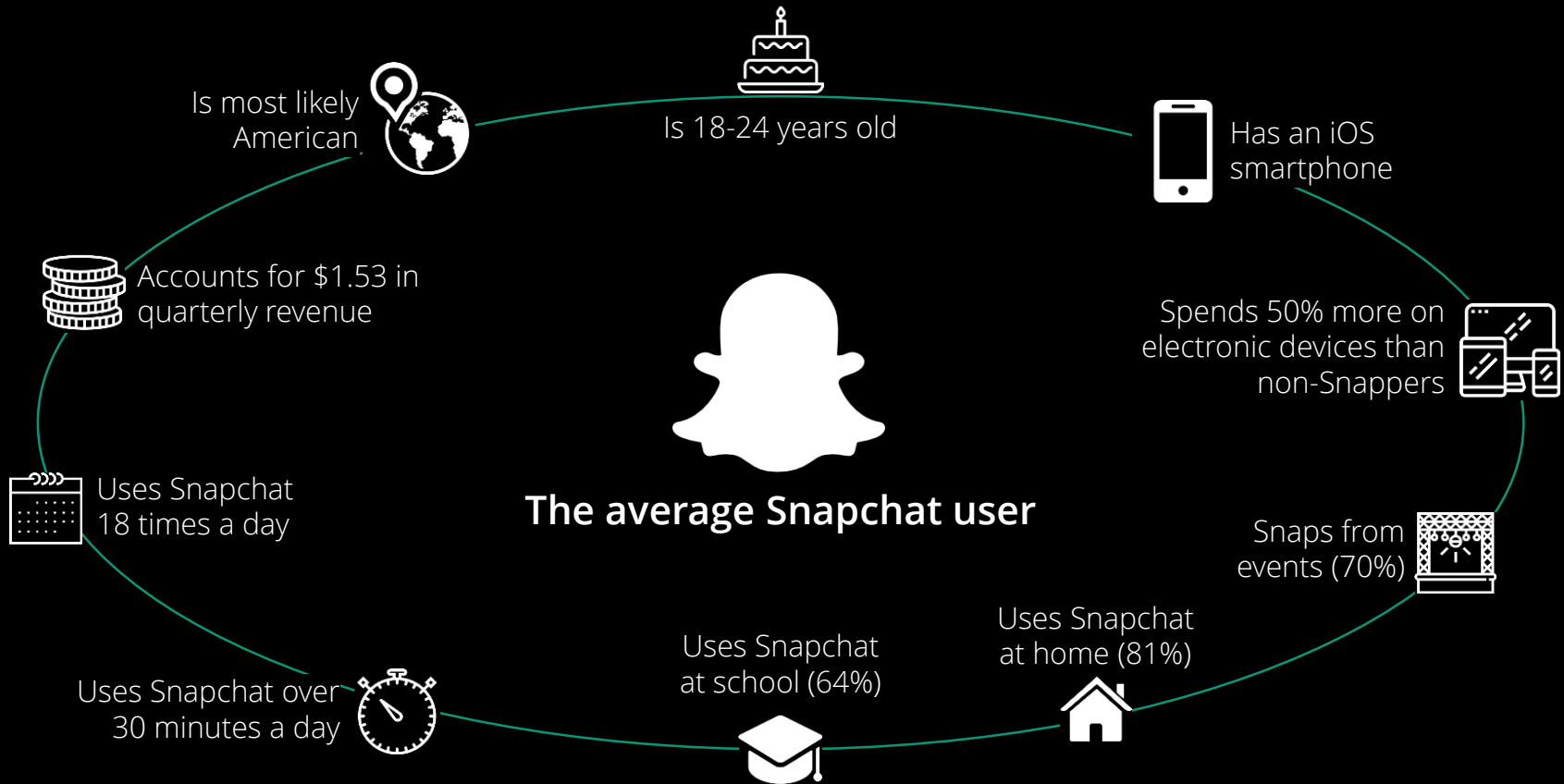
Number of daily active Snapchat users in millions



29 1: Europe includes Russia and Turkey 2: North America includes Mexico and the Caribbean  
Source: Company Information

# Snapchat users are young, American, and snap a lot

Average Snapchat user

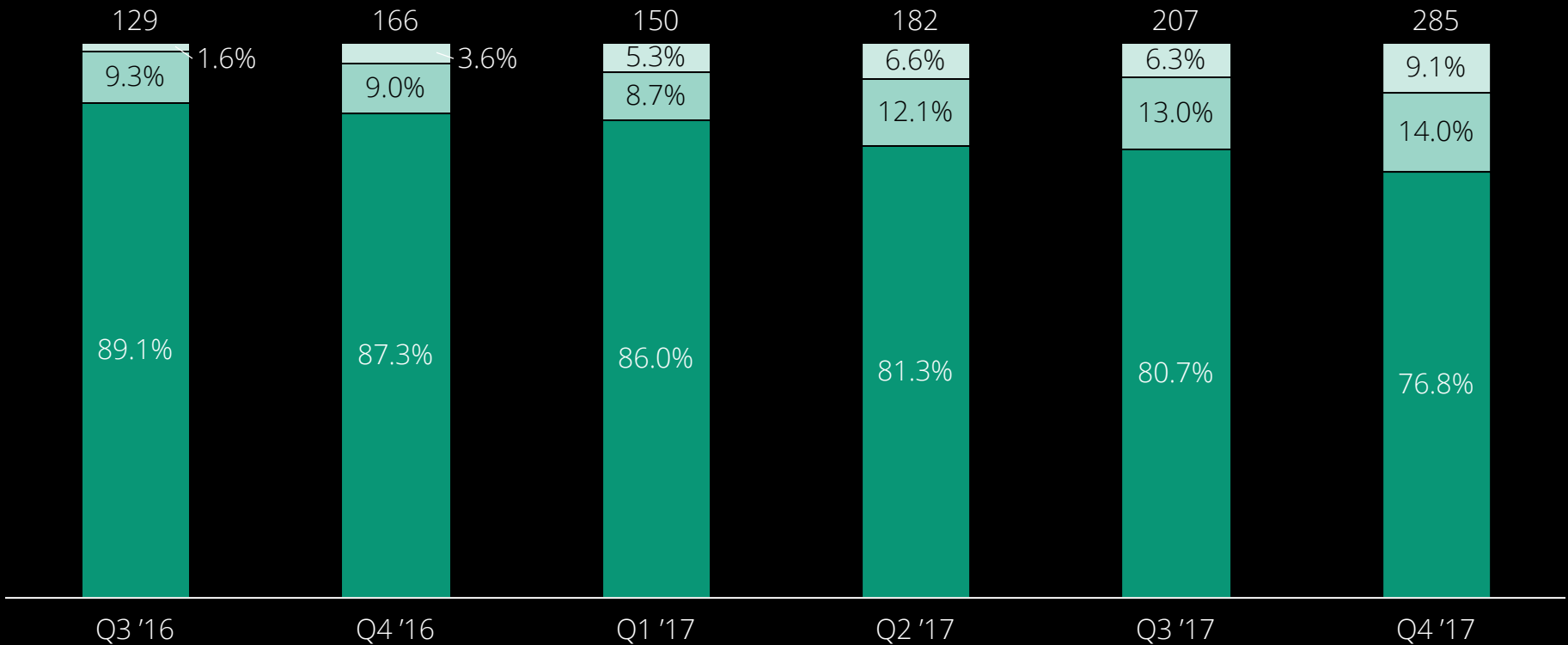


# Snap highly depends on North America, which is responsible for >75% of revenues

Revenue in million US\$



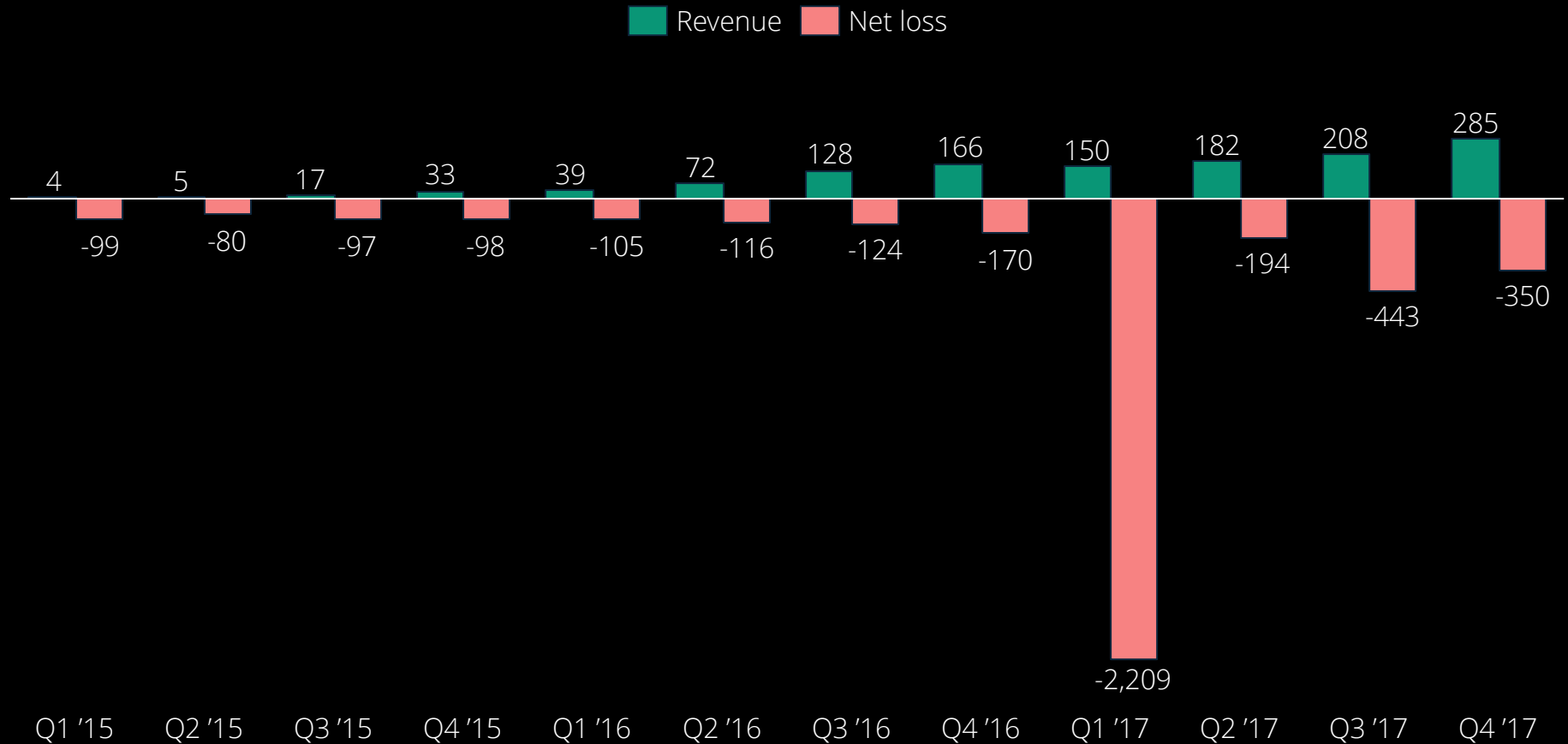
■ North America<sup>1</sup> ■ Europe<sup>2</sup> ■ Rest of the World



31 1: North America includes Mexico and the Caribbean 2: Europe includes Russia and Turkey  
Source: Snap

# After a disastrous first quarter '17, Snapchat seems to be recovering, but is still far from being profitable

Revenue and net loss in million US\$



# The Q4 '17 Report is the first since Snaps IPO to see rising stock prices

Snap Inc. stock prices in US\$





Instagram

Username

Password

Log In

Forgotten your login details? Get help with signing in.



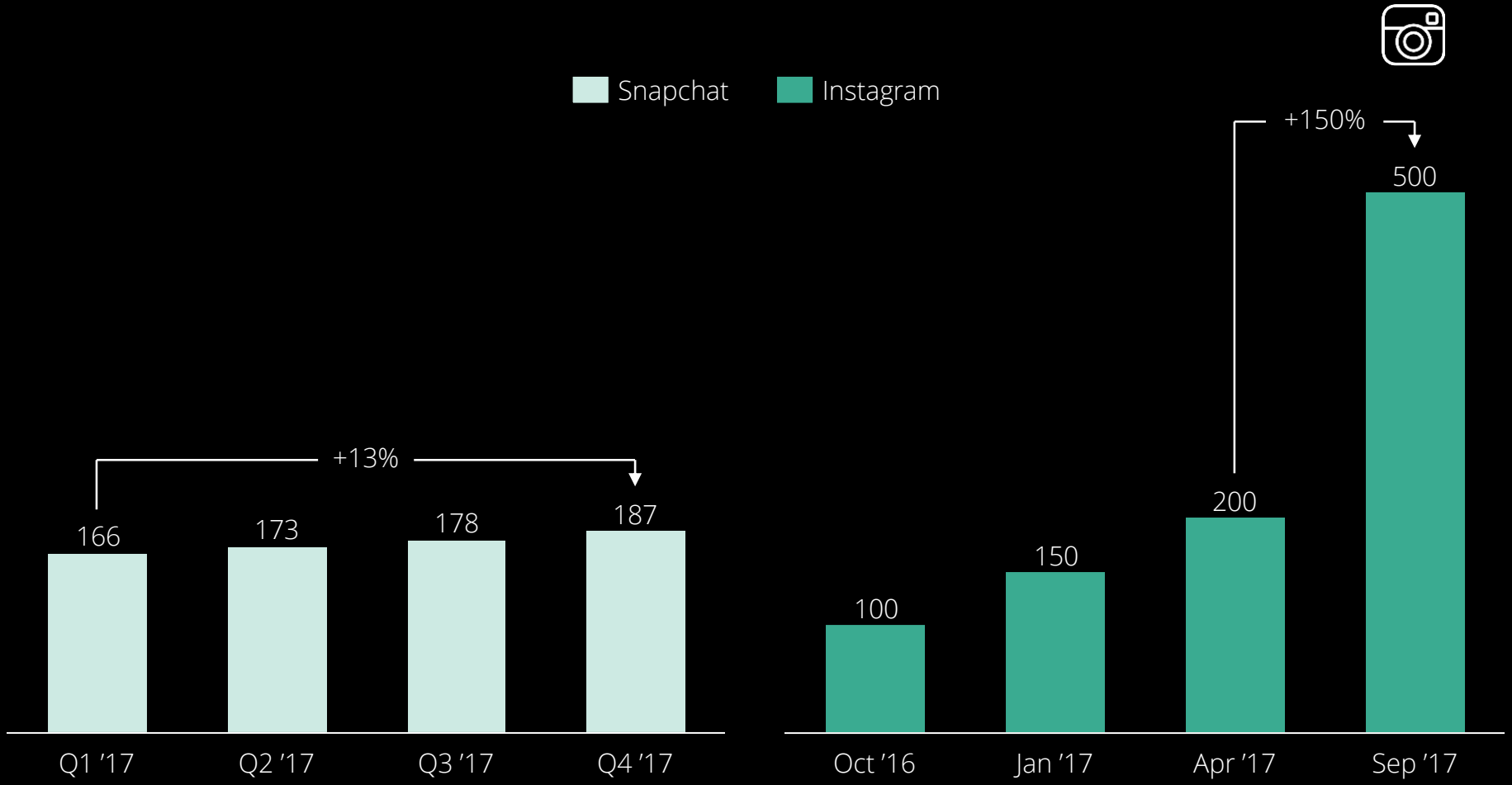
Log in with Facebook

“Instagram was created because there was no single place dedicated to *giving your mobile photos a place to live and to be seen.*”

**Kevin Systrom**  
Co-founder of Instagram

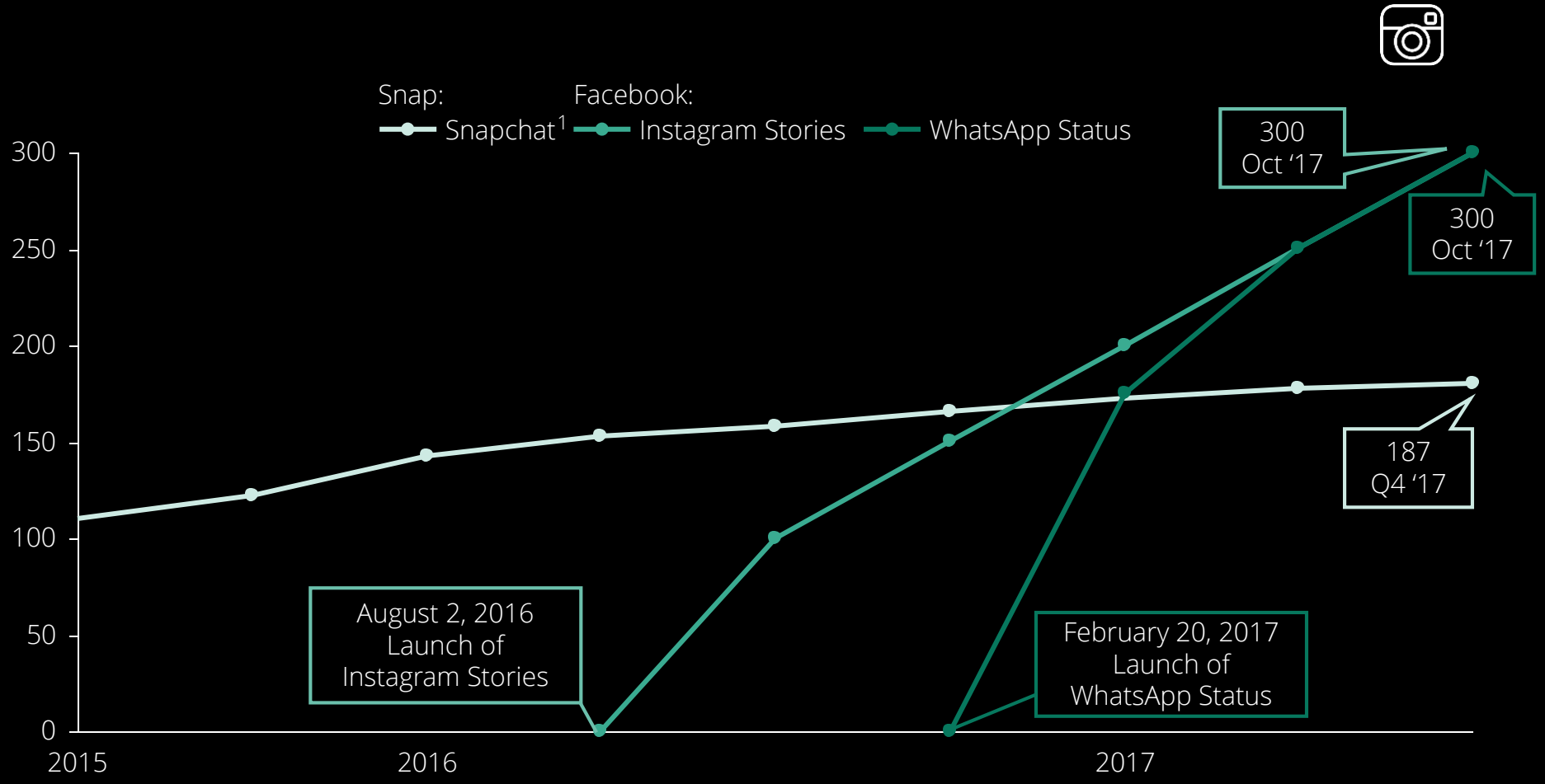
# While Snapchat is struggling, Instagram more than doubled their daily active users in five months

Daily active users in million



# Facebook's Snapchat clones beat the original

Worldwide daily active users of Instagram Stories, WhatsApp Status and Snapchat in millions

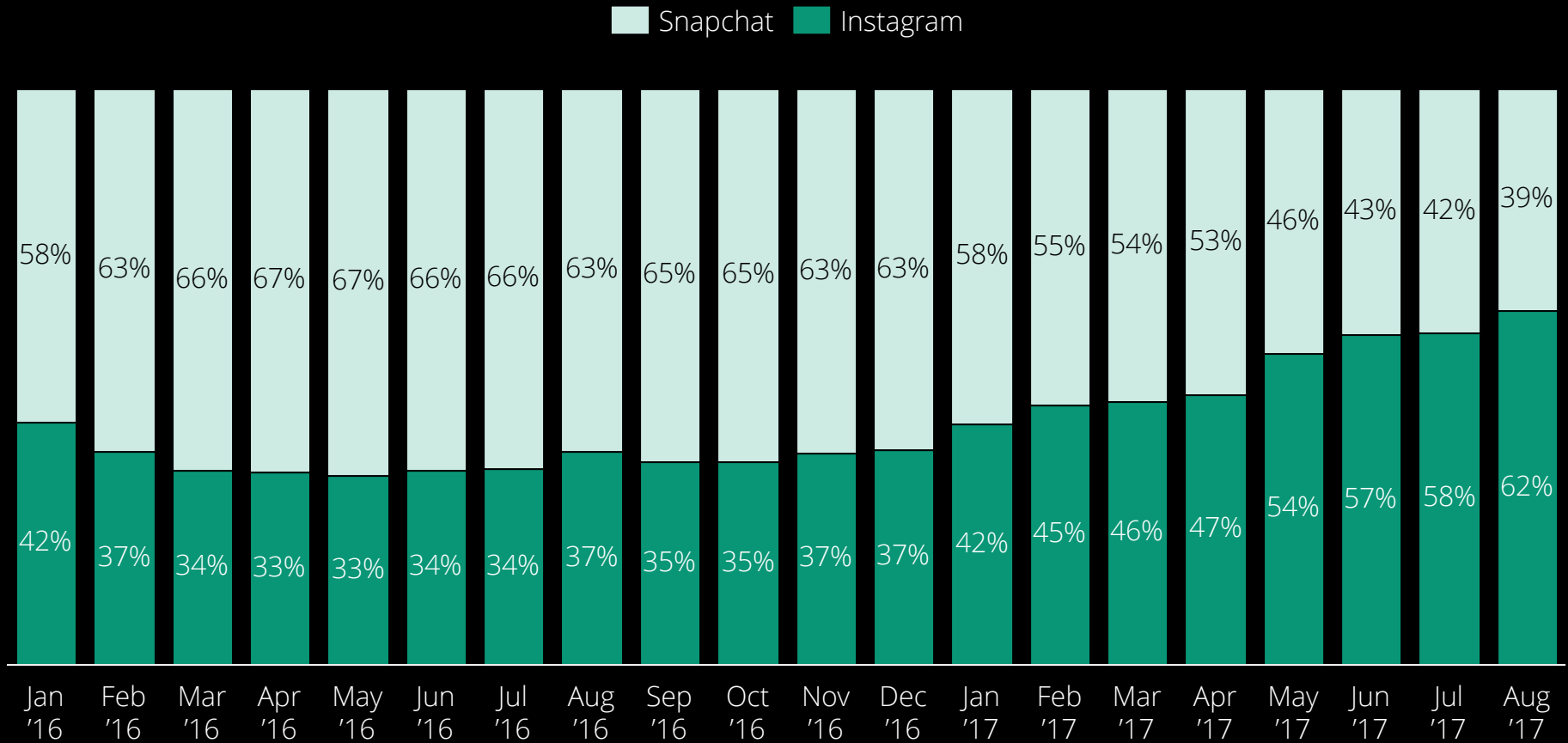


36 1: Snapchat's user numbers represent quarterly averages  
Source: Snap, facebook



# Instagram has taken the lead over Snapchat in terms of new sign-ups

Proportion of global new sign-ups

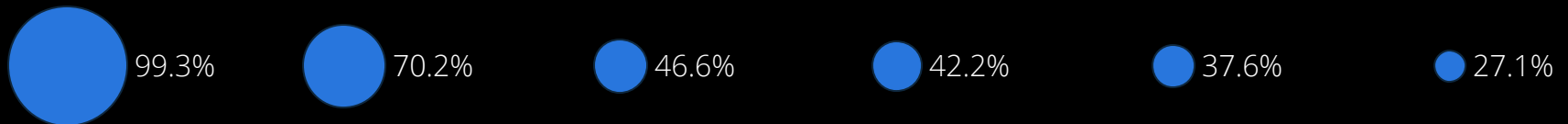


# Instagram is the #1 influencer platform, all influencers use it

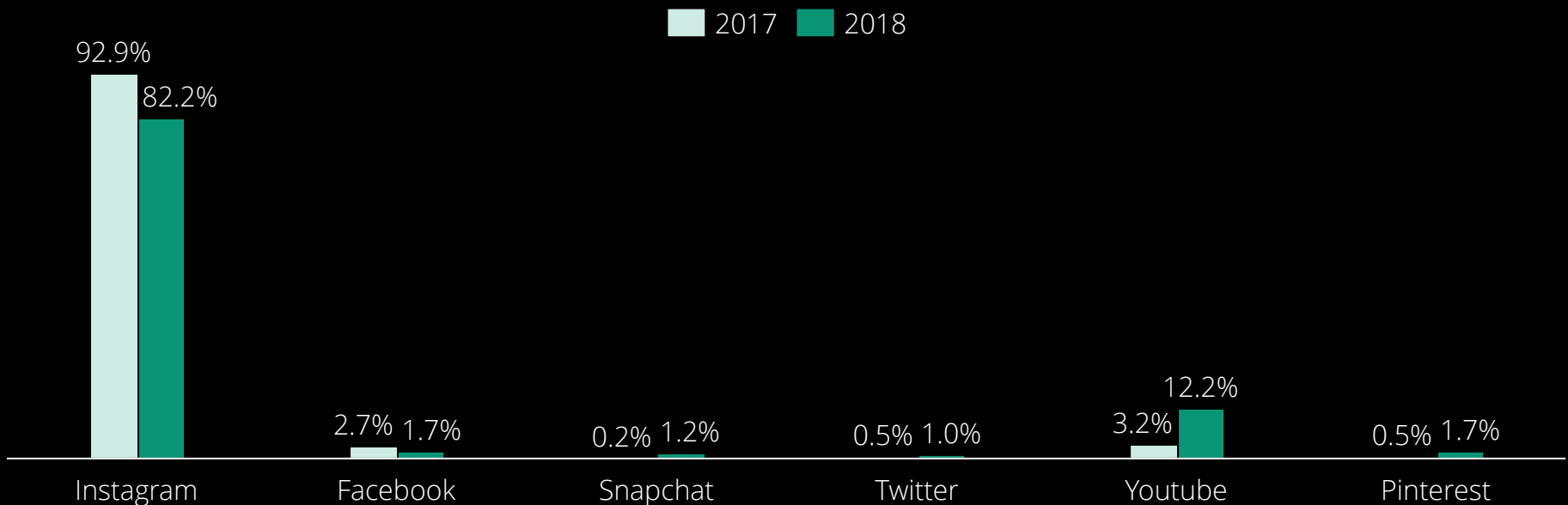
Most important influencer platforms



Share of influencers that use the platform



#1 Platform in 2017 and expected in 2018

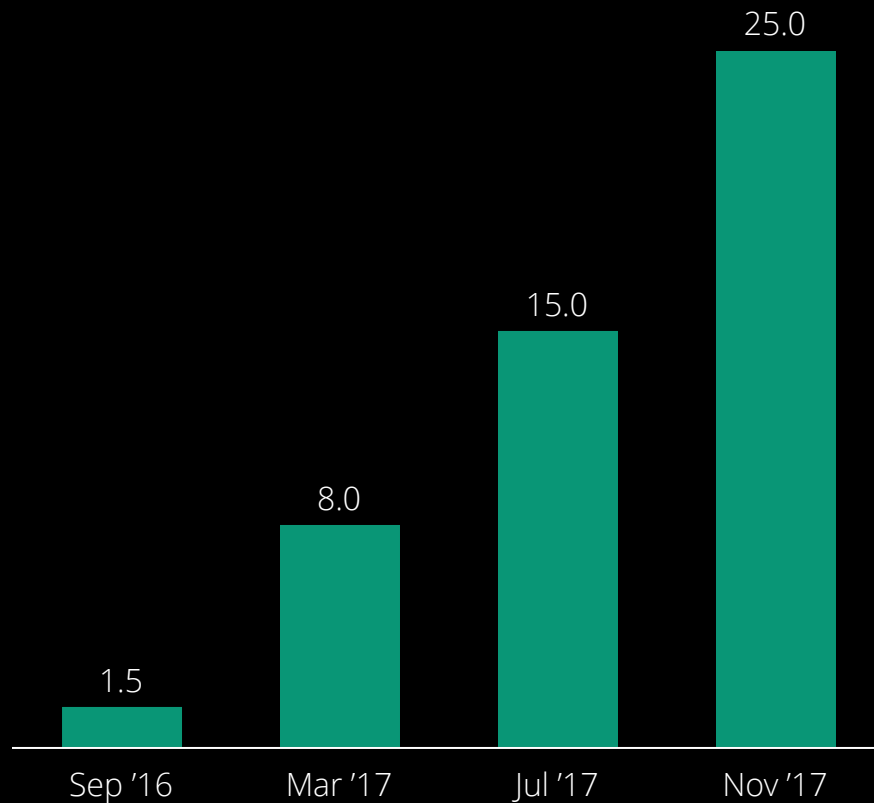


# Instagram is gaining importance in advertising with already 2 million active advertisers

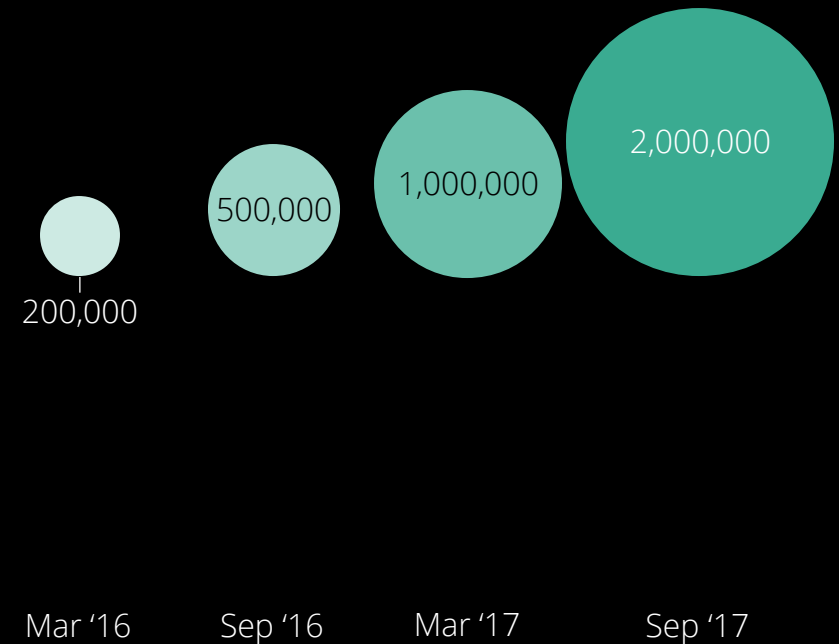
Business profiles and active advertisers on Instagram



Number of business profiles in million

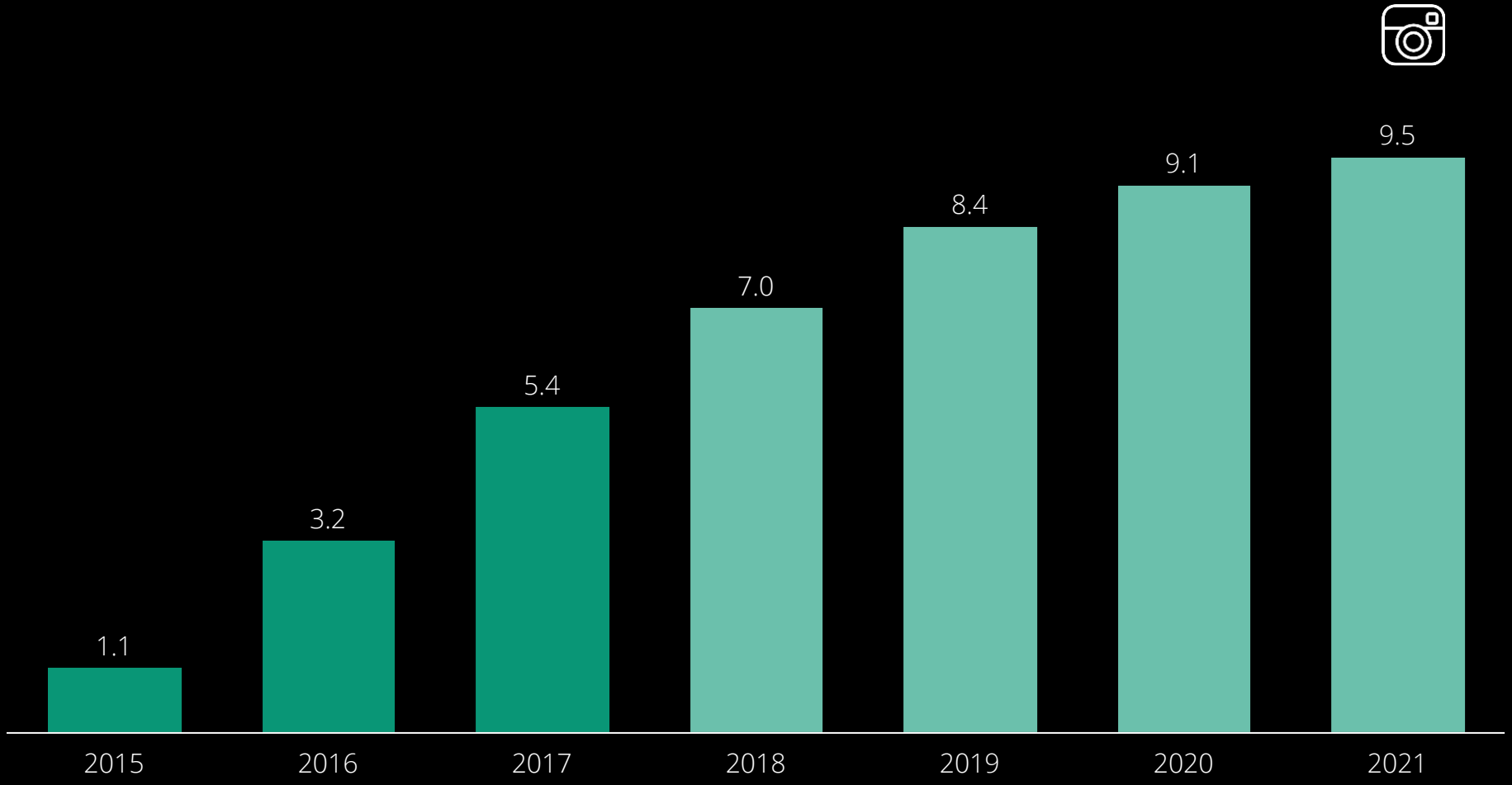


Number of active advertisers



# Instagram revenues expected to grow to US\$9.5bn

Projected revenue of Instagram in billion US\$



## Global Trend

# The 3-Trillion-Dollar Quintet

U.S. tech leaders by their stunning numbers

They are the providers of the most innovative technologies with mass market adoption, they have billions of daily active users, combined revenues of over US\$500bn and a US\$3 trillion market capitalization: Apple, Google (Alphabet), Microsoft, Amazon, and Facebook shape the digital world like no other.

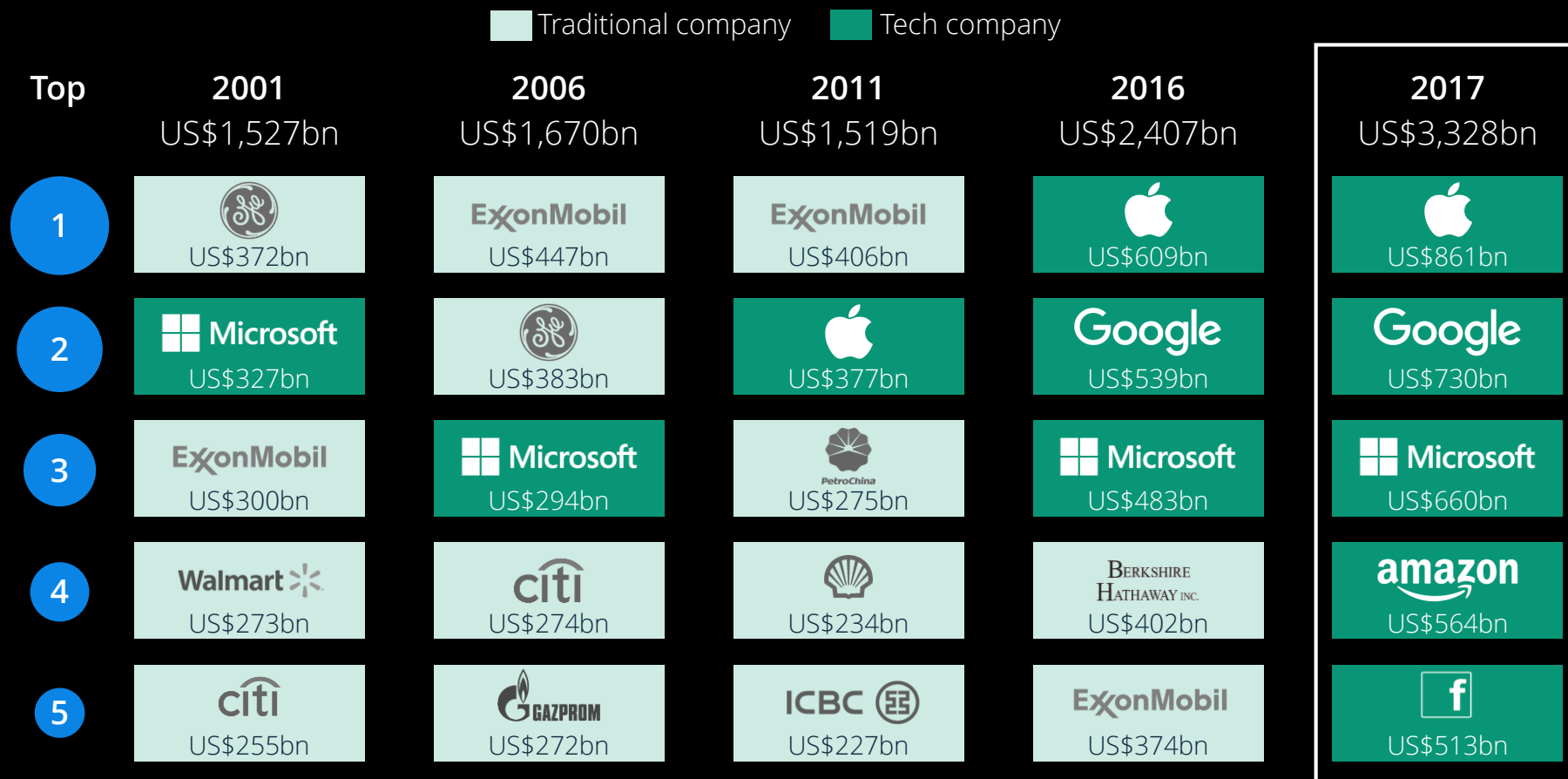
They create new services and business models and successively expand into completely new industries. Due to their fast scalability, the “big five” have achieved a size and global reach that is impressive and frightening alike. Some examples? In 2016, Google generated more digital ad

revenues than the Chinese economy spent on digital ads in total. Apple is sitting on such a huge pile of overseas cash that they could buy every franchise of the Top 5 U.S. sports leagues – with a lot of money left to give to employees to watch some games. In August 2017, Amazon announced that about one in three U.S. internet users had become an Amazon Prime subscriber.

We analyzed what these great companies earn their money with. Who are their cash cows and their rising stars? After this analysis one might ask: What would our everyday life look like if these companies did not exist?

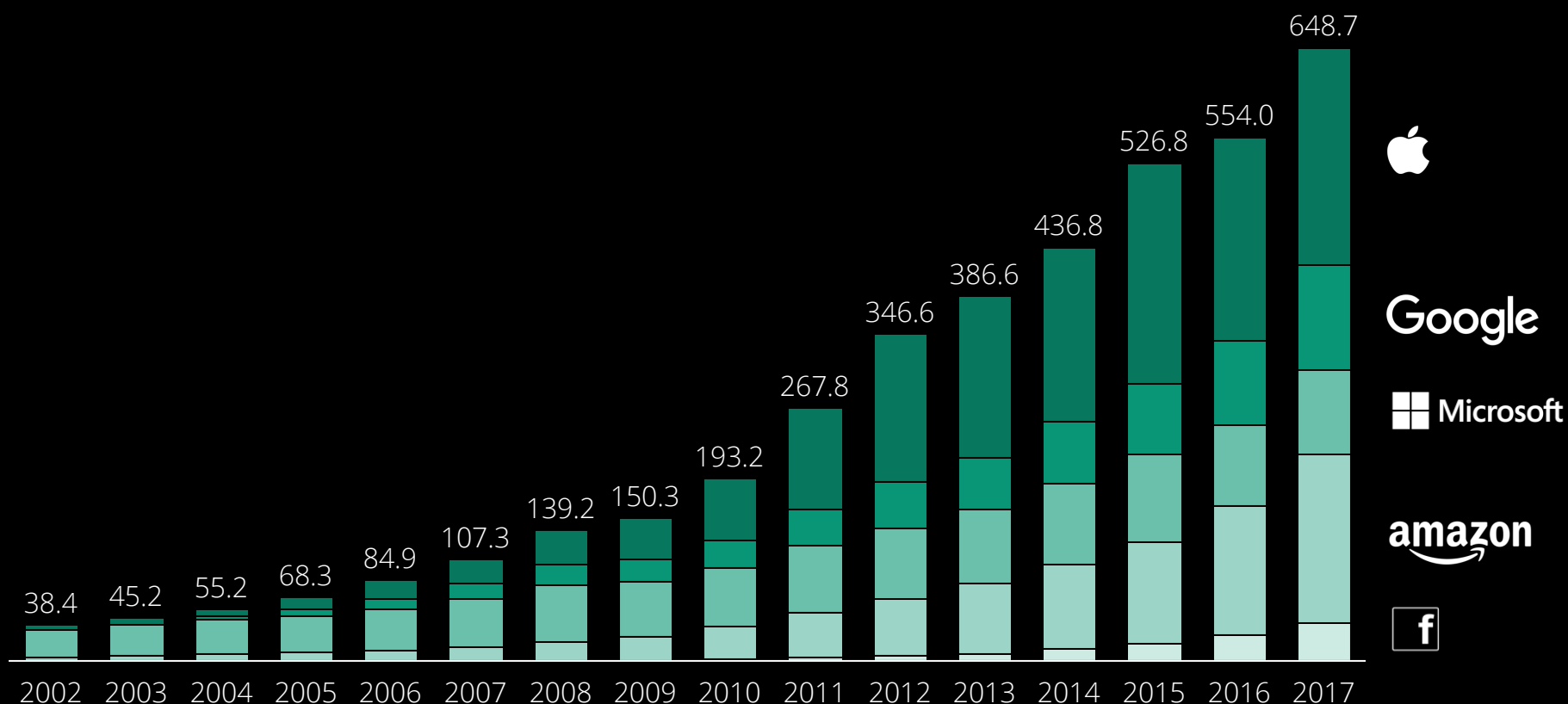
# Tech companies take over the stock markets: In 2017 the Top 5 were valued at US\$3.3 trillion

Most valuable companies by market cap in billion US\$



# Combined revenues rose to ~US\$650bn in 2017

Global annual revenue development in billion US\$



Google

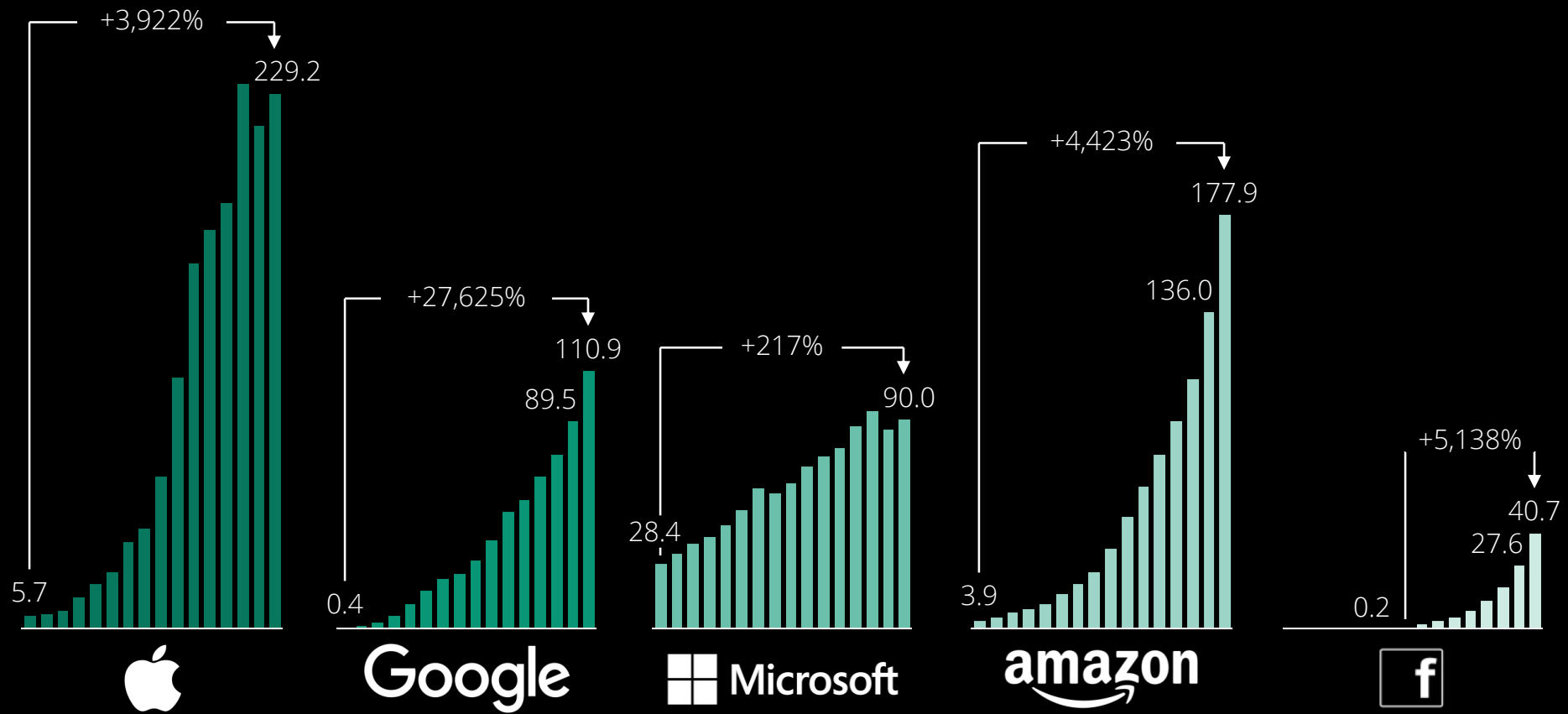


amazon



# Revenues of each top 5 tech company have been skyrocketing over the past few years

Global annual revenue development from 2002 to 2017 in billion US\$

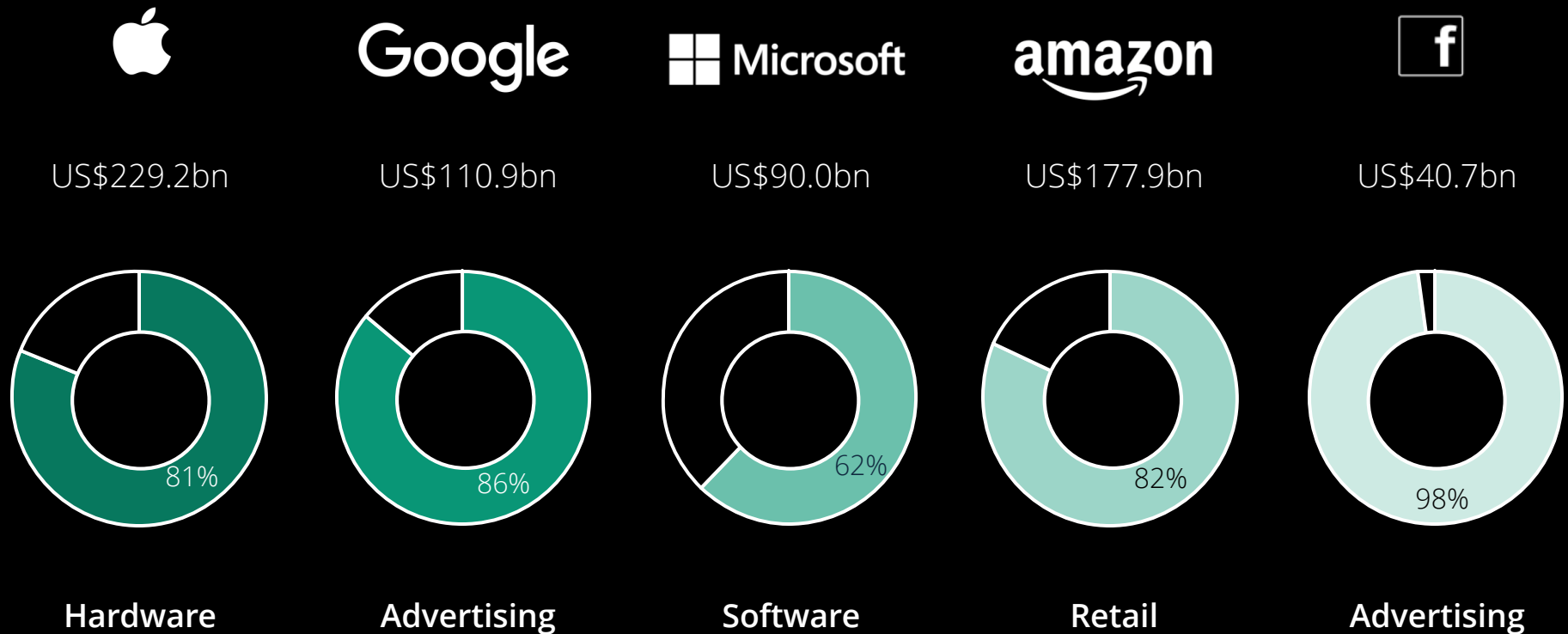


44 Note: Facebook revenues included as of 2007  
Source: Company Information



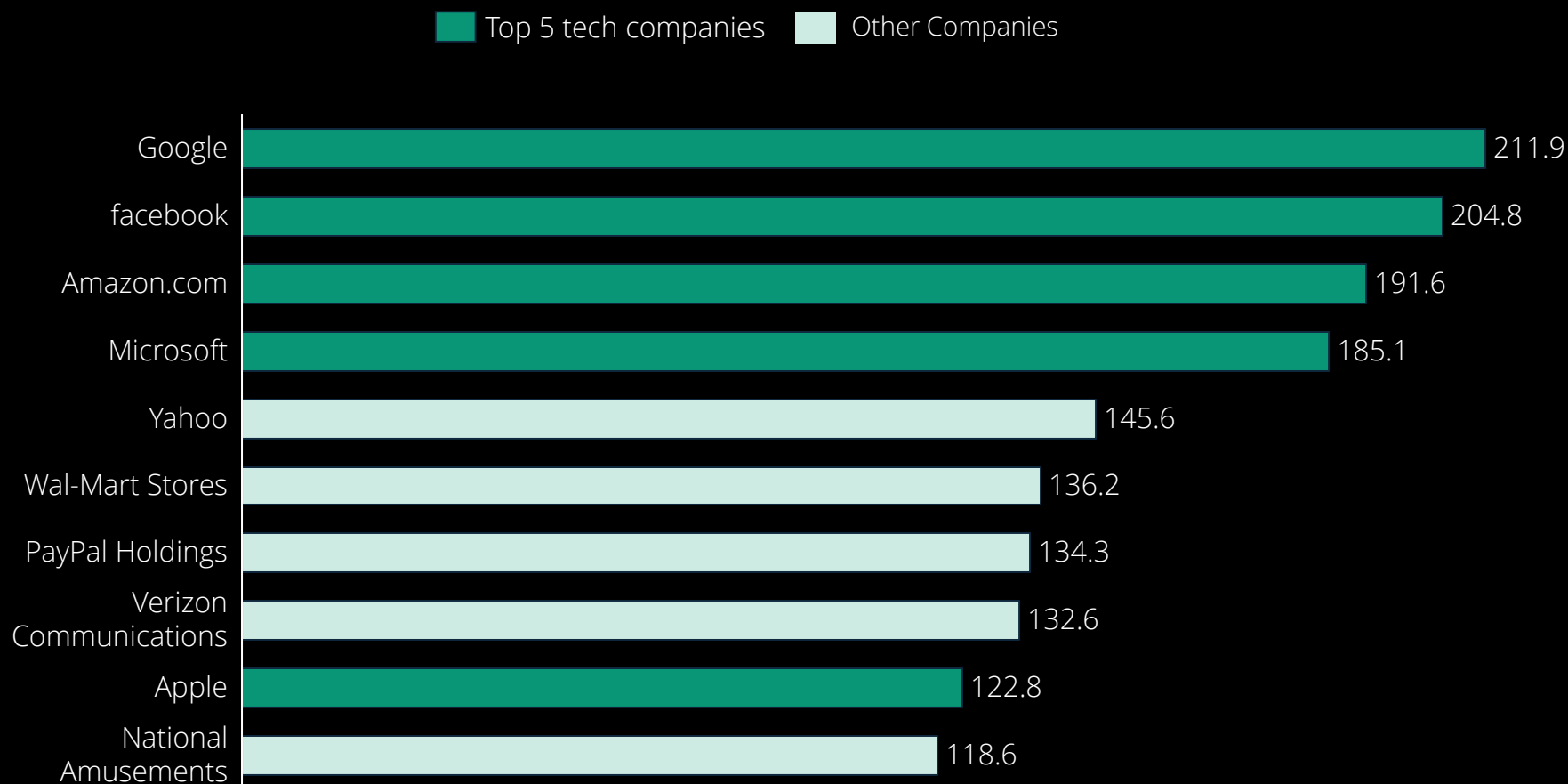
# Their common ground is technology, yet their products are diverse

Revenue in 2017 and share of the dominant field of action / product category



# In addition, the top 5 gather an enormous audience

Audience sizes of leading digital publishers in the U.S. in Nov '17 in millions




# Any mobile activity sooner or later involves at least one of the top 5

Mobile hardware, services and applications from Apple, Google, Amazon, Facebook, and Microsoft



Note: List is not comprehensive; the main purpose is to illustrate the reach of the most popular mobile products and services of Microsoft, Google, Amazon, Facebook, and Apple



“ An iPod, a phone, and an internet communicator... These are **not** three separate devices, this is **one** device, and we are calling it iPhone! **Today, Apple is going to reinvent the phone.** And here it is.

**Steve Jobs**  
Former CEO of Apple Inc.

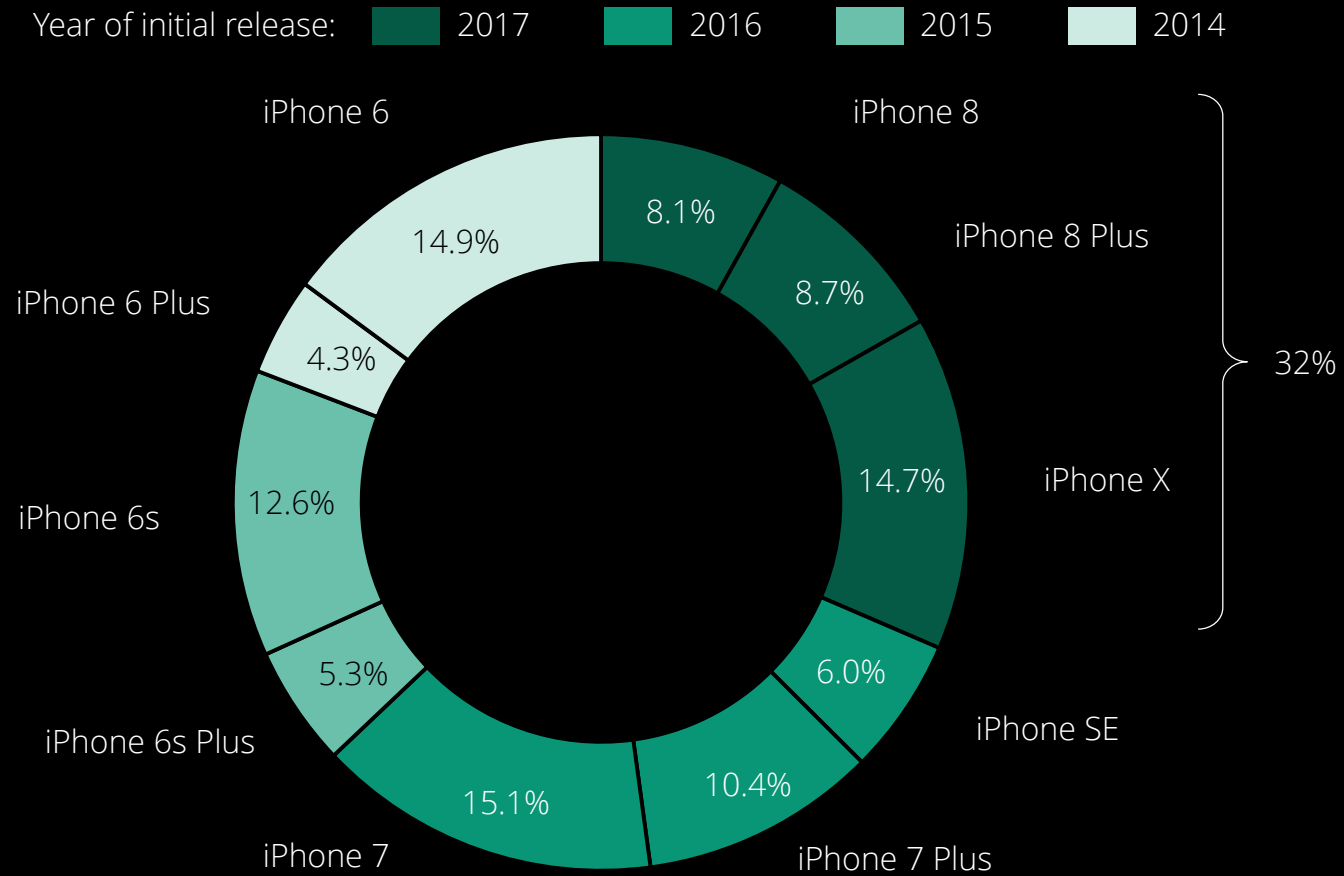
# Since Apple launched their first iPhone, cumulated revenues have reached over US\$850 billion

iPhone revenues in billion US\$



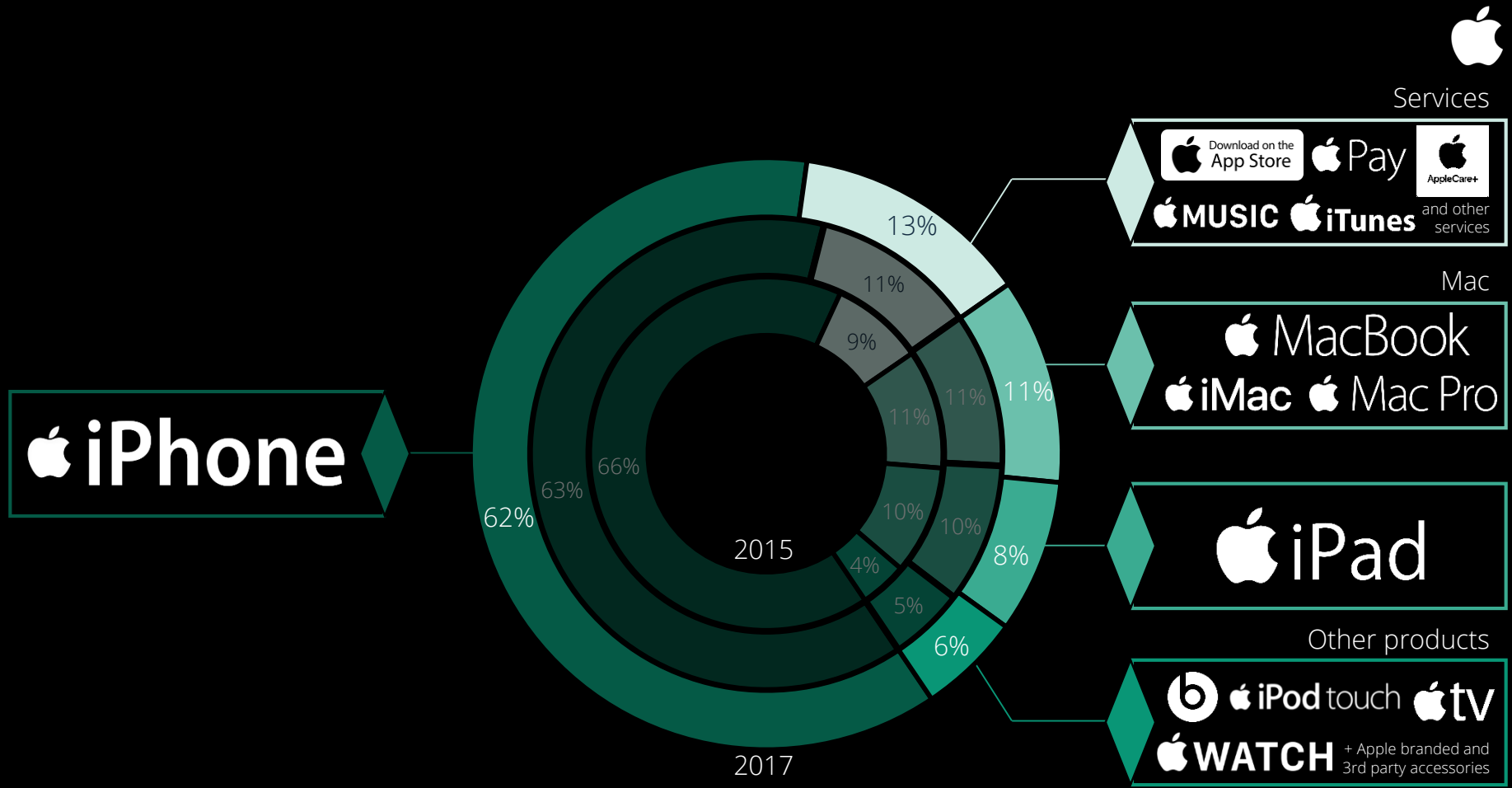
# The new iPhone generation only accounted for 32% of Apple's 2017 Christmas sales

Apple device activations in the week before Christmas 2017<sup>1</sup>



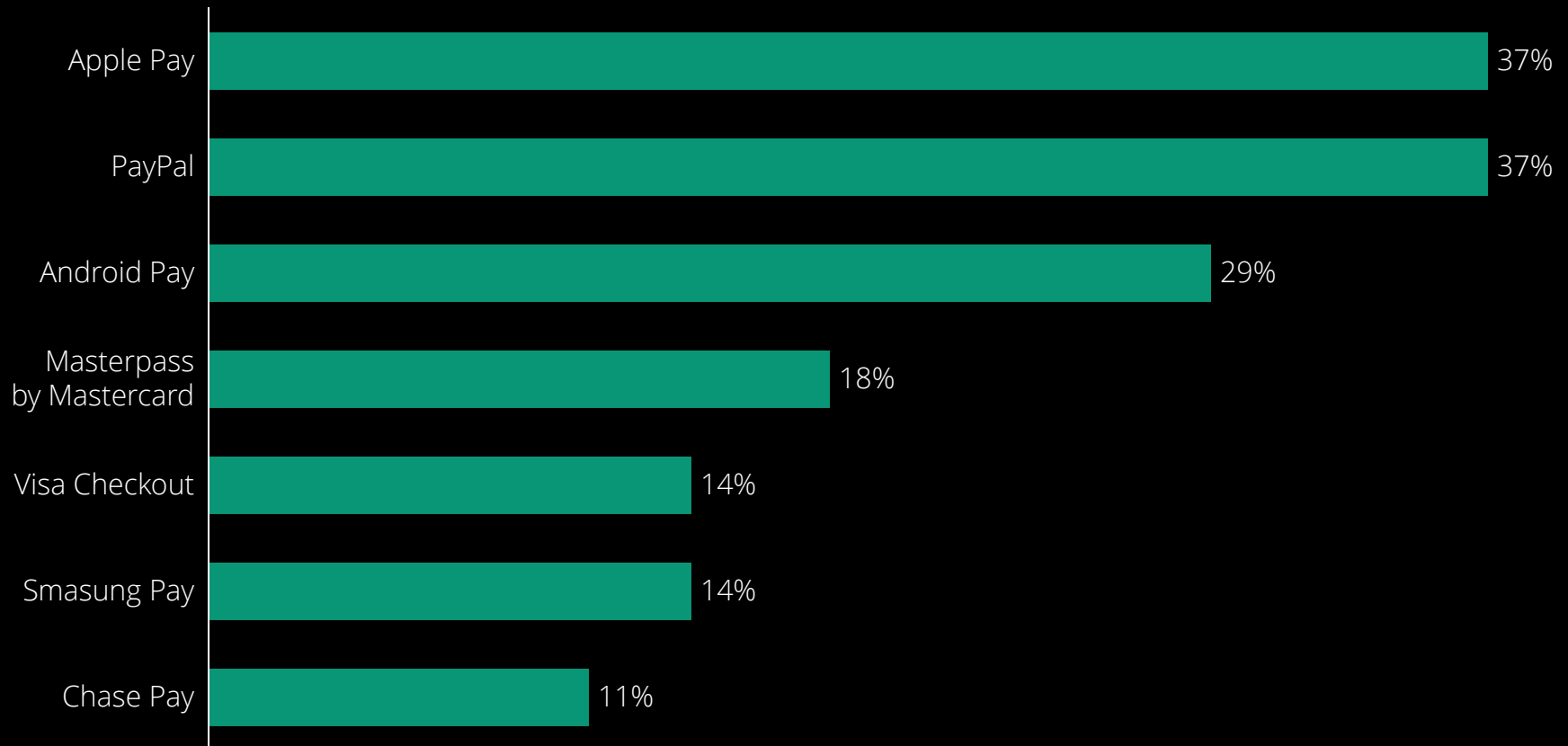
# The iPhone remains Apple's biggest revenue source with 62%, yet service categories are growing

Revenue share of Apple's product categories



# Apple Pay and PayPal record the highest acceptance rates among North American retailers

Apple Pay retail acceptance in North America compared to major competitors



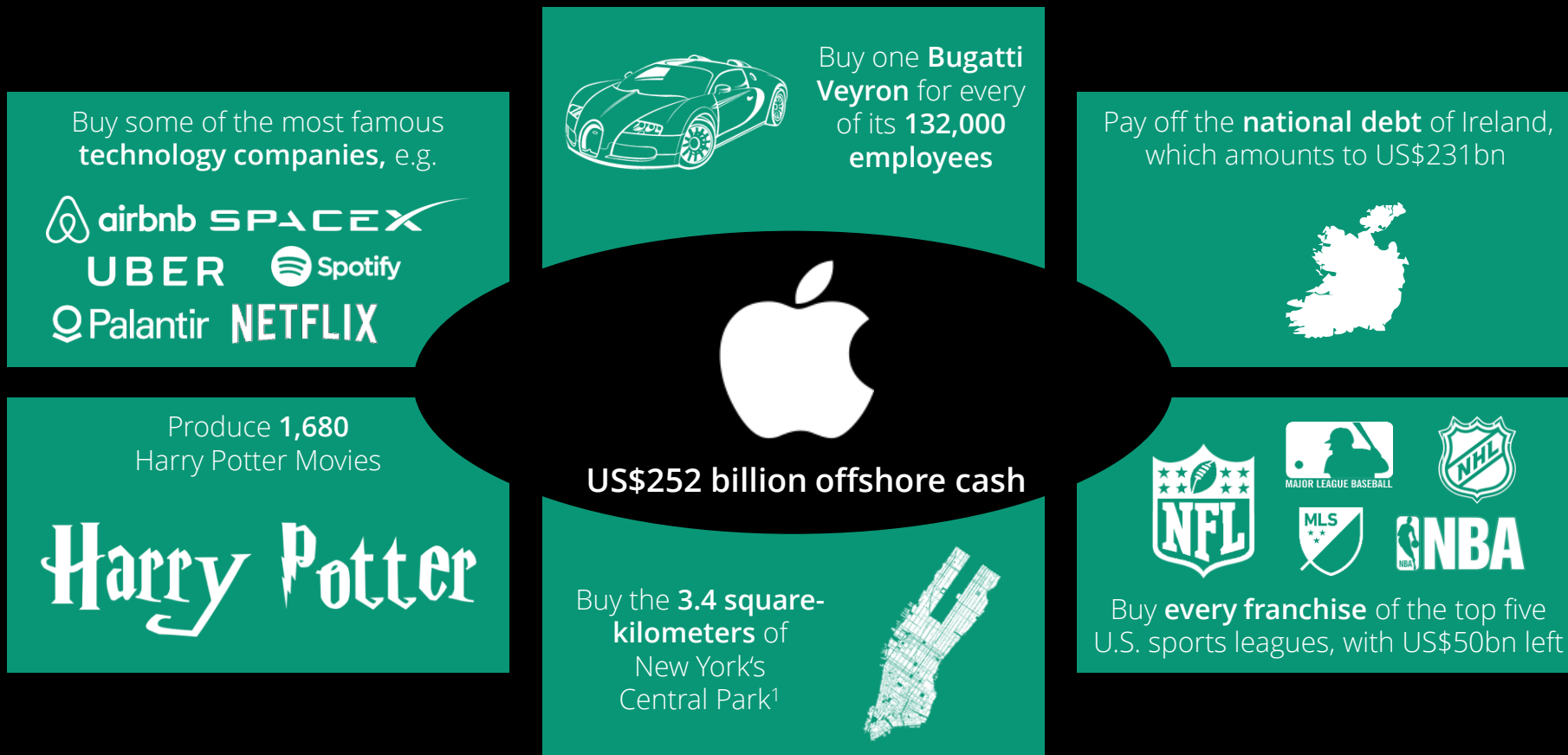
N=500 VPs and C-Level executives at North American retailers  
Based on data from December 2017

52 Source: Boston Retail Partner



# Apple is sitting on a huge pile of offshore cash, which offers interesting spending opportunities

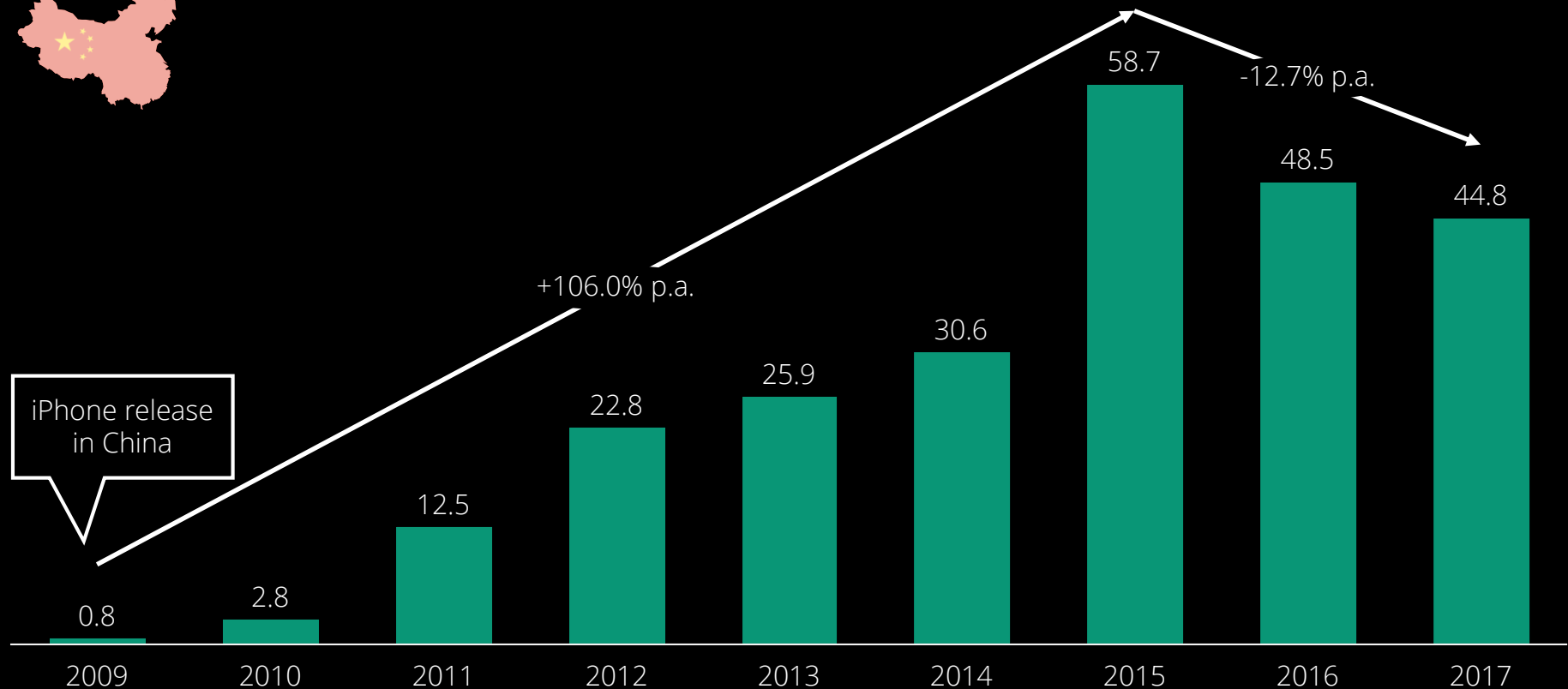
Spending opportunities for Apple's offshore cash



Note: The amount of offshore cash refers to the 2017 released Paradise Papers  
 1: Based on the average US\$5,417 per square foot for a Central Park West apartment  
 Source: Company Information, Forbes, NeighborhoodX, Morningstar, Dow Jones, IMF

# Competition from Chinese smartphone vendors is threatening Apple's China business

Apple revenues generated in the „Greater China“ area in billion US\$



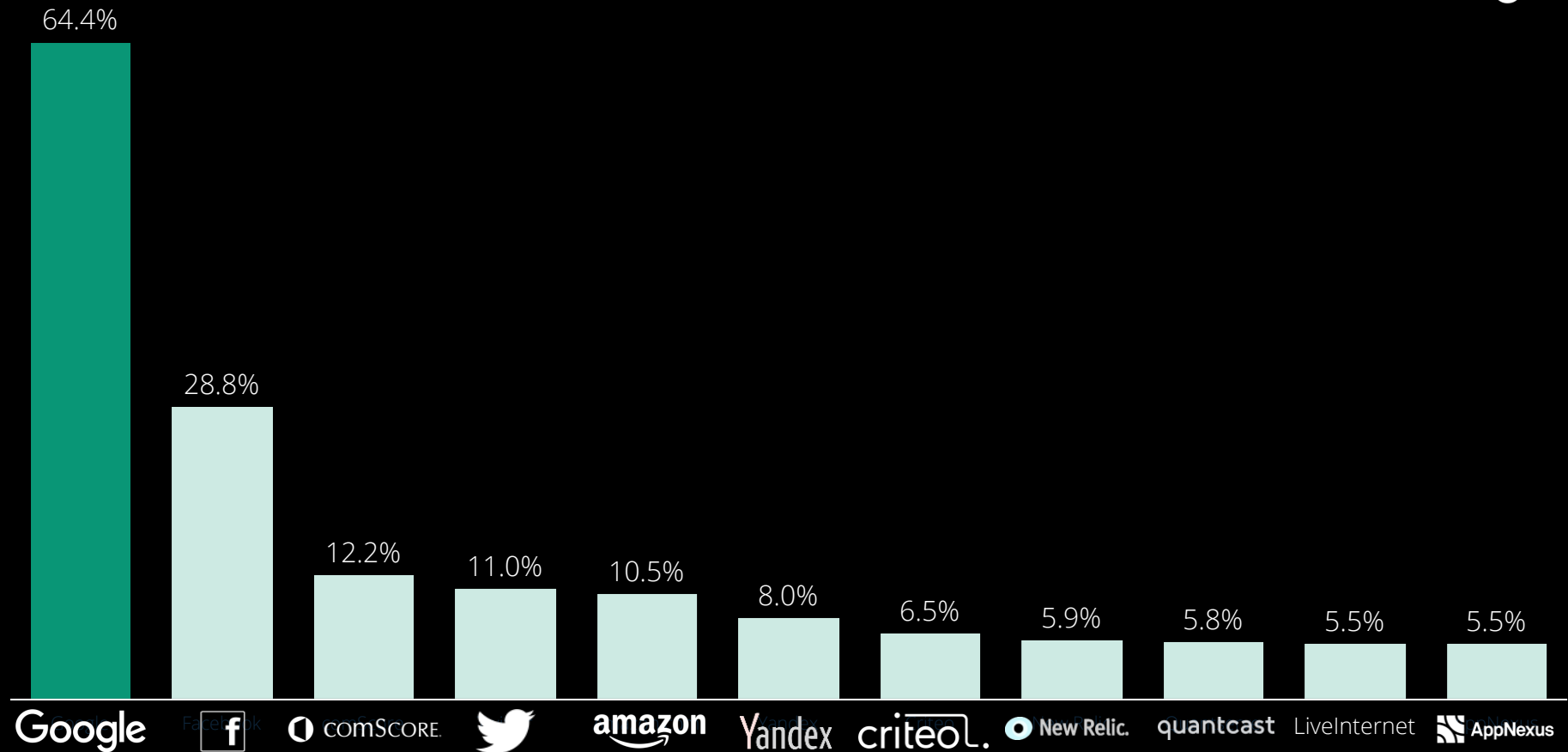
“If it isn't on Google, *it doesn't exist.*”

**Jimmy Wales**  
Co-founder of Wikipedia

# Google's page load tracking covers almost 65% of all page loads

Share of global page loads tracked by technology companies

Google



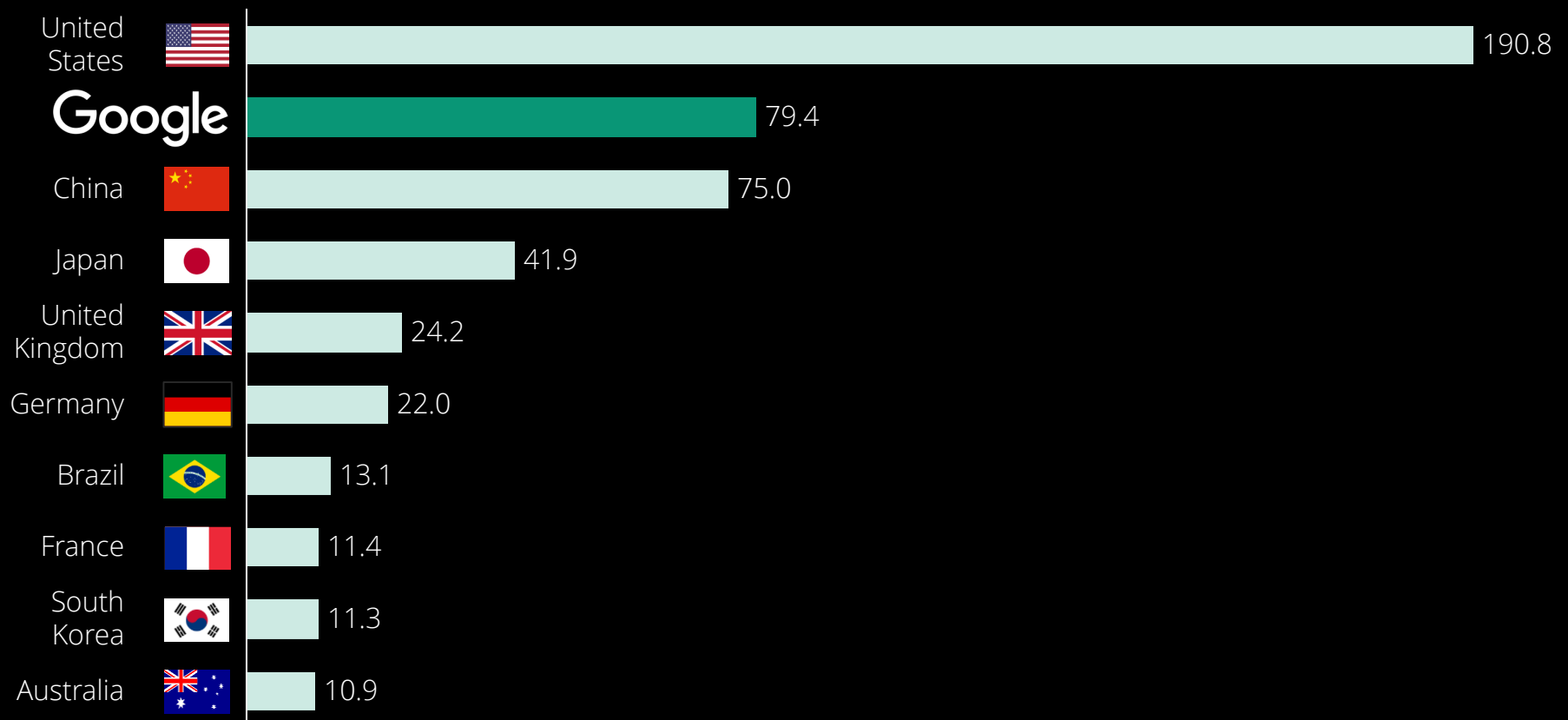
Note: Based on the analysis of more than 144 million page loads by 850,000 users in more than 20 countries

56 Source: Ghostery, Cliqz

# Google generated more revenues through advertising than China spent on ads in 2016

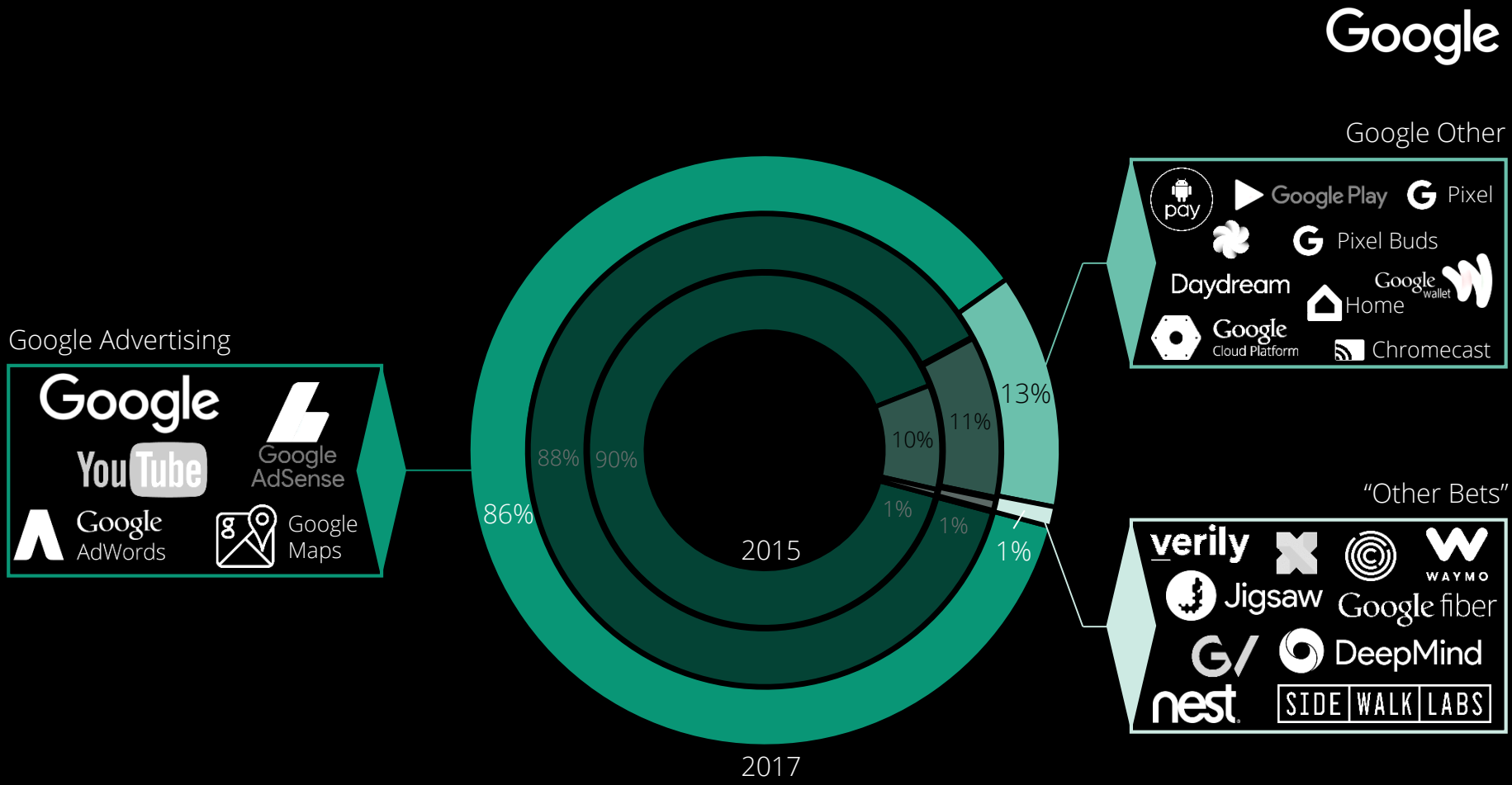
Google's advertising revenues and total ad spending in the largest ad markets in 2016 in billion US\$

Google



# Since digital ads generate so much revenue, Google has plenty of cash to develop its "Other Bets"

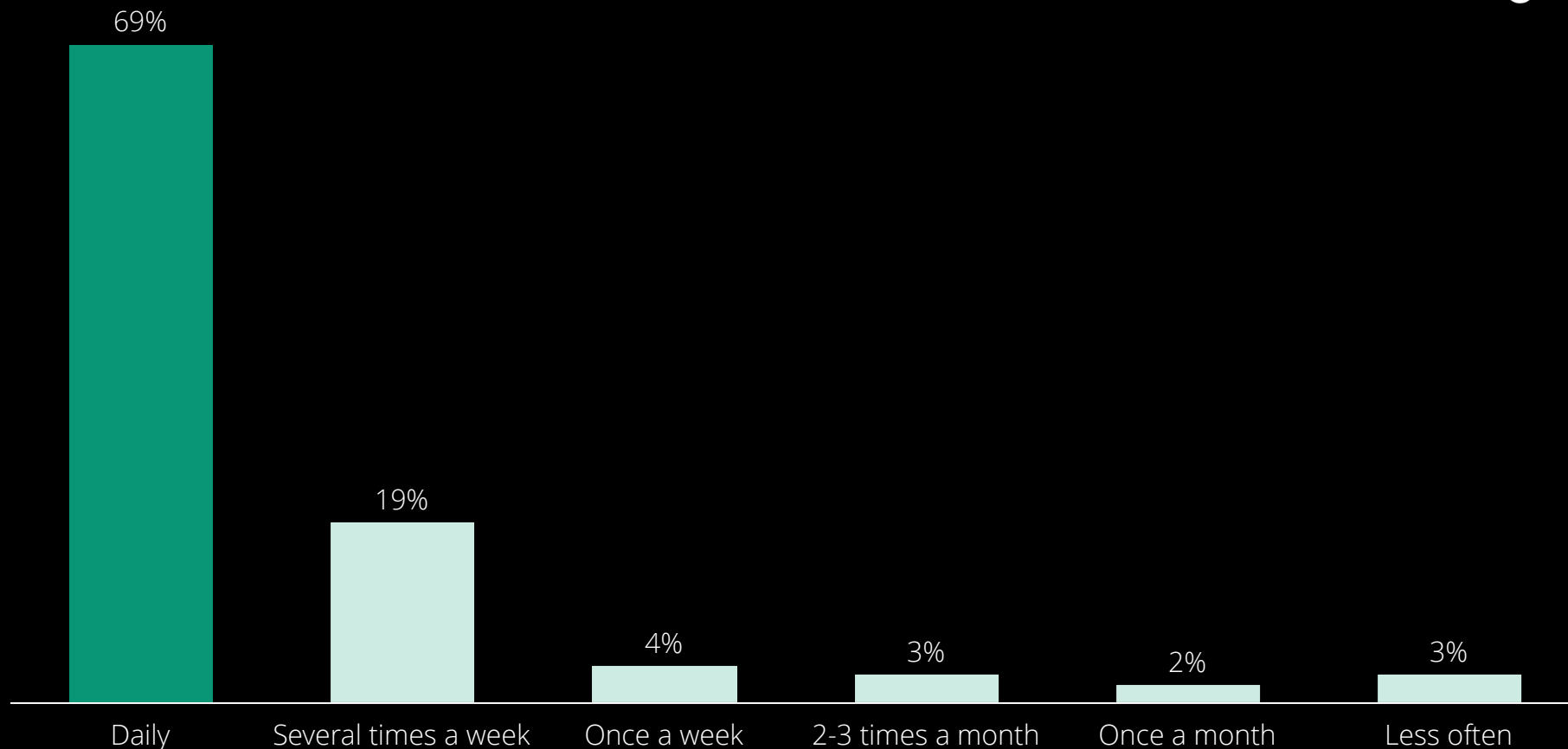
Revenue share of Alphabet's product categories



# Almost 70% of U.S. users access Google every day

Usage frequency of Google services and products in the U.S. in 2017

Google



"How often do you use Google services and products?"; n=916; respondents who use Google products or services  
Base: Google product or service users

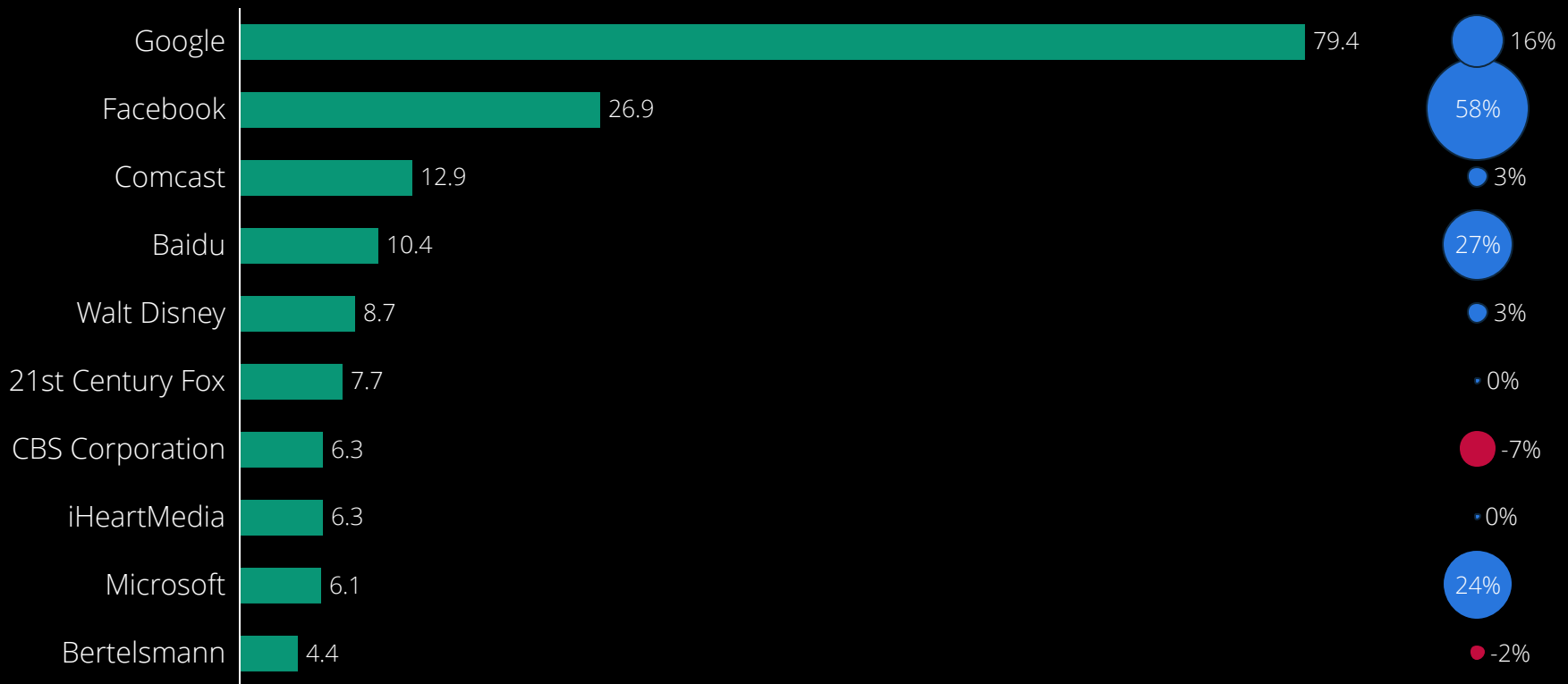
59 Source: Statista Survey "Google, Amazon, Facebook and Apple in the U.S. 2017"

# Google's US\$79bn in ad revenues secure its pole position, but other tech brands are growing faster

Advertising revenues and growth rates of major media and tech brands

Google


Advertising revenues in billion US\$ in 2016



1: CAGR: Compound Annual Growth Rate / average growth rate per year

Source: Zenith



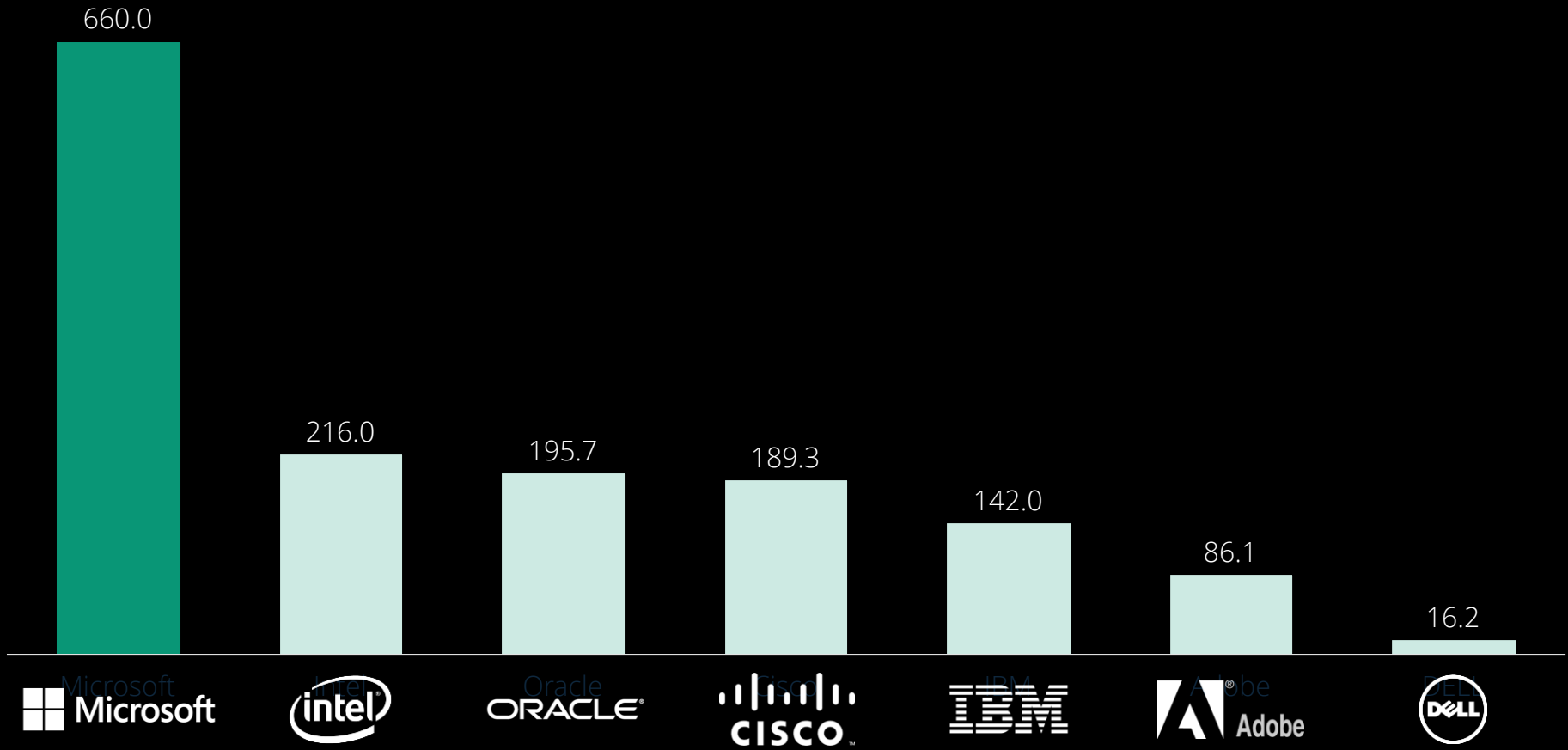


“ When Paul Allen and I started Microsoft over 30 years ago, ***we had big dreams about software.*** We had dreams about the impact it could have.

**Bill Gates**  
Founder of Microsoft

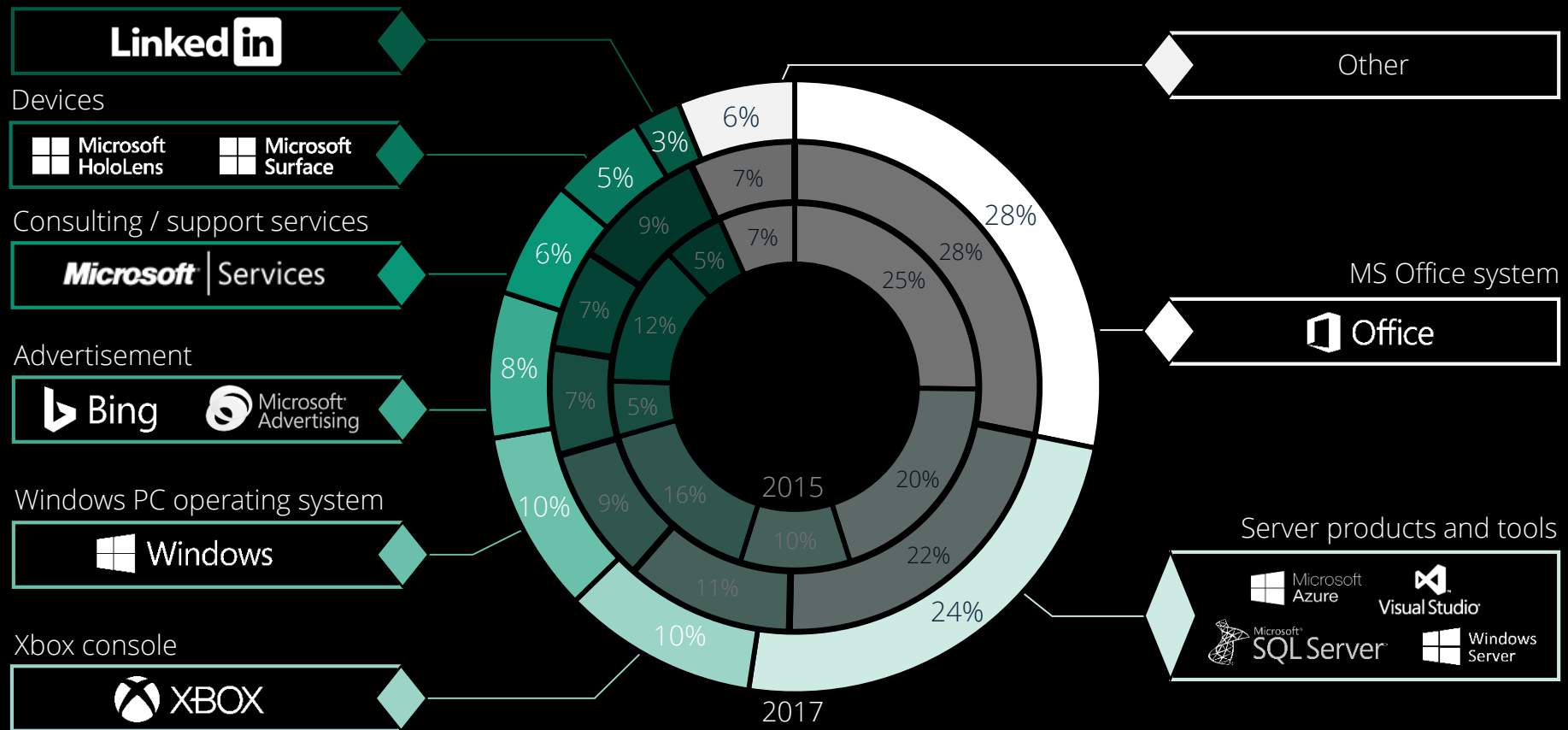
# With US\$660bn, Microsoft is the most highly valued software company

Market cap of traditional IT companies in billion US\$



# Microsoft Office products are the largest revenue source accounting for 28% in 2017

Revenue share of Microsoft's product categories



# Many businesses depend on Microsoft: 80% of fortune 500 companies use Microsoft cloud offerings

Microsoft products in numbers

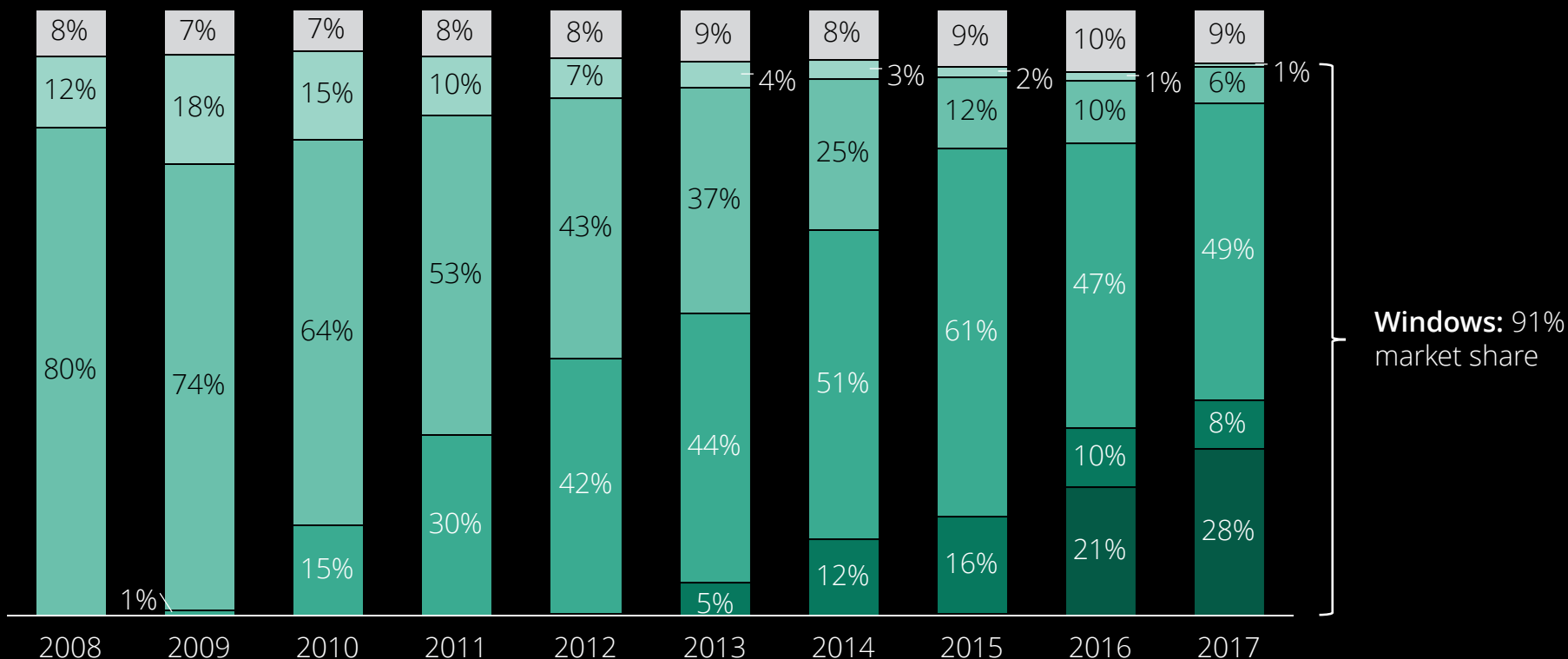


# 91% of all desktop PCs run on Microsoft Windows

Worldwide desktop market share of operating systems



Other Operating Systems Windows Vista Windows XP Windows 7 Windows 8 Windows 10

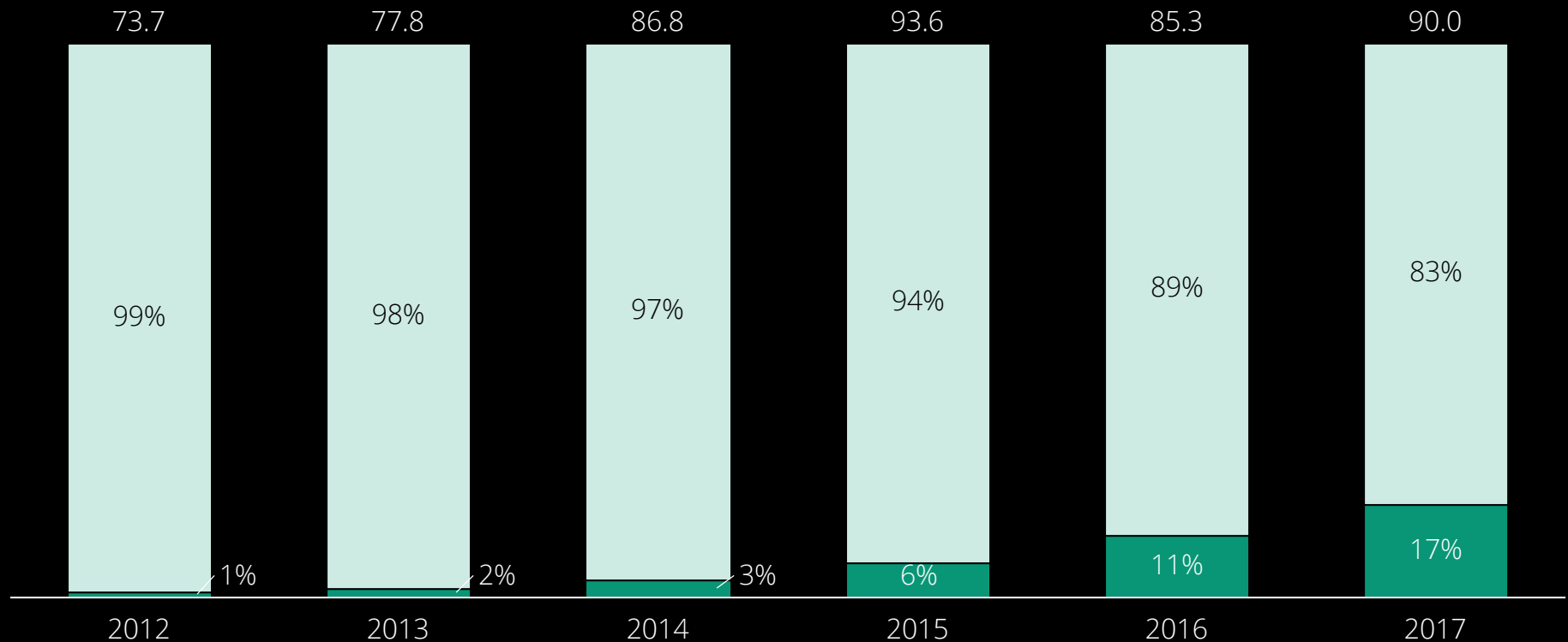


# The Commercial Cloud business is getting increasingly important, with a revenue share of 17% in 2017

Commercial Cloud revenues as a share of total revenue in billion US\$



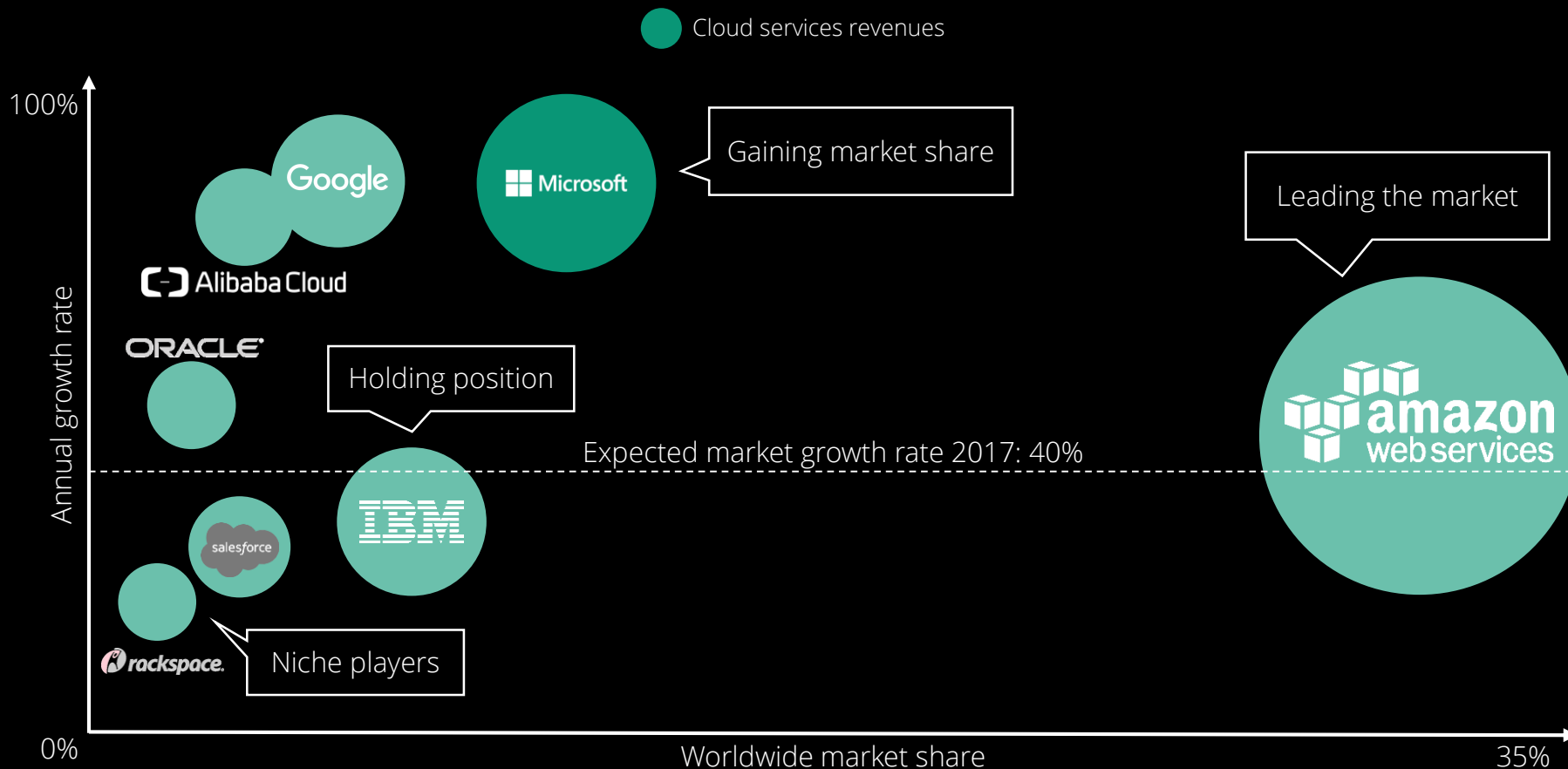
Other Segments Commercial Cloud



Note: Commercial Cloud comprises Office 365 Commercial, Dynamics CRM Online, Microsoft Azure and other Microsoft Office online offerings  
 Source: Microsoft

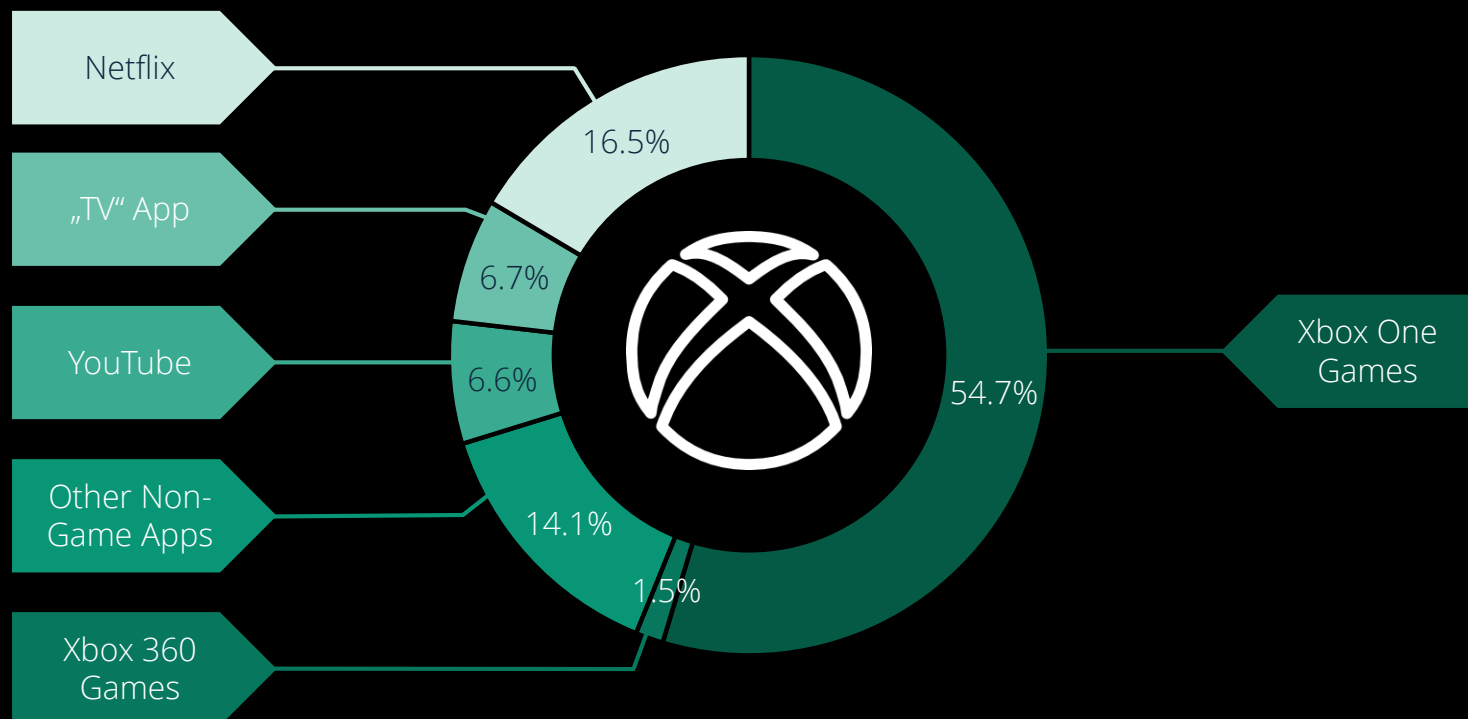
# Although the Microsoft cloud business is growing fast, Amazon is still the top dog

Cloud provider<sup>1</sup> competitive positioning as of Q3 '17



# Microsoft's most important gaming product Xbox One is also used for streaming

Estimated share<sup>1</sup> of time spent on Xbox One content from Sep '16 to Feb '17



1: Based on 930,000 Xbox One users on Xbox Live sampled from 26-09-2016 to 12-02-2017

Source: ars Technica





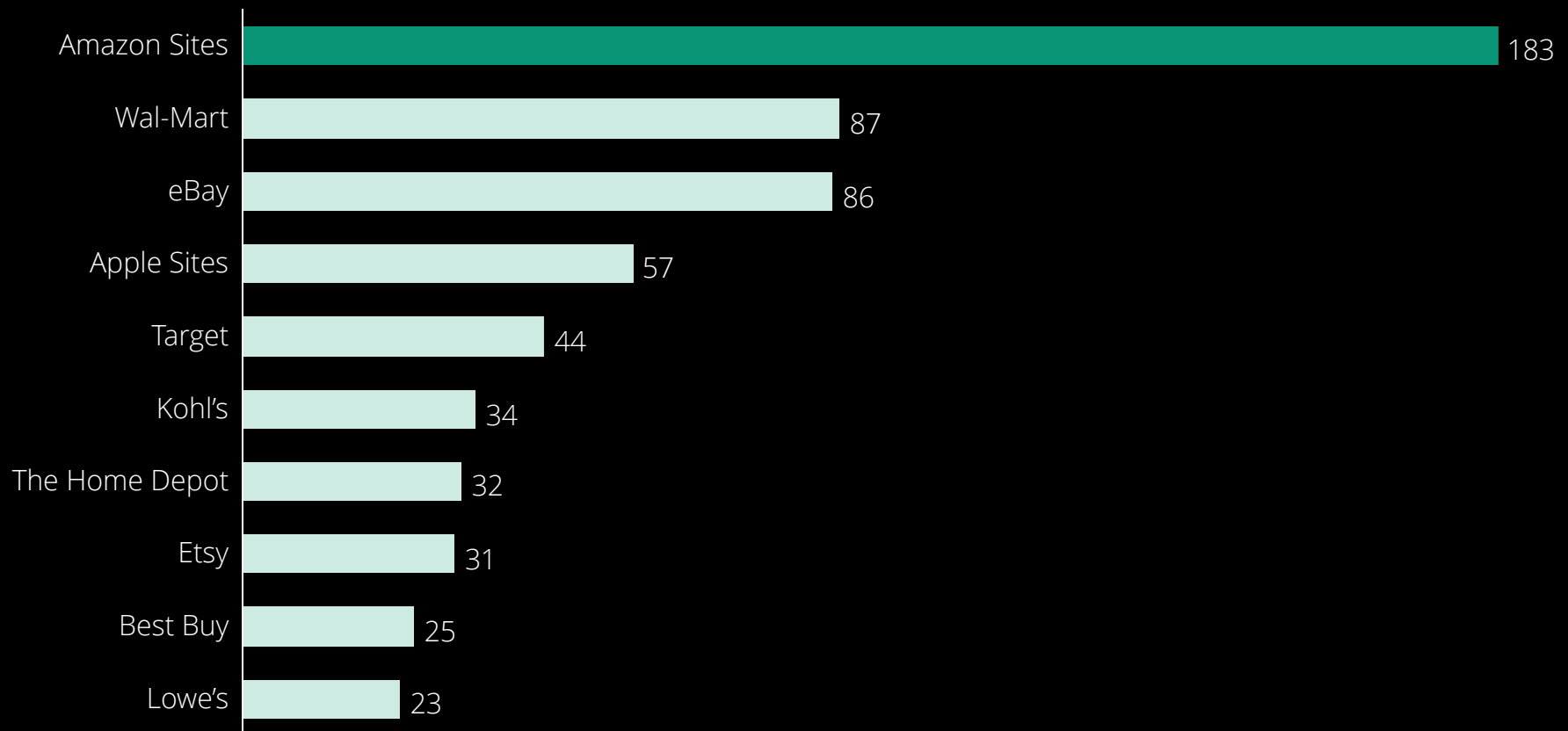
**“ I think Amazon is the greatest start-up and the greatest company in the world. The way they are using new technologies is *not just disrupting retail, it's getting ready to disrupt everything.* ”**

**Mark Cuban**

Founder, investor and owner of the Dallas Mavericks

# Amazon dominates online retail, with >180 million unique visitors per month

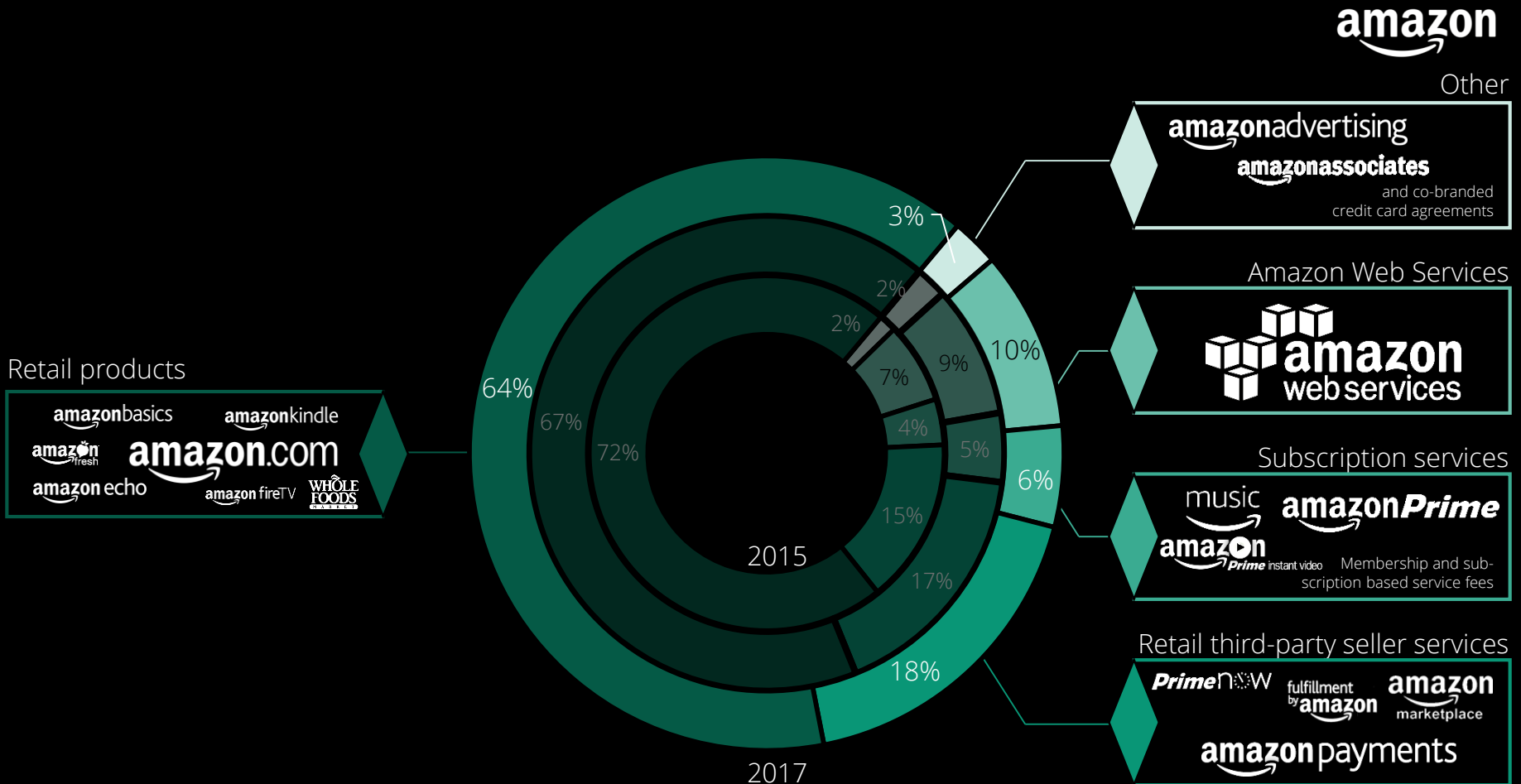
Most popular retail websites in the U.S., ranked by unique monthly visitors in million



Note: As at September 2017, multi-platform  
Source: comScore

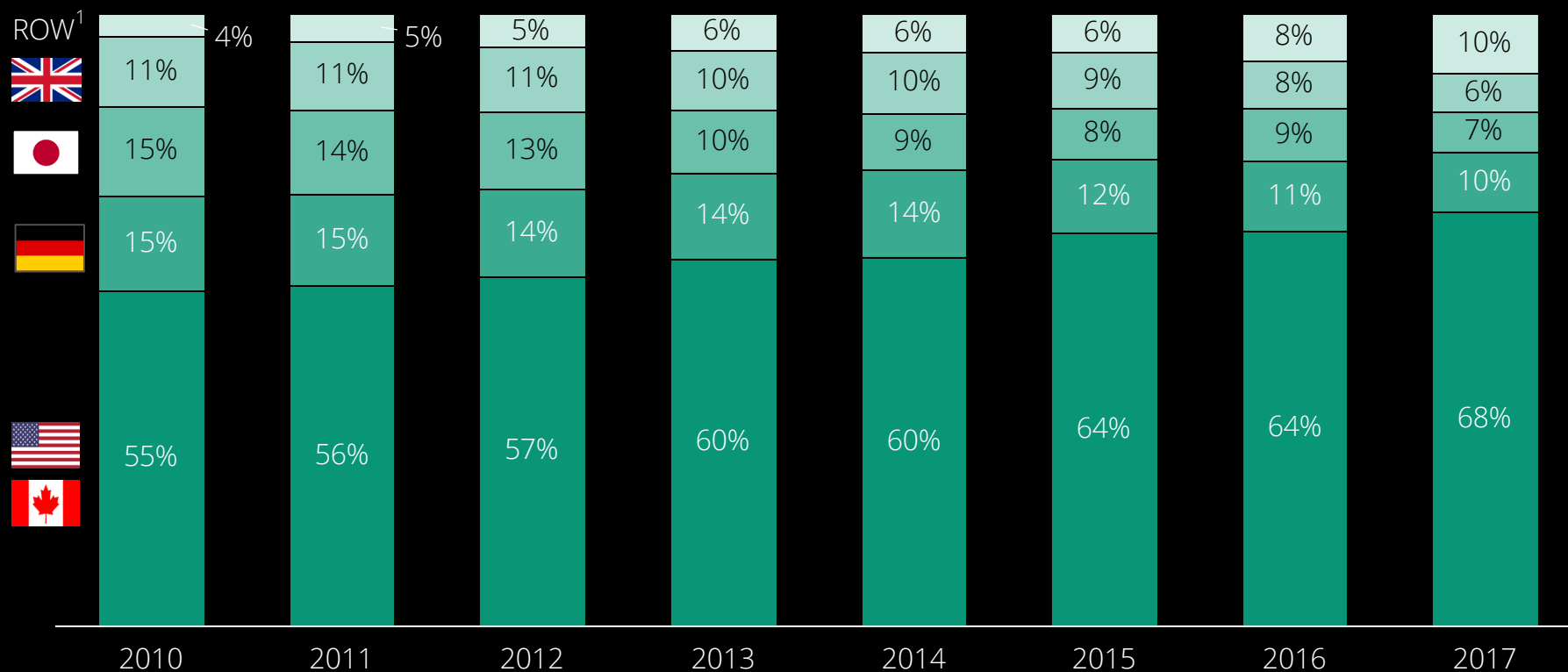
# Retail business drives 82% of Amazon revenues

Revenue share of Amazon's product categories



# The share of North America in Amazon's overall revenue increased to 68%

Amazon's annual revenues split by country



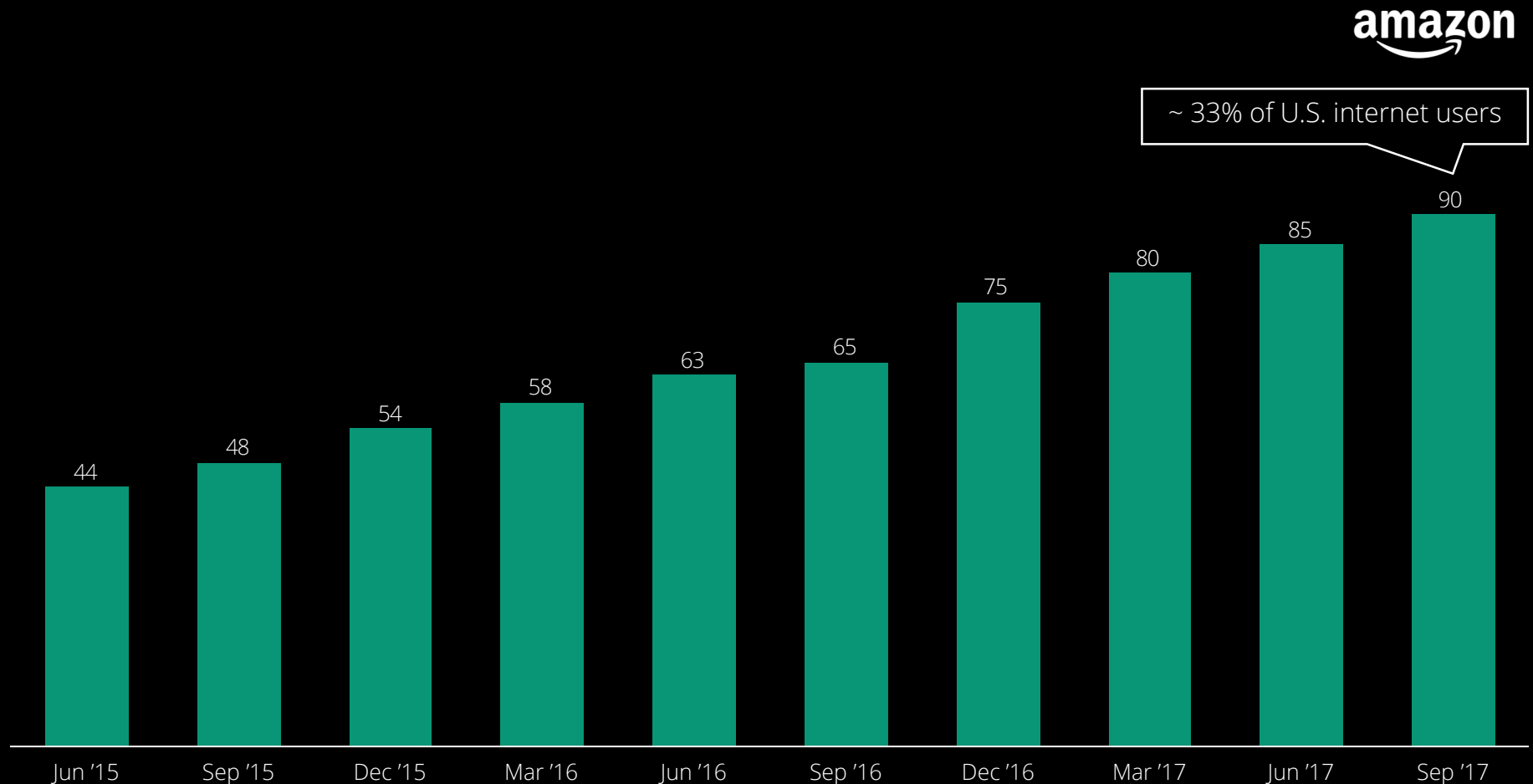
Note: Revenues from AWS are excluded

1: ROW = Rest of world

Source: Company Information

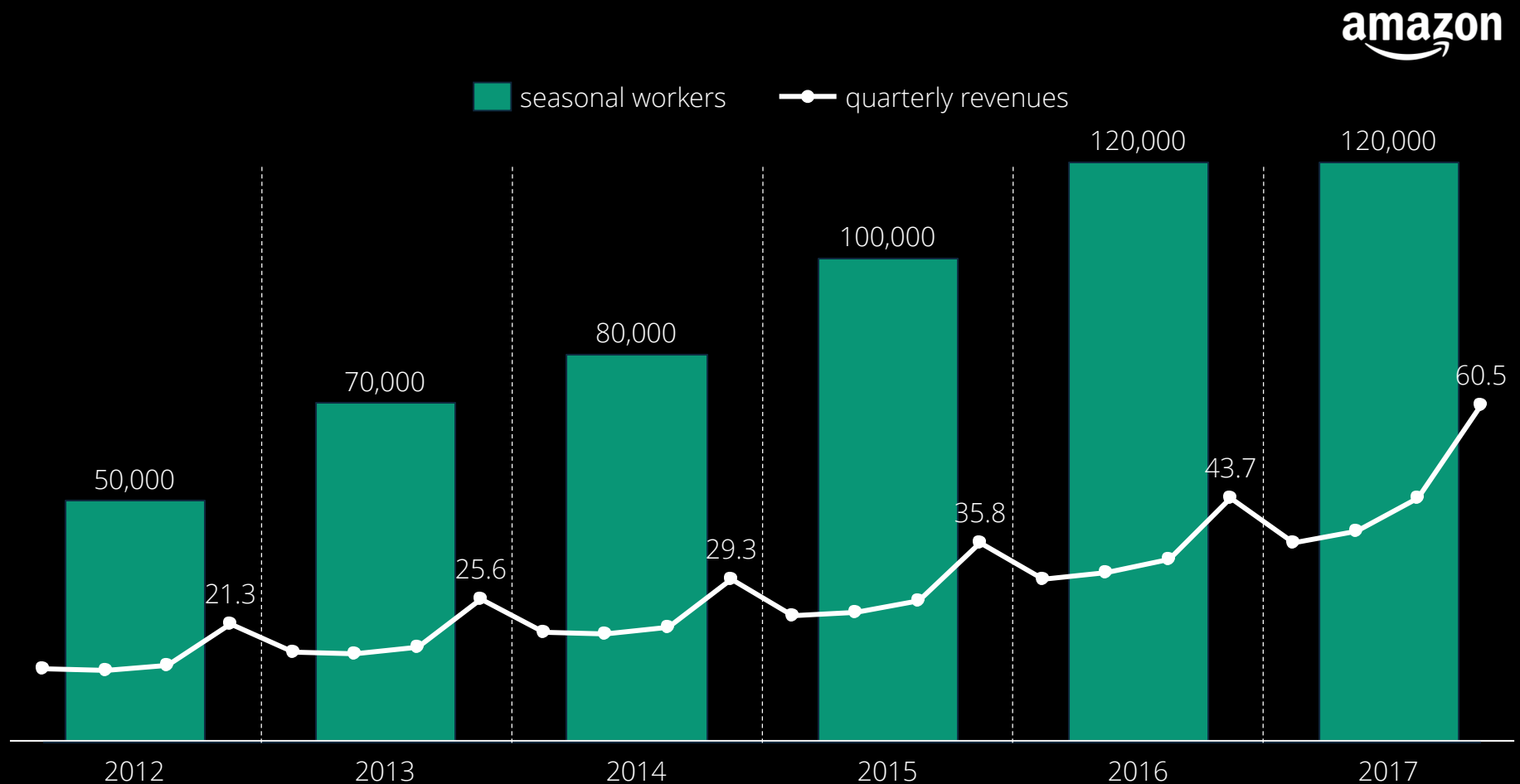
# Customer loyalty in the form of Prime memberships could be a reason for Amazon's strength in the U.S.

Number of Amazon Prime members in the U.S. in million



# High revenues require a large workforce: Amazon hired 120k seasonal workers in 2017

Seasonal workers hired by Amazon for holiday season in thousand and quarterly revenues in billion US\$





“ Advertising works most effectively when it's in line with what people are already trying to do. And people are trying to communicate in a certain way on Facebook - they share information with their friends, they learn about what their friends are doing - so there's really a whole **new opportunity for a new type of advertising model** within that.

**Mark Zuckerberg**  
Founder and CEO of Facebook

# 2 billion and counting – the Facebook community is still growing despite its already huge active user base

Facebook's global active users in billion



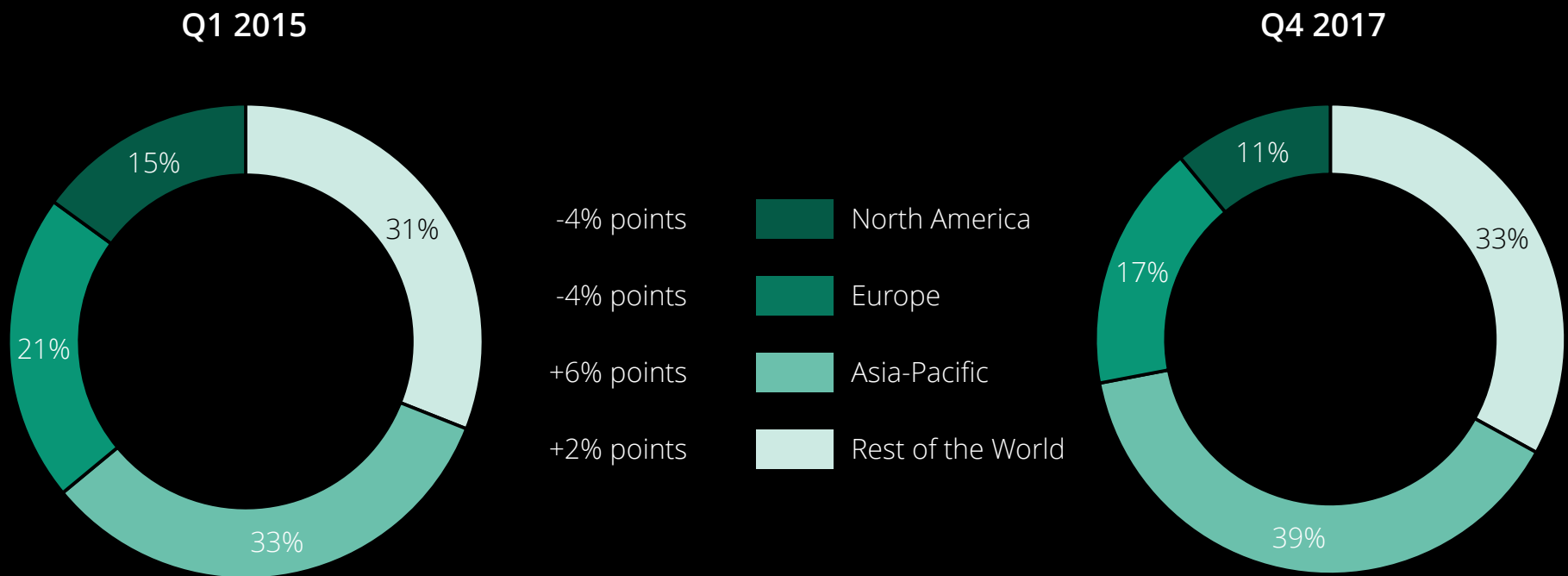
Monthly, but not daily active users Daily active users





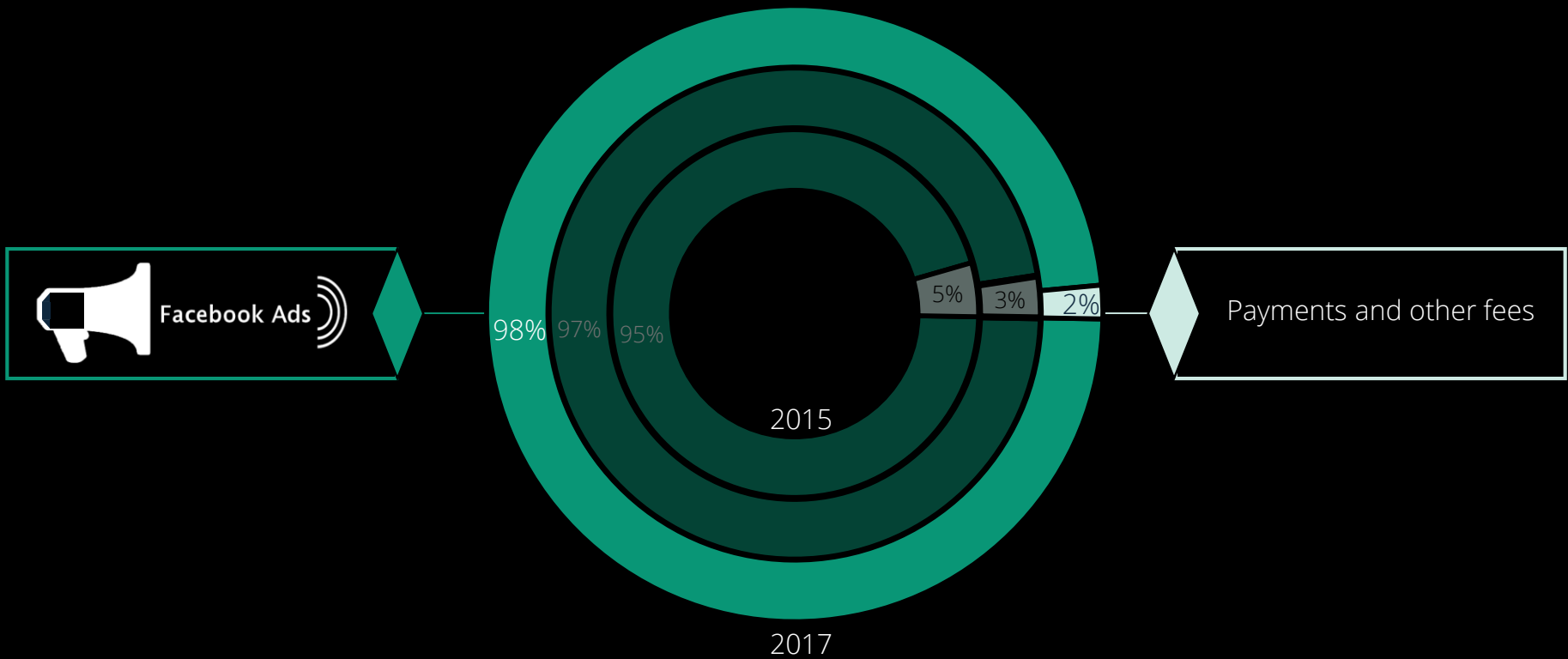
# The share of Facebook users in Asia-Pacific increased the most

Regional distribution of Facebook's overall monthly active users



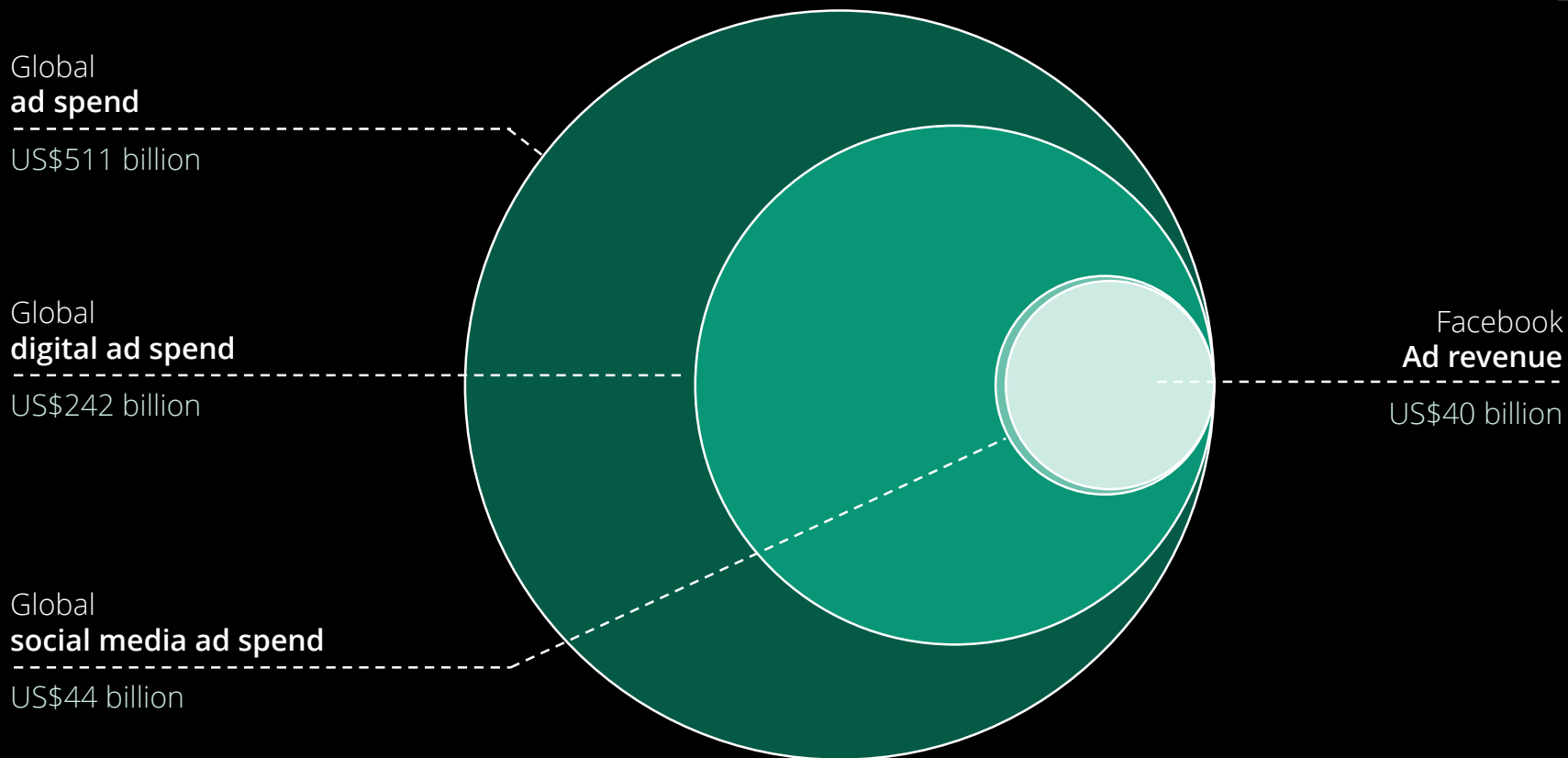
# Facebook's revenues almost exclusively stem from ads

Revenue share of Facebook's product categories



# Facebook is responsible for almost the entire social media ad spending market

Facebook ad revenue compared to global ad spending in billion US\$



Note: Bubble sizes only illustrate ratios and do not correspond to actual market sizes

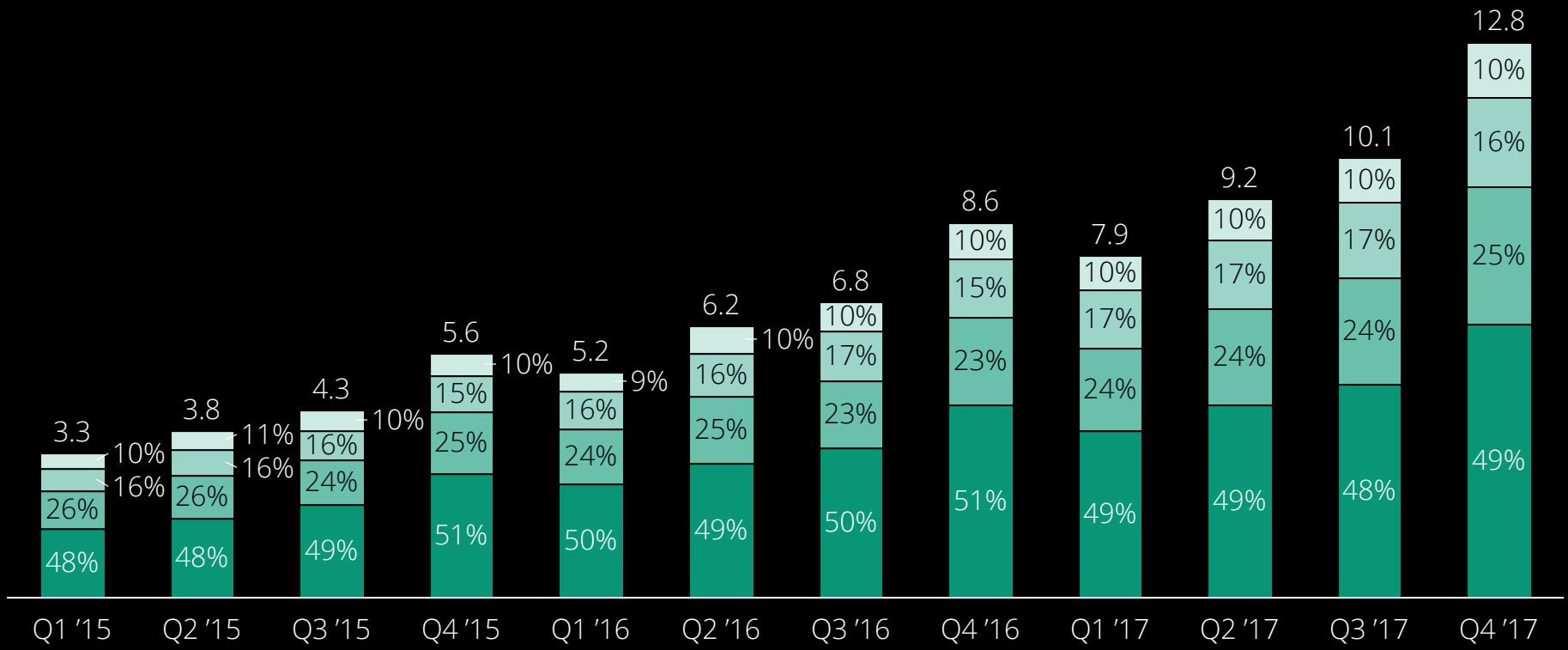
Source: Statista Digital Market Outlook 2017, Facebook, Magnaglobal

# Facebook's home market North America leads the regional revenue distribution with a share of ~50%

Facebook's quarterly advertising revenues in billion US\$



■ North America 
 ■ Europe 
 ■ Asia-Pacific 
 ■ Rest of World

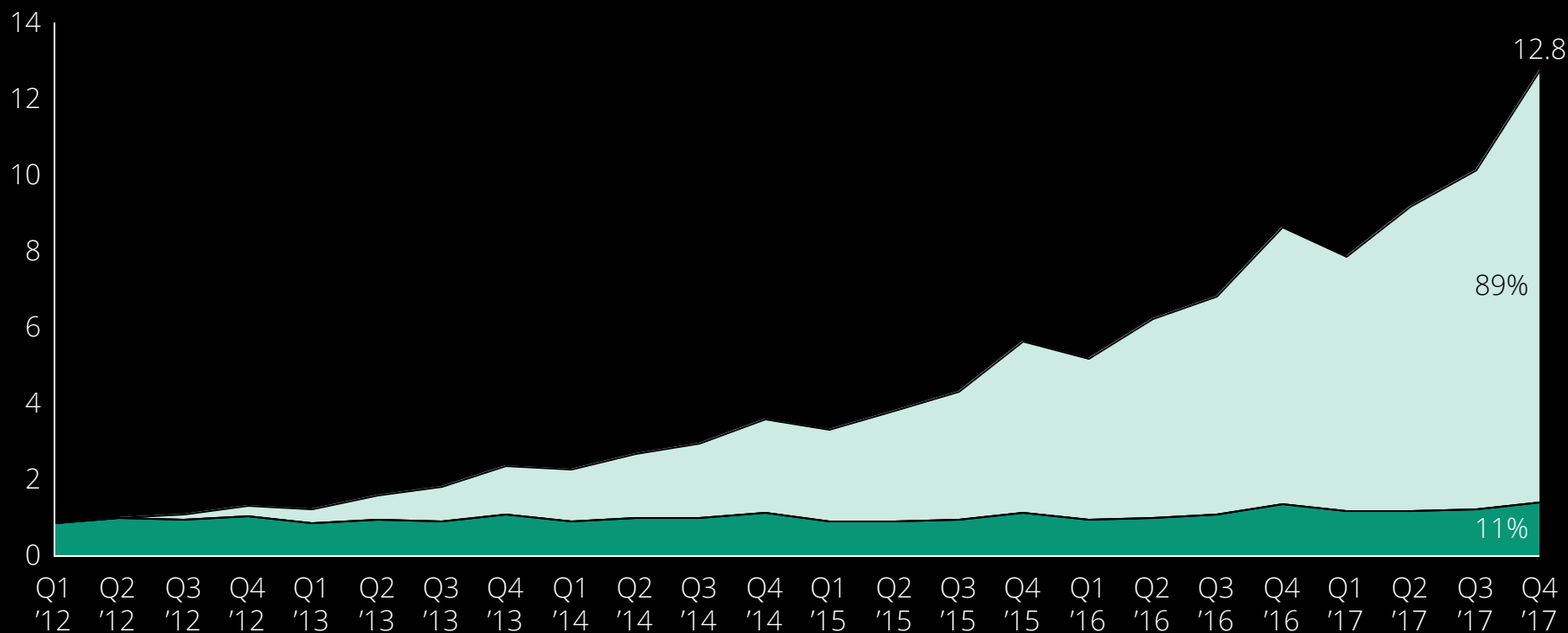


# Mobile accounts for 89% of Facebook's ad revenues

Ad revenue of Facebook by segment in billion US\$



Mobile Advertising
  Desktop Advertising



## Global Trends

# Vertical Platforms

Everything that can become a platform, will become a platform

In his famous article "Why software is eating the world", VC Marc Andreessen stated: *"Six decades into the computer revolution, four decades since the invention of the microprocessor, and two decades into the rise of the modern Internet, all of the technology required to transform industries through software finally works and can be widely delivered at a global scale", a statement which has never been more true than today.*

No matter if in terms of accommodation, digital content or transportation: Software, and in particular digital platforms join creators and consumers in a very efficient and convenient way. More importantly, they are scaling fast!

Spotify, Netflix, Airbnb, Uber and many other platforms have reached critical mass in terms of connecting creators and consumers of content. In the last five years, Spotify has increased its number of paying subscribers from three to 70 million users, Netflix has surpassed major pay-TV providers in paying subscribers and Airbnb increased annual guest arrivals from three million to over 100 million.

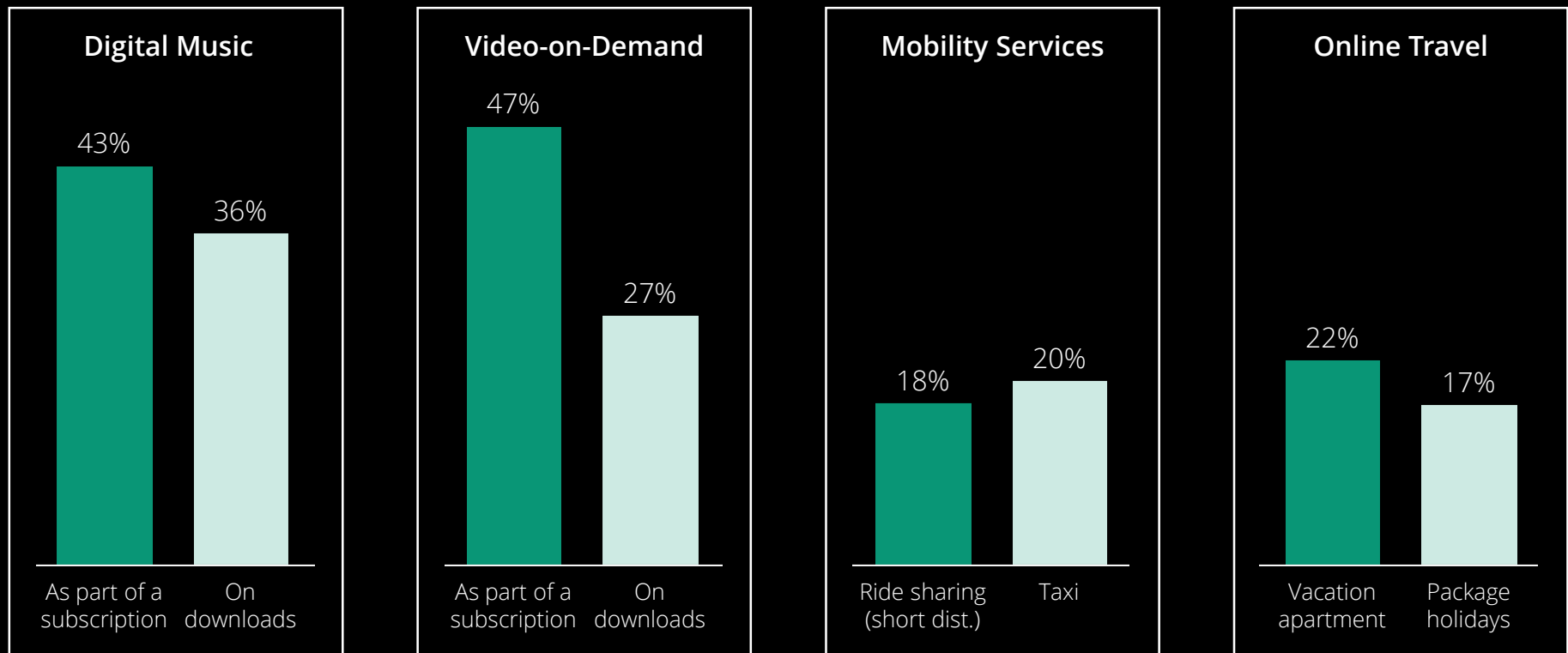
This development has not yet come to an end. These players are going to increase pressure on traditional offline businesses even more – as the shift from offline to online will continue. And those platforms sit at the digital end, waiting for more customers to come.

# Digital platforms popped up in many industries to challenge former incumbents

Products / services subscribed to, purchased, or booked online by U.S. customers

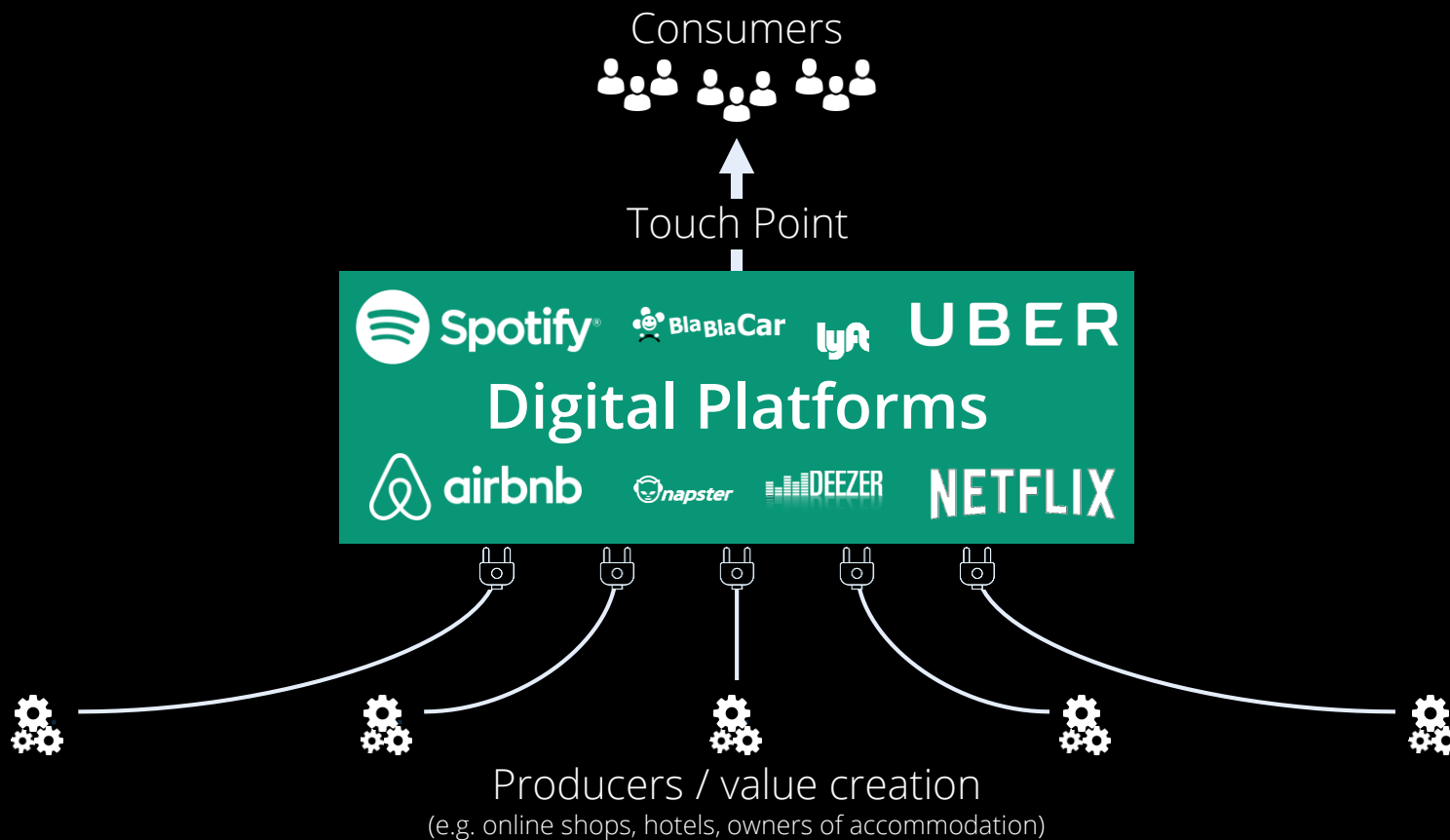


 Markets with huge vertical platforms     Markets led by established players



# The key to success is a platform that connects consumers and content creators

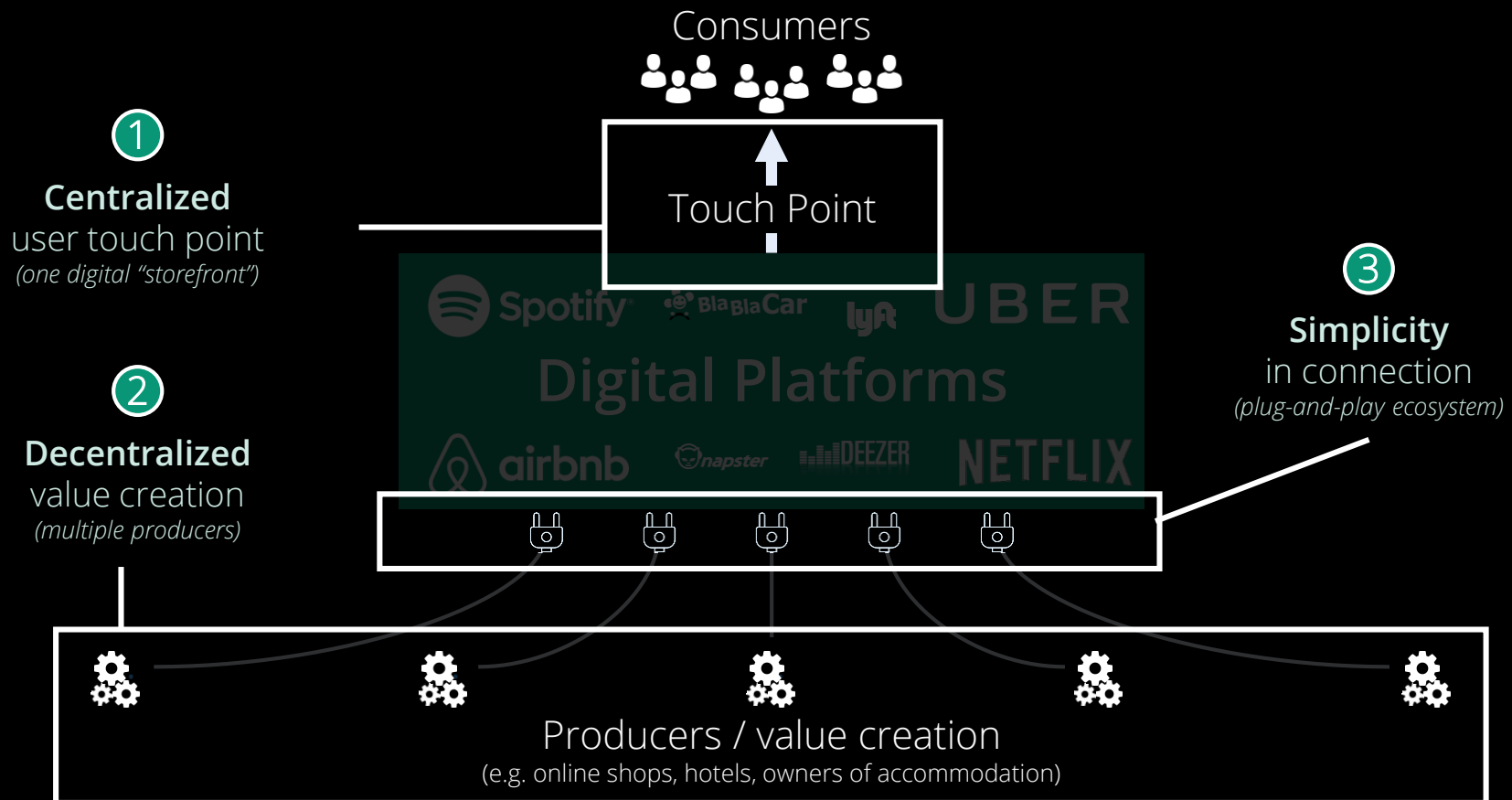
Digital platform approach in streaming & sharing economy





# Three main factors drive the outstanding success, enable fast scalability and tremendous growth

Factors driving the success of digital platforms



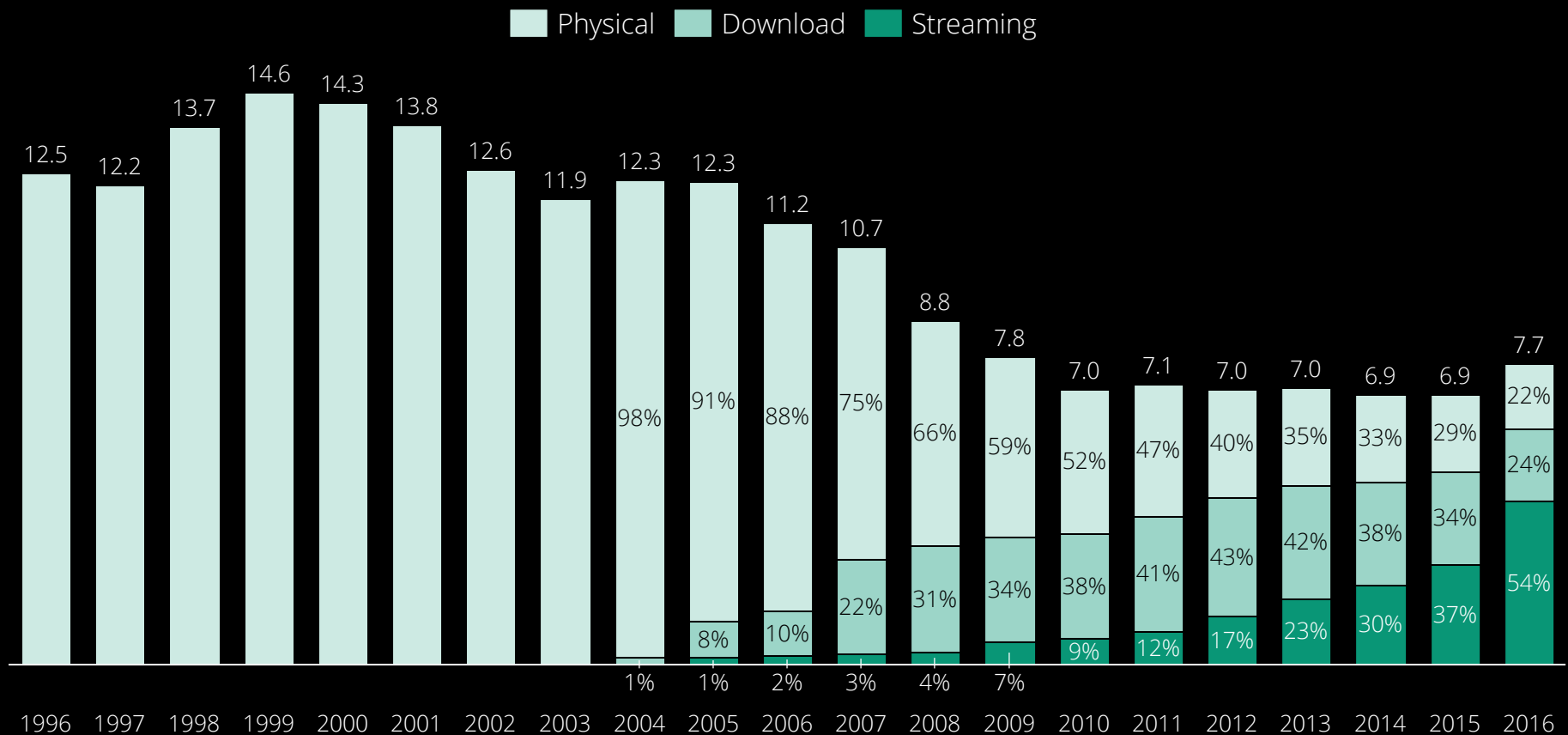


“ [...] I don't know where streaming will go in the future. The analytics that we're seeing tell us that **streaming is the next thing**, and downloads are going down. I feel like with the history of this platform, from vinyl to where we are now, **it just seems like the next logical step.**

**Shawn Corey Carter (Jay-Z)**  
Rapper, producer, CEO of Def Jam Records

# In only a decade, digital streaming achieved a share of 54% in U.S. recorded music revenues

U.S. recorded music year-end revenues in billion US\$

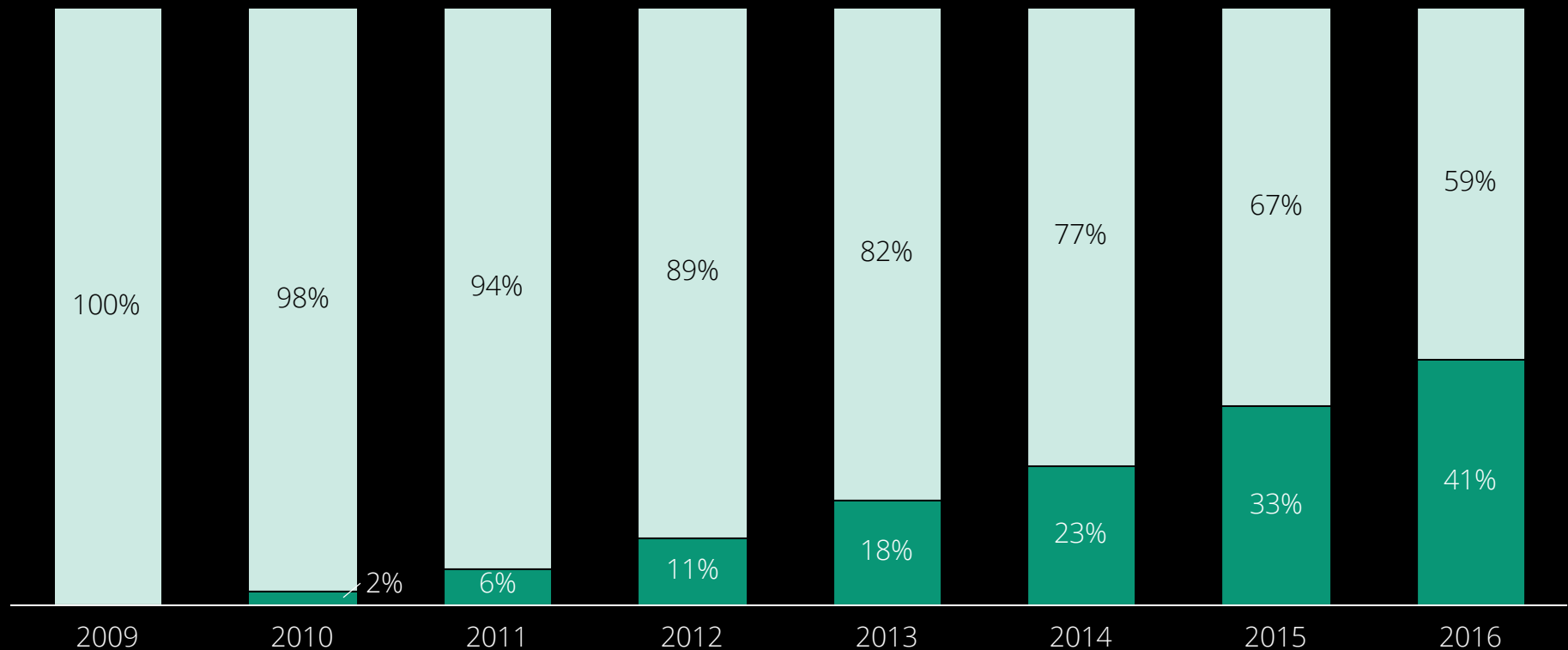


# Spotify is the clear market leader, accounting for over 40% of digital music revenues in 2016

Spotify's share of worldwide digital music revenues

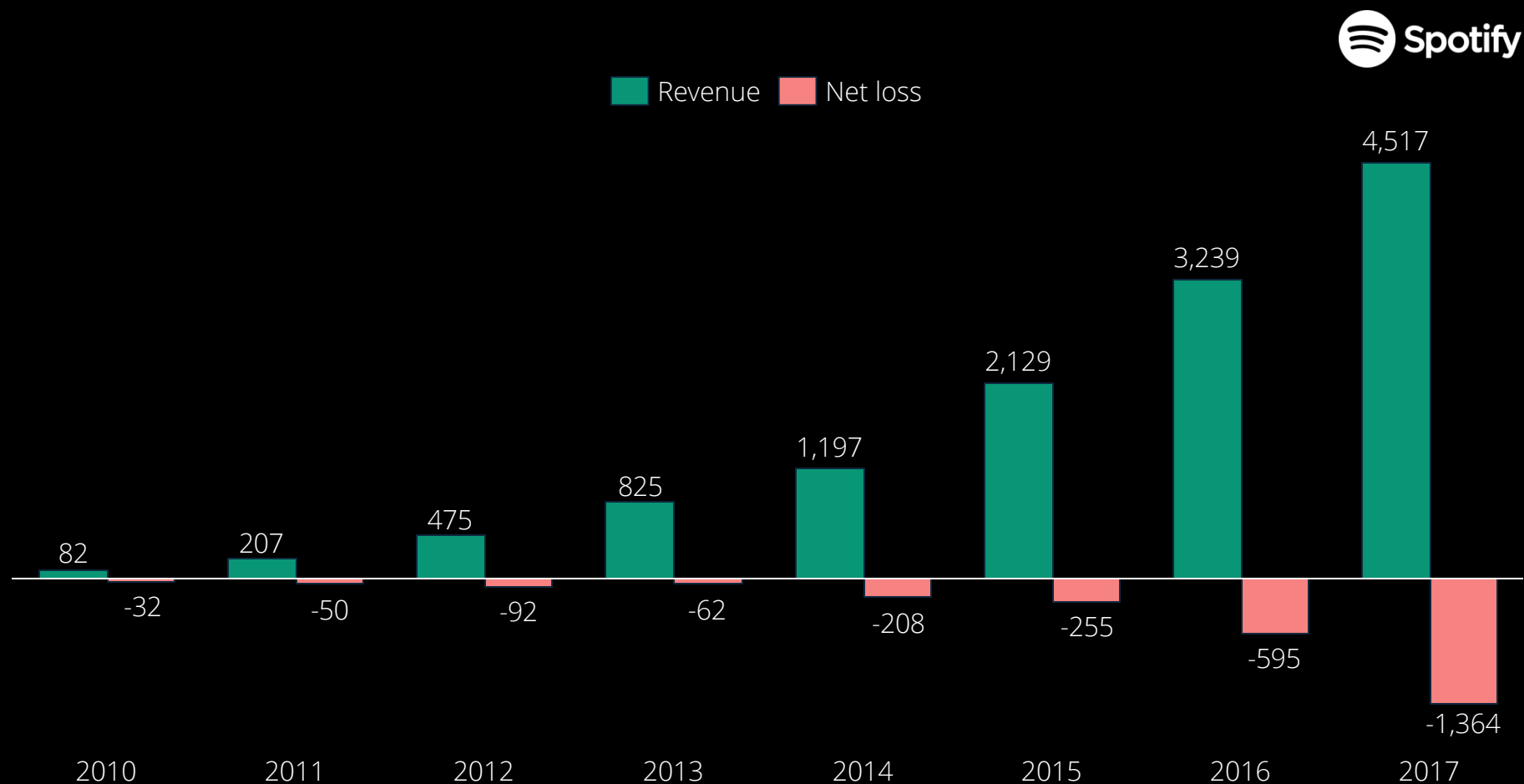


Others Spotify



# Revenues in 2017 are expected to top US\$4.5 billion

Spotify's annual revenues and net loss in million US\$

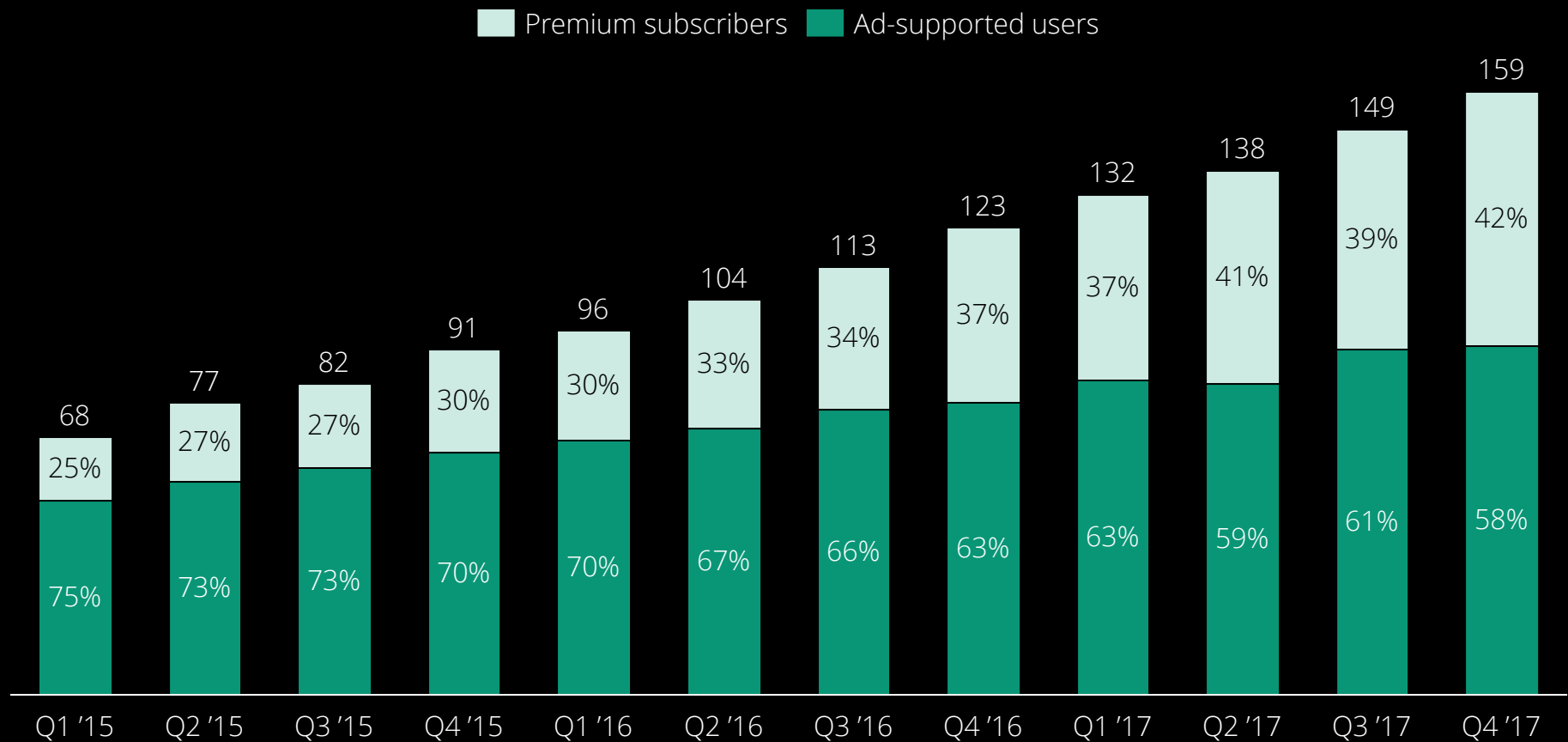


Note: All figures converted into US\$ with 2016 avg. annual exchange rate of 0.90554 US\$ per EUR

89 Source: Spotify

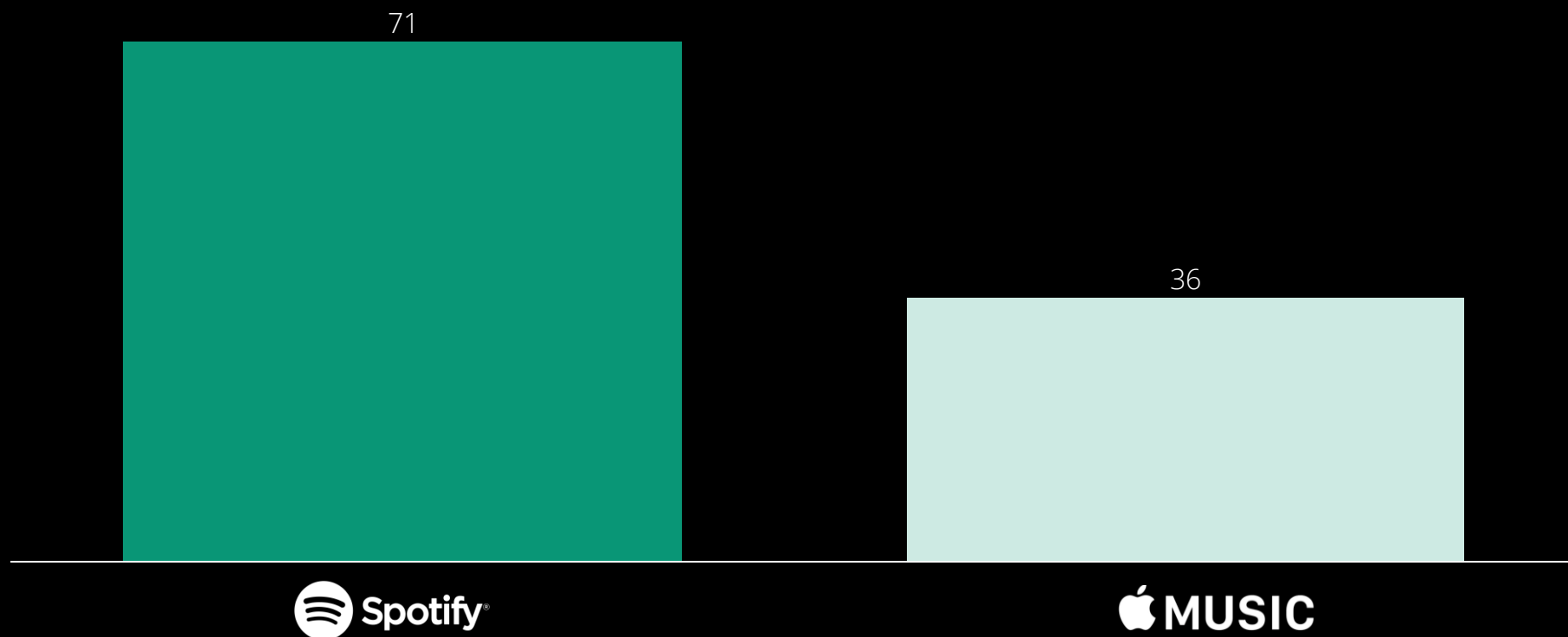
# Spotify's share of paying subscribers is growing rapidly and already makes up almost half of its MAUs


Spotify's monthly active users



# Apple Music is far behind, with only half of Spotify's paying subscribers

Paying subscribers to the biggest music streaming providers in million





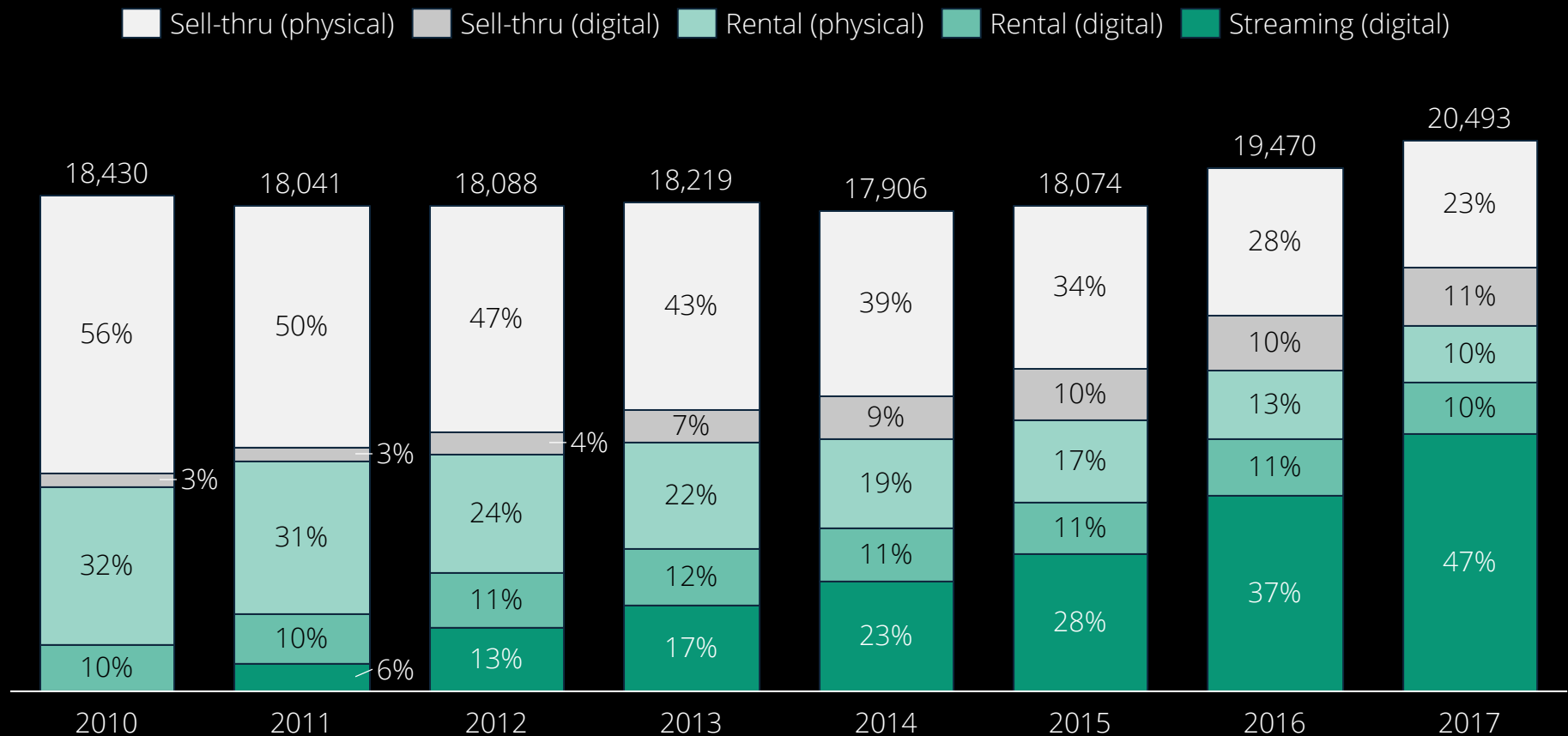
“Netflix shook it up, brought this whole new generation of people who said, ***'I watch things when I want to watch, how I want to watch, where I want to watch,*** and that's something that no one's going to ever forget.' This has changed the game completely, and I think it's the tip of the iceberg.

**Mike Colter**  
Actor



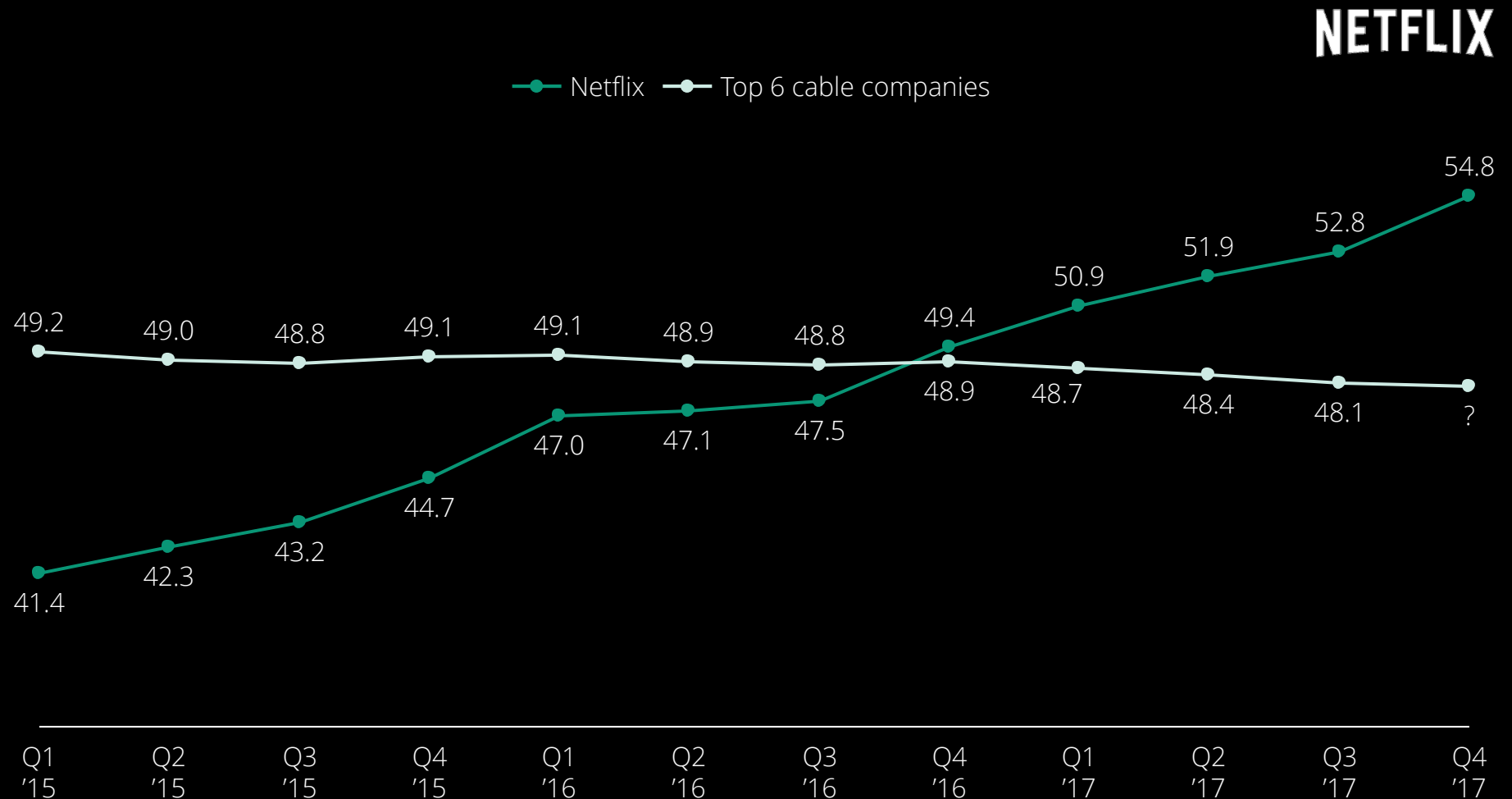
# Video streaming has a share of 47% in U.S. home entertainment spending

U.S. consumer spending on home entertainment in million US\$



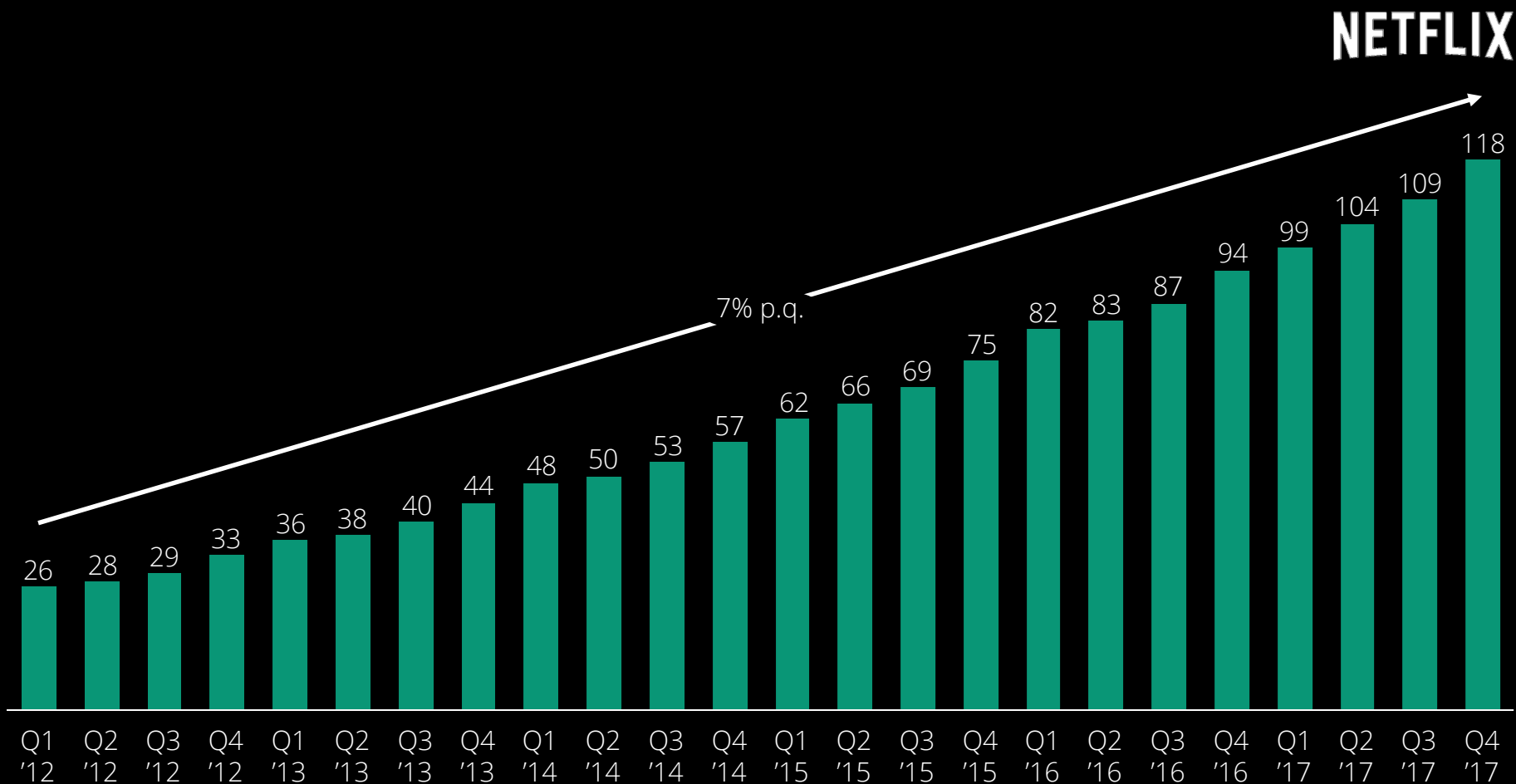
# Netflix already outperforms the top 6 cable companies in the U.S.

Total Netflix subscribers vs. pay-TV subscribers of top 6 cable companies in the U.S. in million



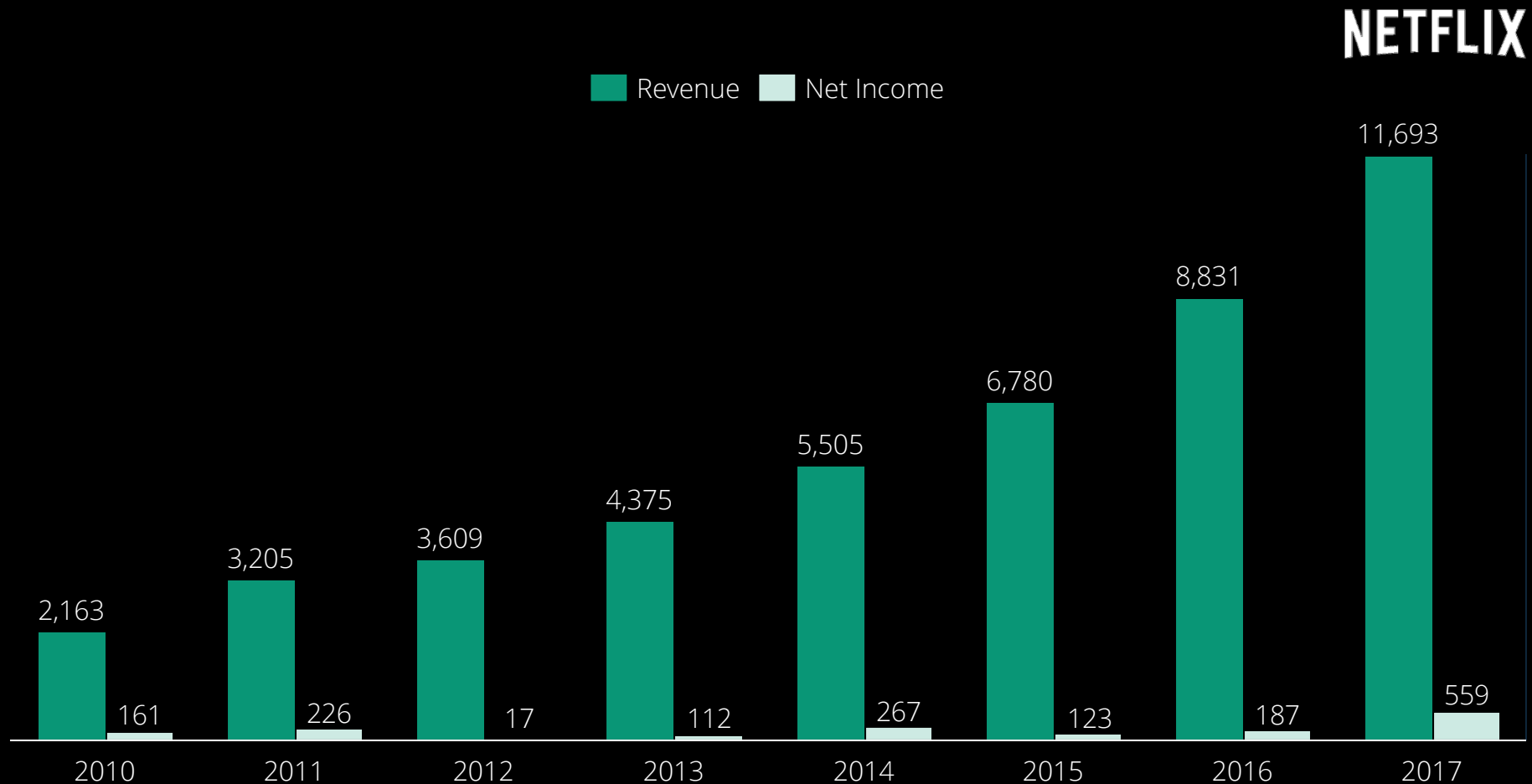
# Netflix increased their global user base to 118 million

Number of global Netflix memberships in million



# While revenues are approaching US\$12bn, net income stays small

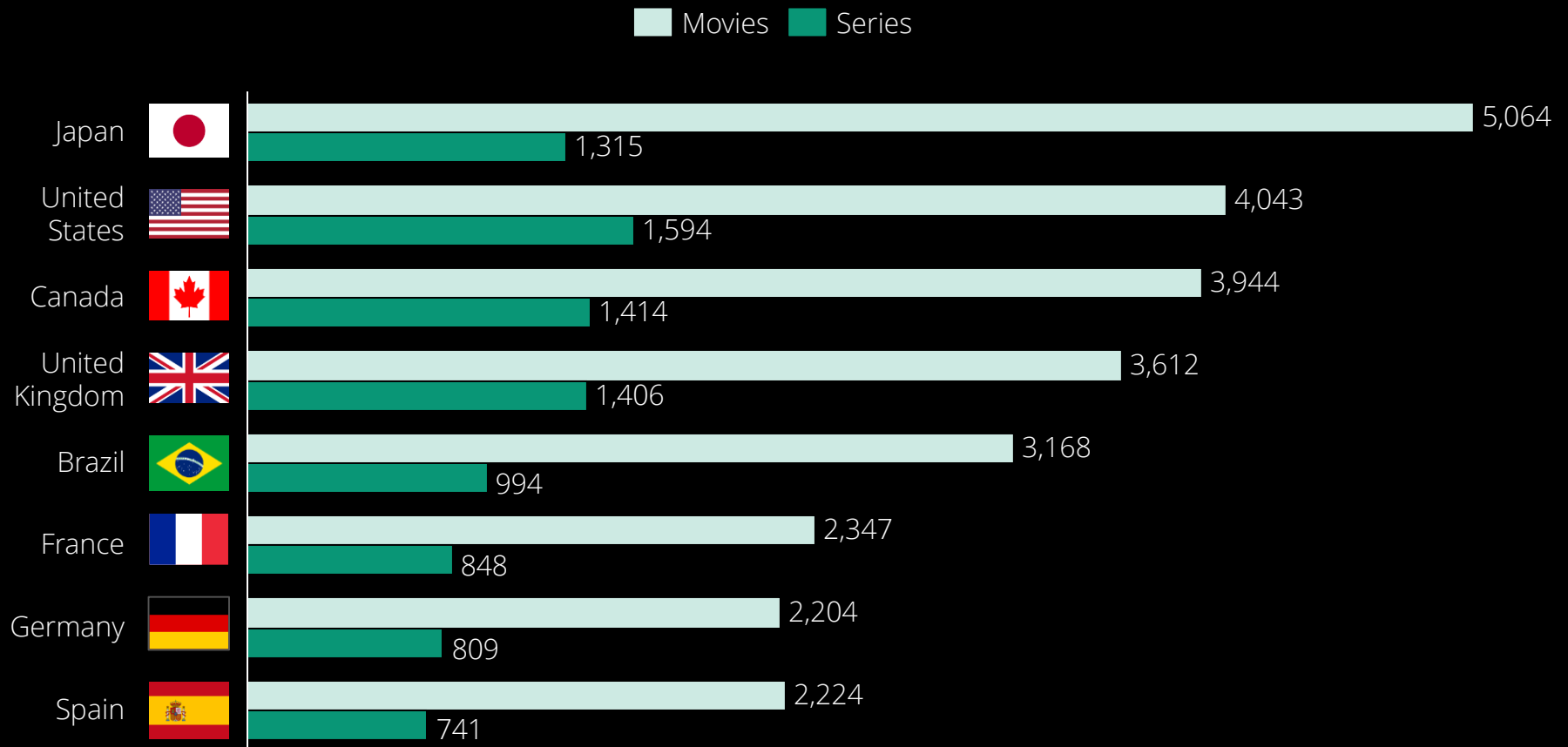
Netflix annual revenues and net income in million US\$



# Japan has by far the most movies, while the U.S. has the most series

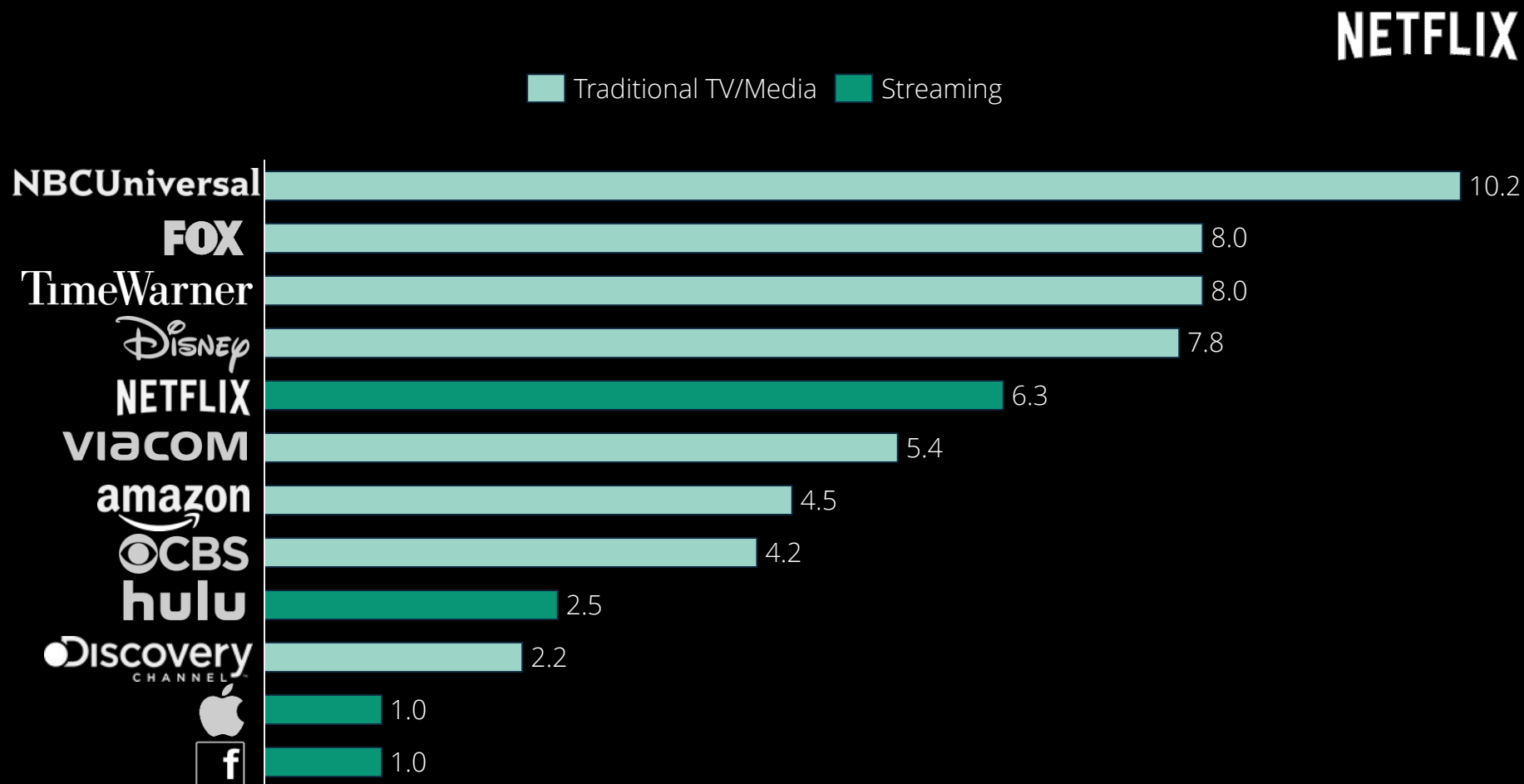
Amount of content available on Netflix in 2018 in selected countries


NETFLIX



# Streaming services catch-up: Netflix spent US\$6.3 billion on video programming

Estimated spending on non-sports video programming by selected companies in US\$ billion in 2017<sup>1</sup>





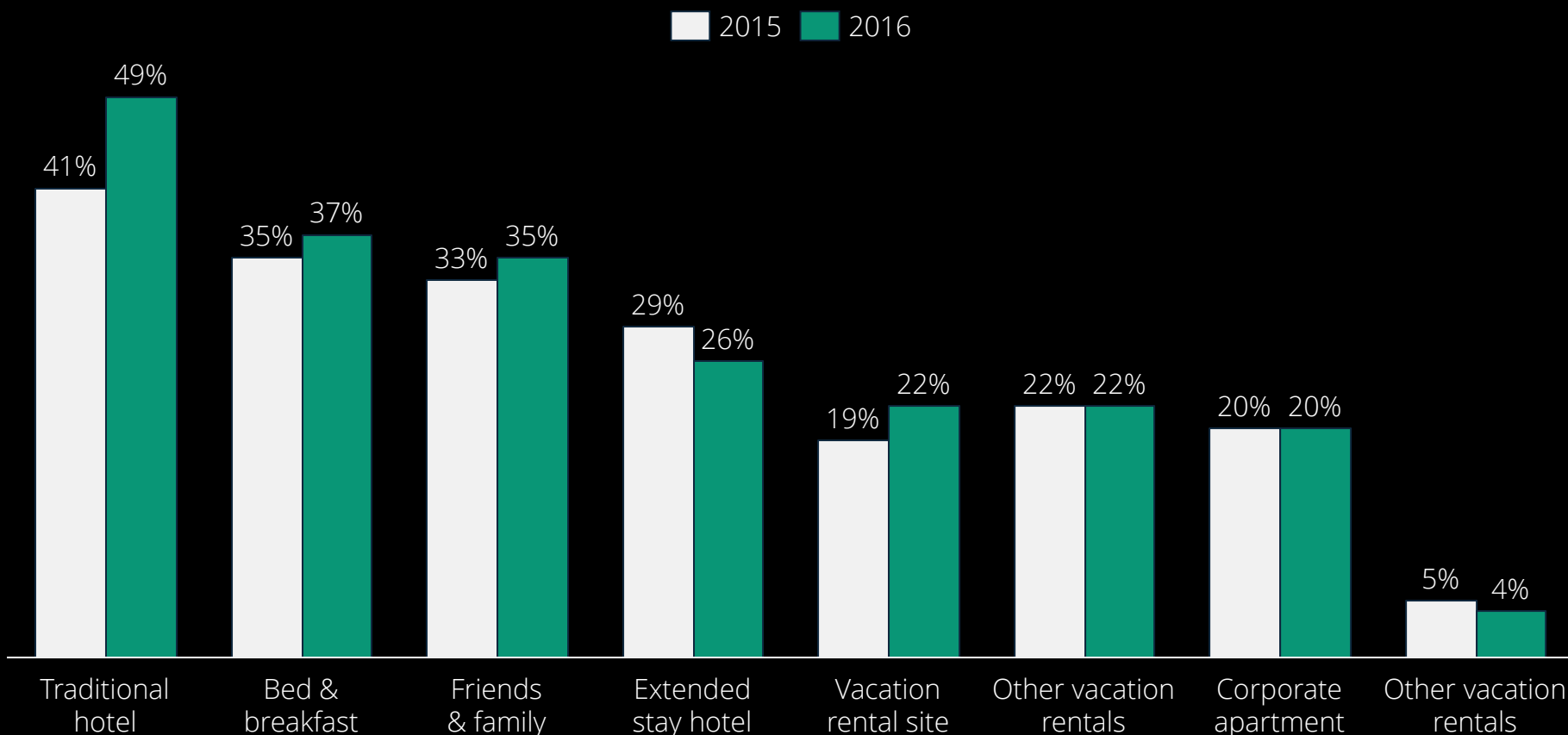
“The next wave of the social graph is empowering services like Airbnb and Lyft that give people the chance to have that physical interaction. People are more open to that because of Airbnb. **Airbnb took couch surfing and took an additional step.**

**John Zimmer**

Co-founder and president of ridesharing company Lyft

# Hard times for traditional hotels: Airbnb is taking over

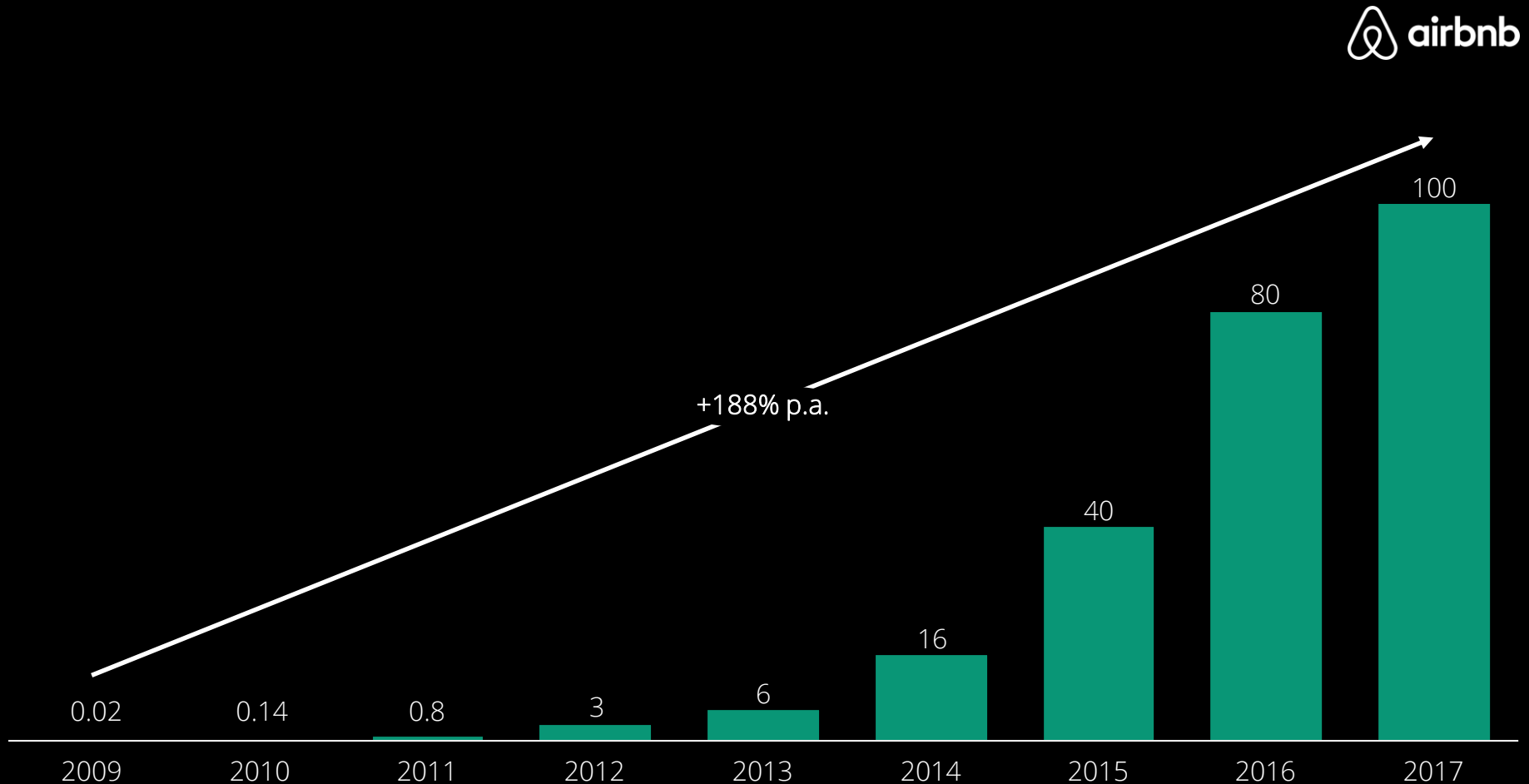
Accommodation alternatives that Airbnb replaced in the past 12 months as stated by Airbnb users





# Airbnb is expected to grow from 20,000 to about 100 million yearly guest arrivals in less than a decade

Estimated annual Airbnb guest arrivals in million



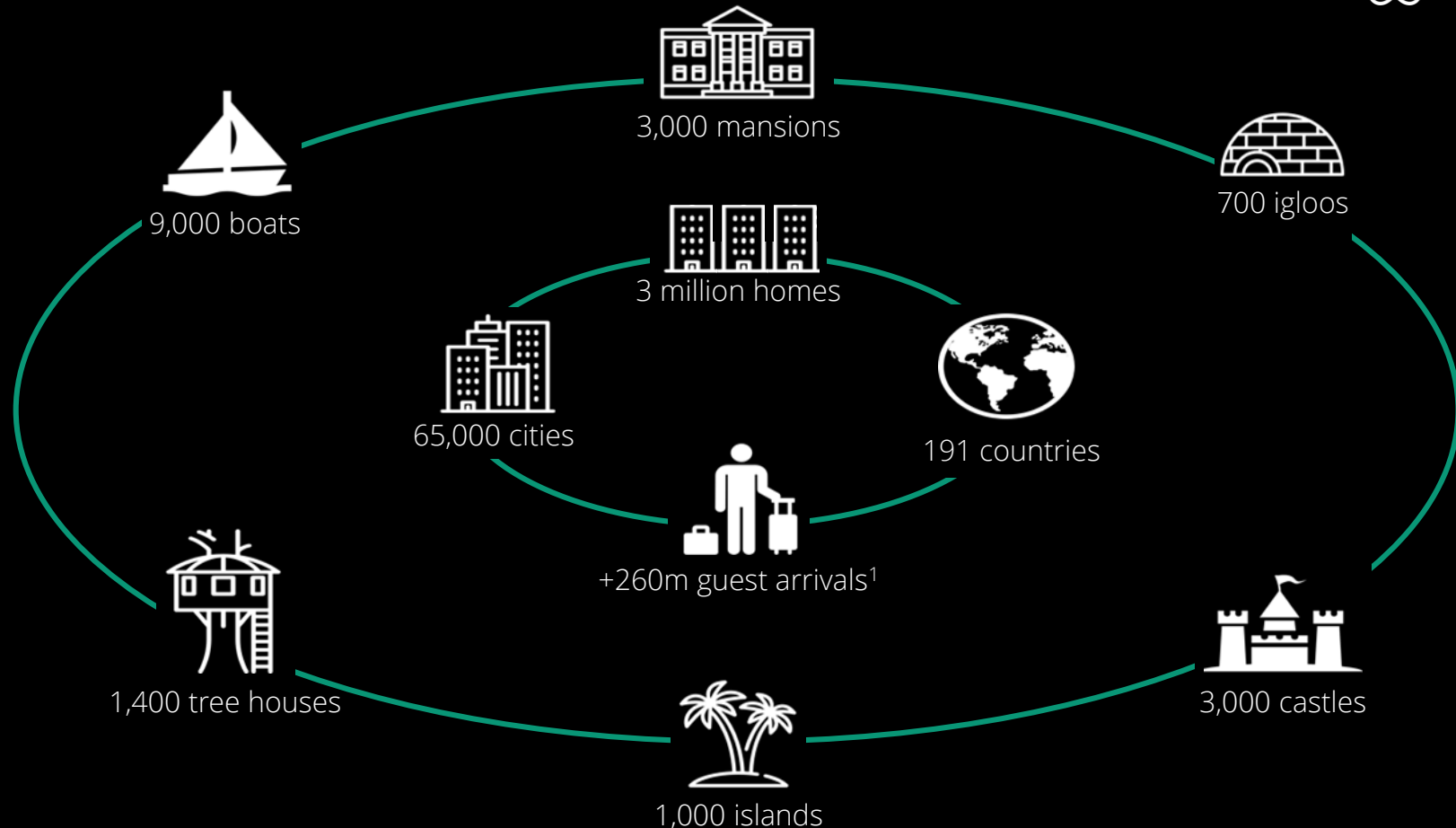
# Airbnb's revenues reached US\$2.6bn in 2017

Estimated annual revenues and net income in million US\$



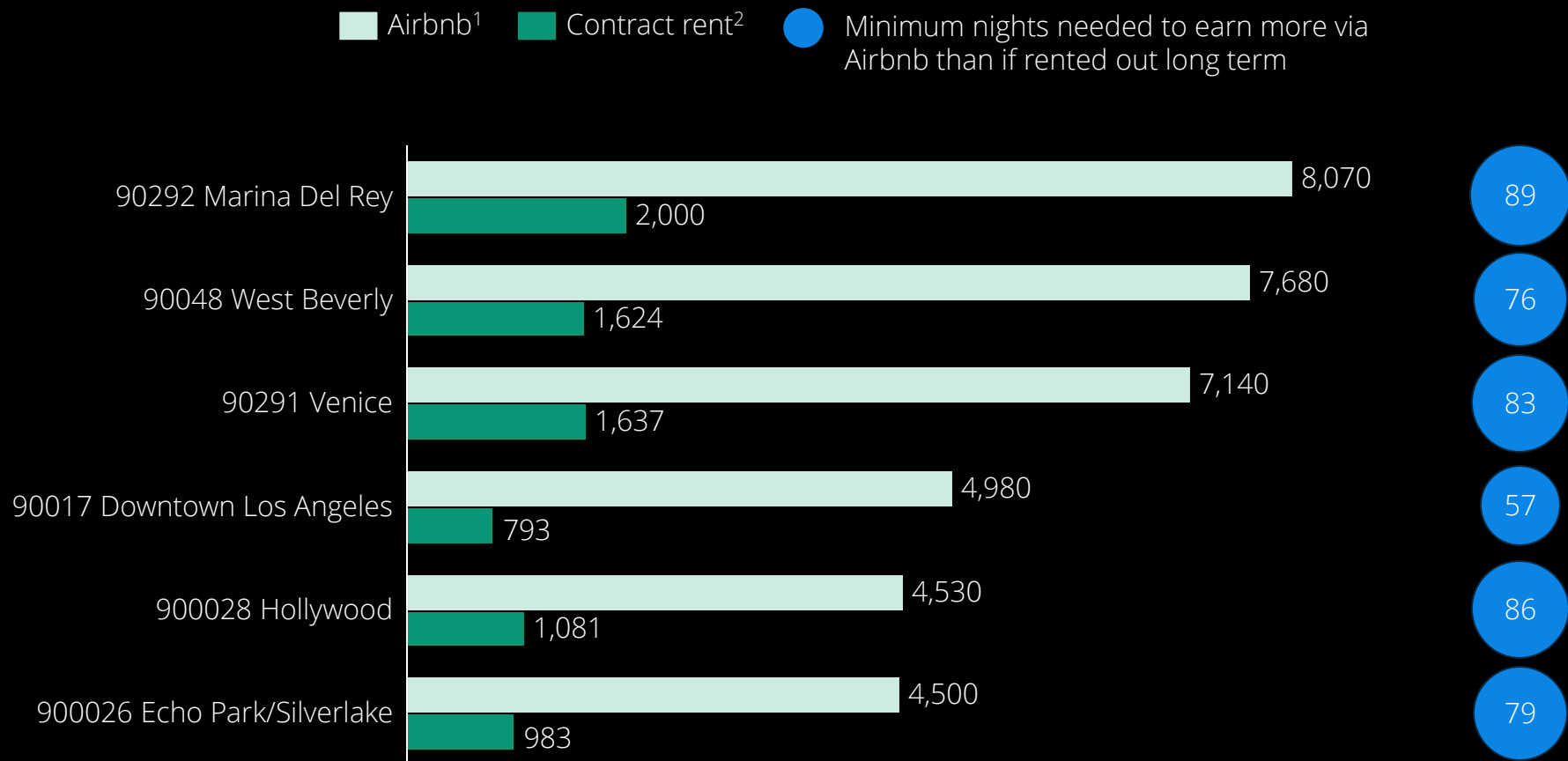
# Airbnb's variety of accommodation types is huge


Fast facts about accommodation availability on Airbnb



# For hosts, Airbnb can be of great benefit – especially in L.A.

Rent per month in Los Angeles in US\$



A hand holding a smartphone displaying the Uber app interface. The screen shows a driver's profile and the Uber logo. A quote is overlaid on the screen.

“**The internet business model changed dramatically.** You would never have an Uber, you would never have an Instagram – if you didn't have a connected computer in your pocket that didn't also have a camera or a GPS.

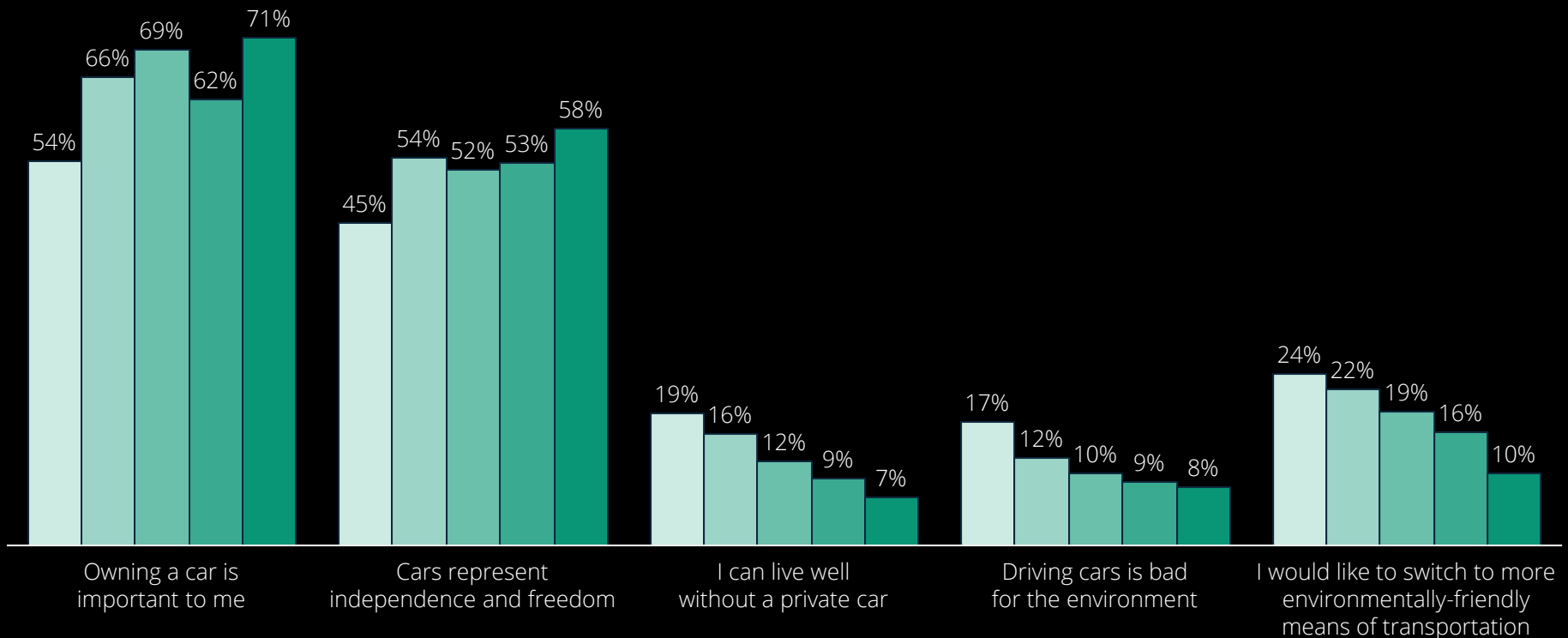
**Steve Mollenkopf**  
CEO of Qualcomm

# Attitudes towards cars differ between age groups

Attitude of U.S. citizens towards mobility



18 - 24 years 25 - 34 years 35 - 44 years 45 - 54 years 55 - 64 years



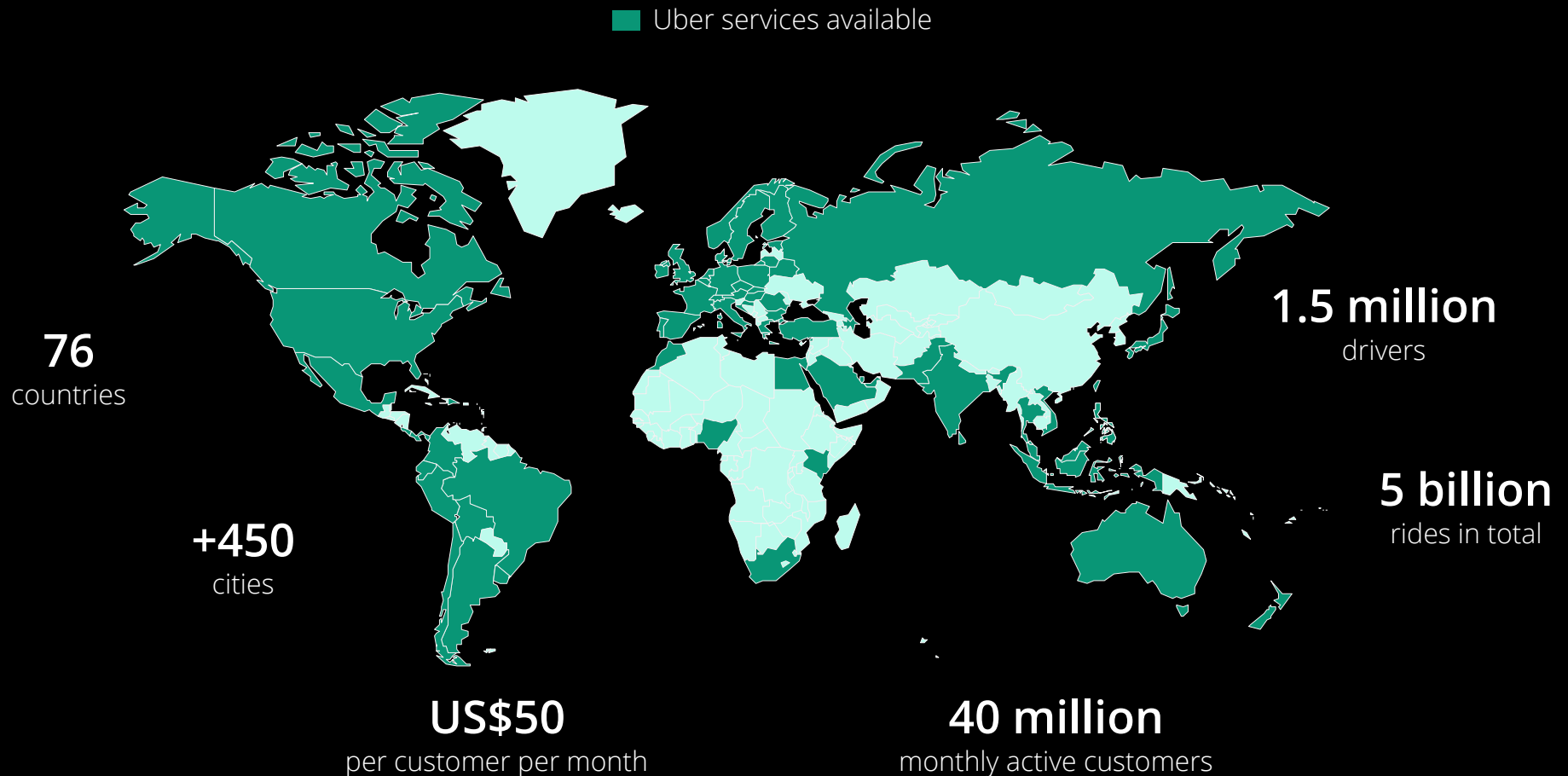
"Which of these statements apply to you?"; Multiple response; n=2,027

106 Source: Statista Global Consumer Survey 2018

# Uber is on the road in 450+ cities in 76 countries

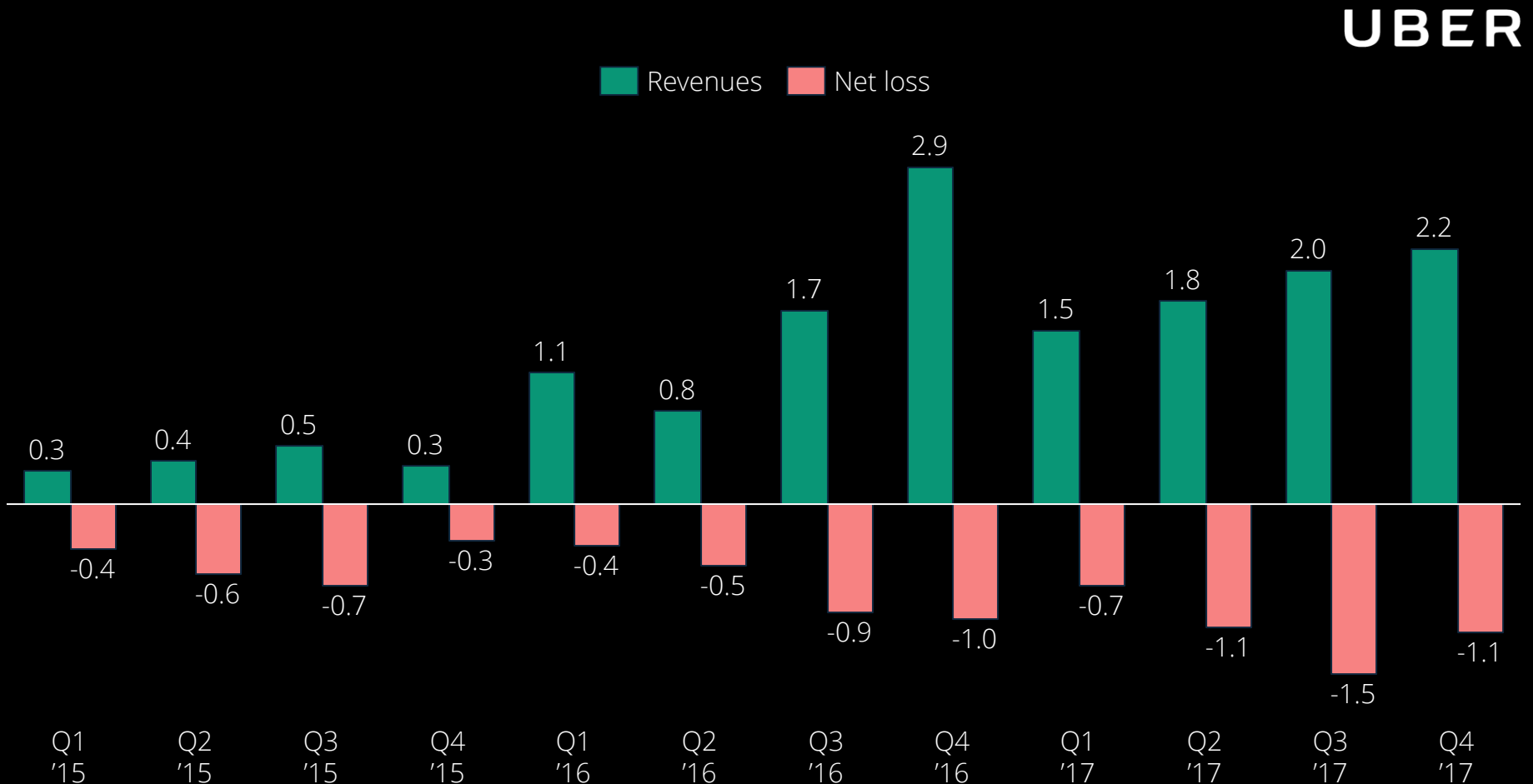
Uber's global availability and quick facts

**UBER**



# Despite its reach and fast revenue growth, Uber is still burning a lot of investor money

Ubers revenue and net loss in billion US\$



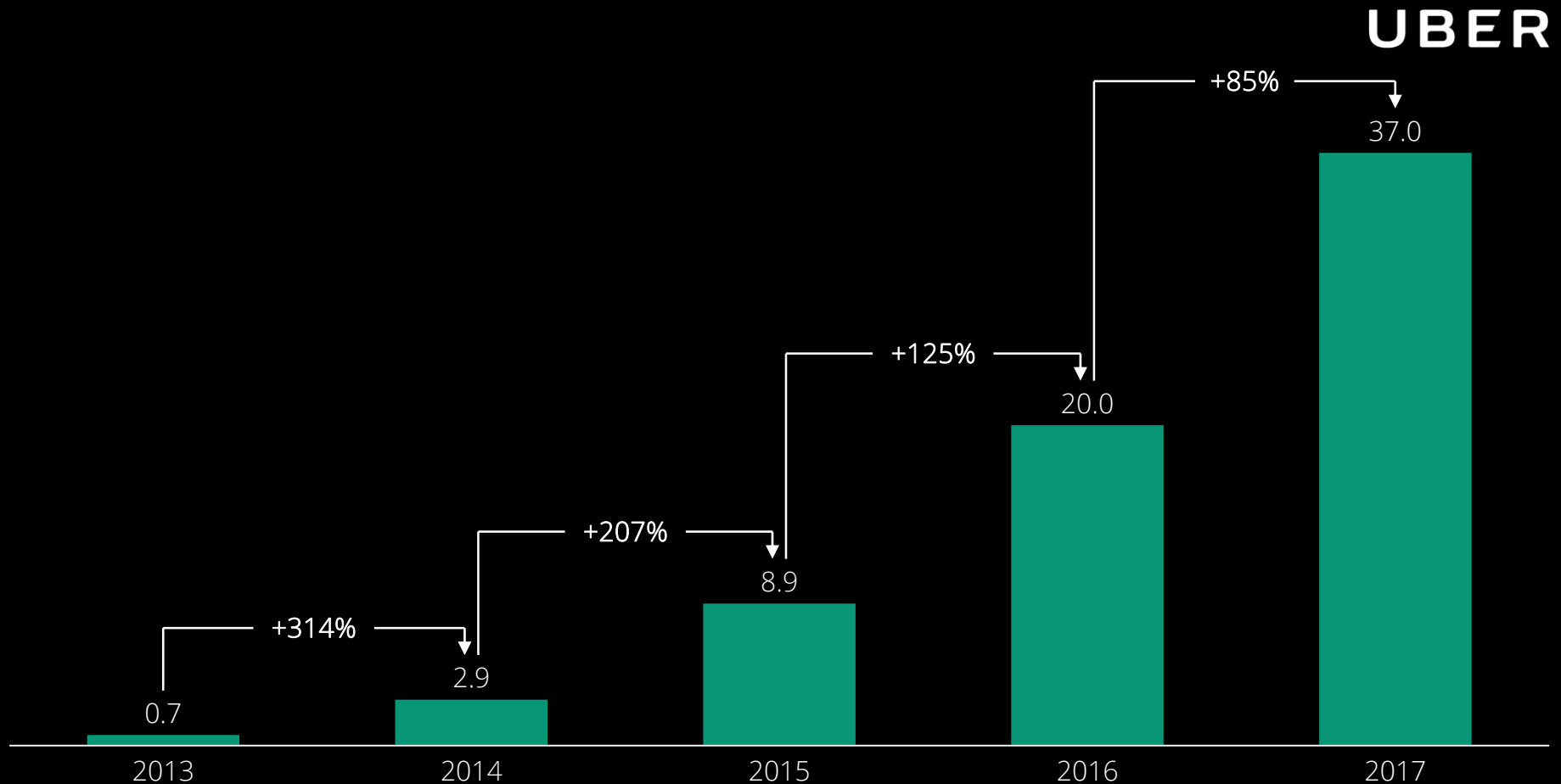
Note: As of 2016, China is excluded and net revenue/loss is adjusted; Q1 / Q2 2017: adjusted net revenue; Q1-2017: net loss estimated by Statista

108 Source: Statista, Business Insider, Bloomberg, Reuters, Axios



# Uber is looking into a promising future, as growth of gross bookings continues to be high

Gross bookings in billion US\$



## Global Trends

# Digital China

Two players do it all – explaining Chinese “Everything Companies”

The digital economy in China is shaped by two major players: the Alibaba Group and Tencent Holding.

These two companies own the digital user touchpoint for retail, digital media, messaging, and many other services. They have built a comprehensive digital ecosystem in order to provide as many services as possible to their customers from one single source.

The Alibaba Group is the country's #1 retailer. As a platform, they provide the infrastructure for domestic as well as foreign merchants. They own China's biggest brands, which serve as a digital touchpoint to connect businesses with

customers. You want to sell to Chinese online customers without having Alibaba on board? Good luck!





















Tencent's well-known instant messaging app WeChat is used by almost one billion people. This is important, as many digital services can be incorporated into WeChat: Media, retail, location services, and payment. Thus, Tencent has multiple sources to generate revenues in usually very small portions.

We dive into the financials and business models and show how Alibaba and Tencent earn their money – as this is quite different compared to companies in Europe and the U.S.

# The mobile payment business reveals the rivalry between Tencent and Alibaba

Comparison of mobile payment services of Tencent (WeChat Pay) and Alibaba (Alipay)



Users	806 million (2016)	450 million (2016)
Total transaction volume	US\$1.2 trillion (2016)	US\$1.7 trillion (2016)
Domestic market share	40%	54%
Annual avg. transaction value per user	US\$1,527 (2016)	US\$2,921 (2015)
Devices supported	Most smartphones	All smartphones, tablets, and computers
Service portfolio	<ul style="list-style-type: none"> <li> Money transfer</li> <li> Bill payments</li> <li> Bill sharing</li> <li> eCommerce payments</li> <li> Mobile balance top-up</li> <li> Bank account balance checks</li> <li> Hotel booking</li> <li> Ticket purchasing</li> <li> Taxi ordering</li> <li> Investment in wealth mgmt. funds</li> </ul>	<ul style="list-style-type: none"> <li> Money transfer</li> <li> Bill payments</li> <li> Bill sharing</li> <li> eCommerce payments</li> <li> Mobile balance top-up</li> <li> Bank account balance checks</li> <li> Hotel booking</li> <li> Ticket purchasing</li> <li> Taxi ordering</li> <li> Investment in wealth mgmt. funds</li> </ul>



“If you want 10,000 new customers, you have to build a new warehouse and this and that.

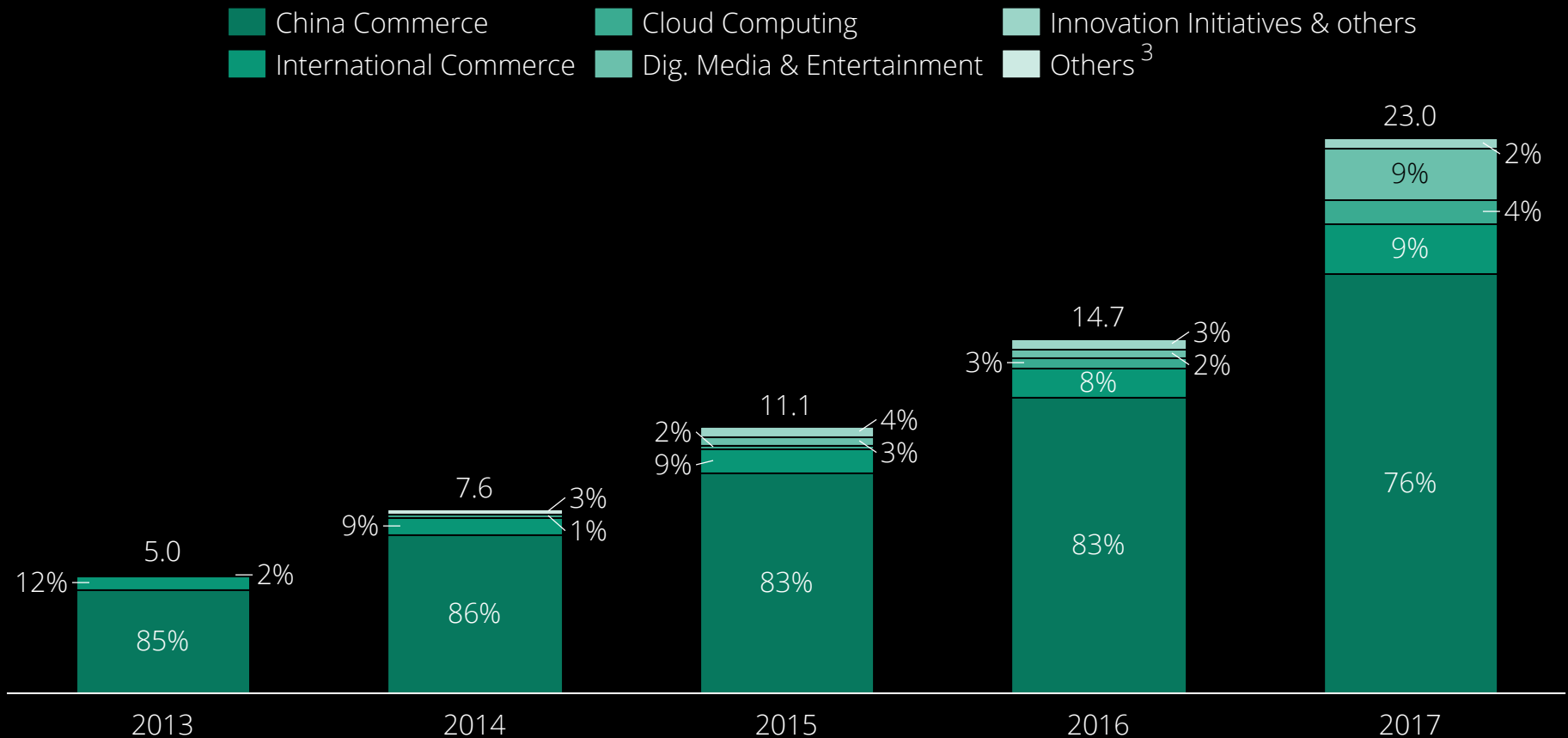
For me: ***two servers.***

**Jack Ma**

Founder of the Alibaba Group  
comparing offline retail and Alibaba's business model

# Commerce is Alibaba's #1 revenue source, but Digital Media & Entertainment<sup>1</sup> is growing fast

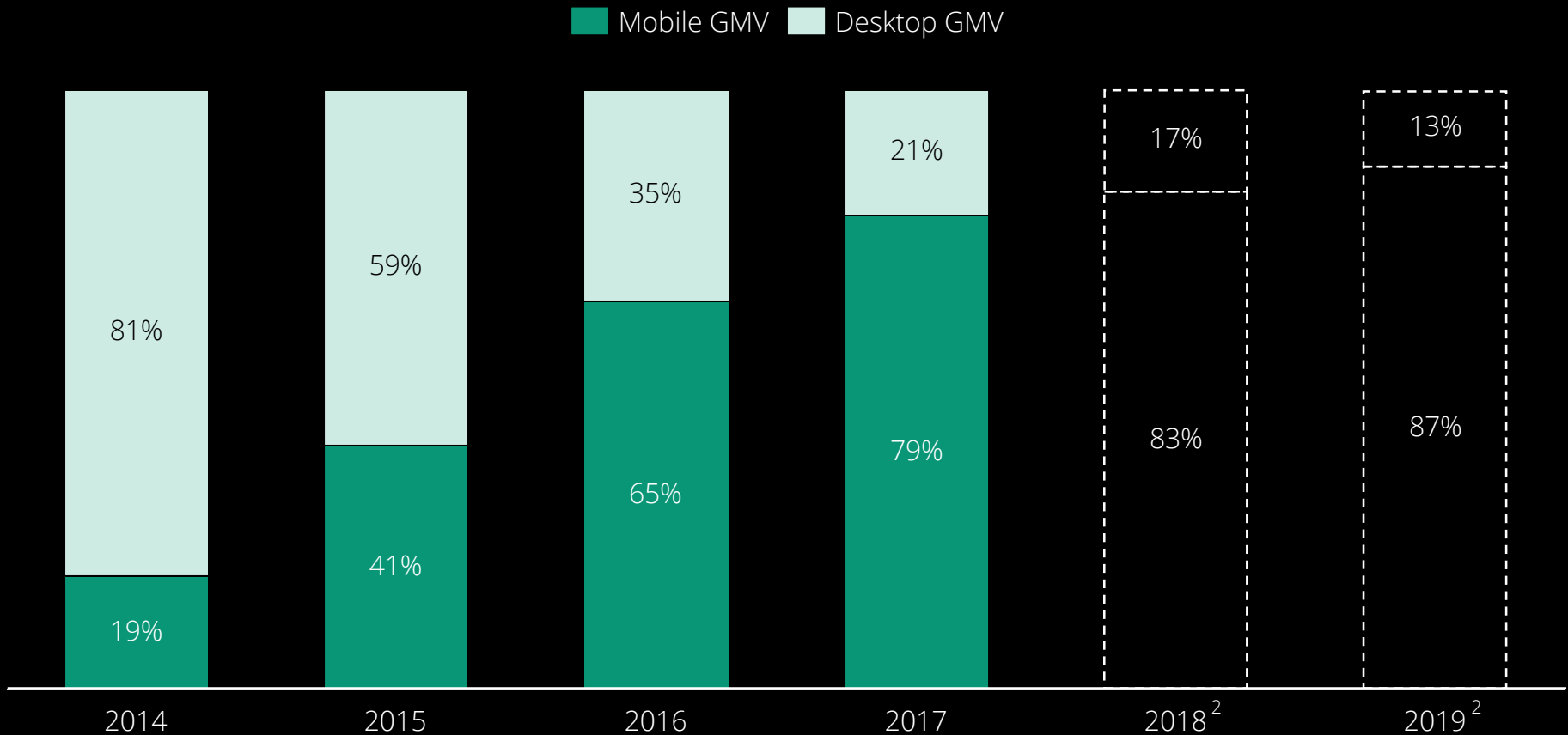
Alibaba's annual revenues in billion US\$<sup>2</sup>



1: Digital Media & Entertainment as per Alibaba's SEC Filings 2: All figures are converted from RMB into US\$ using the exchange rate of RMB6.8832 per 1US\$ 3: Only shown in annual reports until FY2014

# Alibaba's Core Commerce<sup>1</sup> has quickly gone mobile

Alibaba's Core Commerce GMV<sup>3</sup> share



1: Core Commerce as per Alibaba's SEC Filings includes all commerce-related revenues from both its domestic as well as cross-border businesses





2: Statista estimates based on previous developments 3: GMV = Gross merchandise value

# Alibaba clearly separates between business locations, affecting buyers and sellers alike

Alibaba's Core Commerce<sup>1</sup> stores



Retail
  Wholesale

	Chinese 	Global 
Chinese 	<p><i>China Commerce Retail</i></p> <p>农村淘宝 淘宝网 cun.taobao.com Taobao.com</p>	<p><i>China Commerce Wholesale</i></p> <p>1688 采购批发 上1688.com</p>
Global 	<p><i>International Commerce Wholesale</i></p> <p>Alibaba.com™</p>	<p><i>International Commerce Retail</i></p> <p>AliExpress™</p>
	<p>天猫 聚划算 TMALL.COM - juhuasuan.com -</p>	<p>LAZADA GROUP</p>

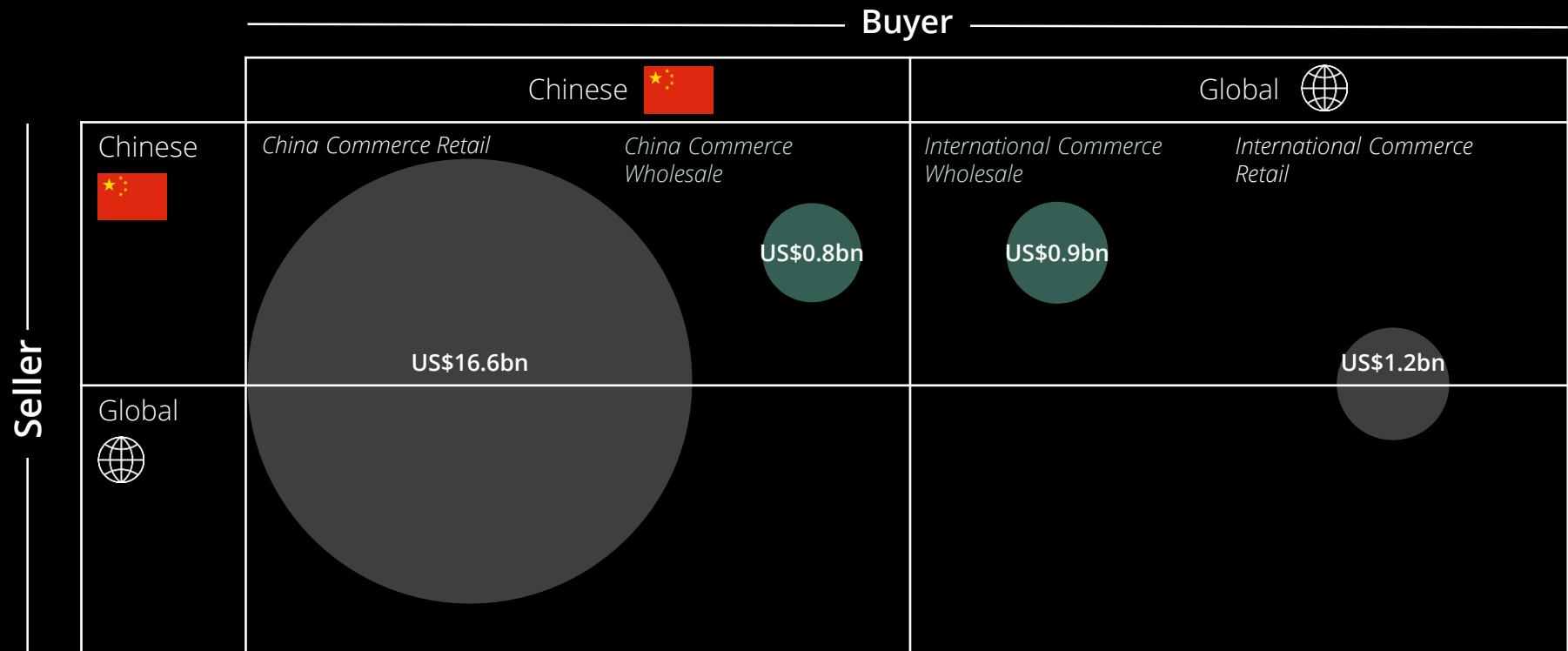
1: Core Commerce as per Alibaba's SEC Filings includes all commerce-related revenues from both its domestic and cross-border businesses

# Alibaba's major revenue source is retail business in China, which generated US\$16.6 billion in 2017

Alibaba's Core Commerce<sup>1</sup> annual revenue in 2017



Retail
  Wholesale

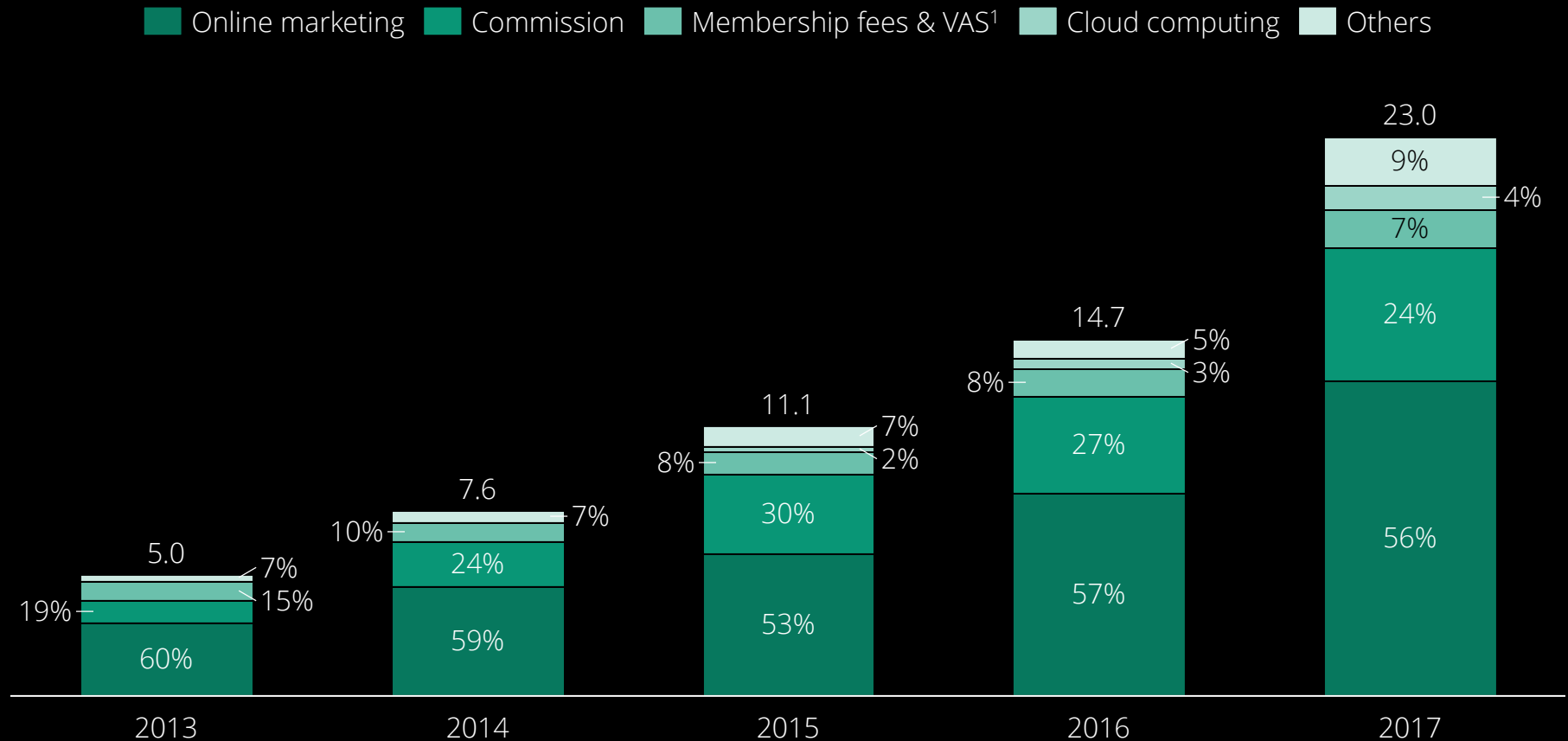


1: Core Commerce as per Alibaba's SEC Filings includes all commerce-related revenues from both its domestic as well as cross-border businesses



# Unlike Amazon, Alibaba makes most of its money through online marketing services

Alibaba's annual revenues in billion US\$

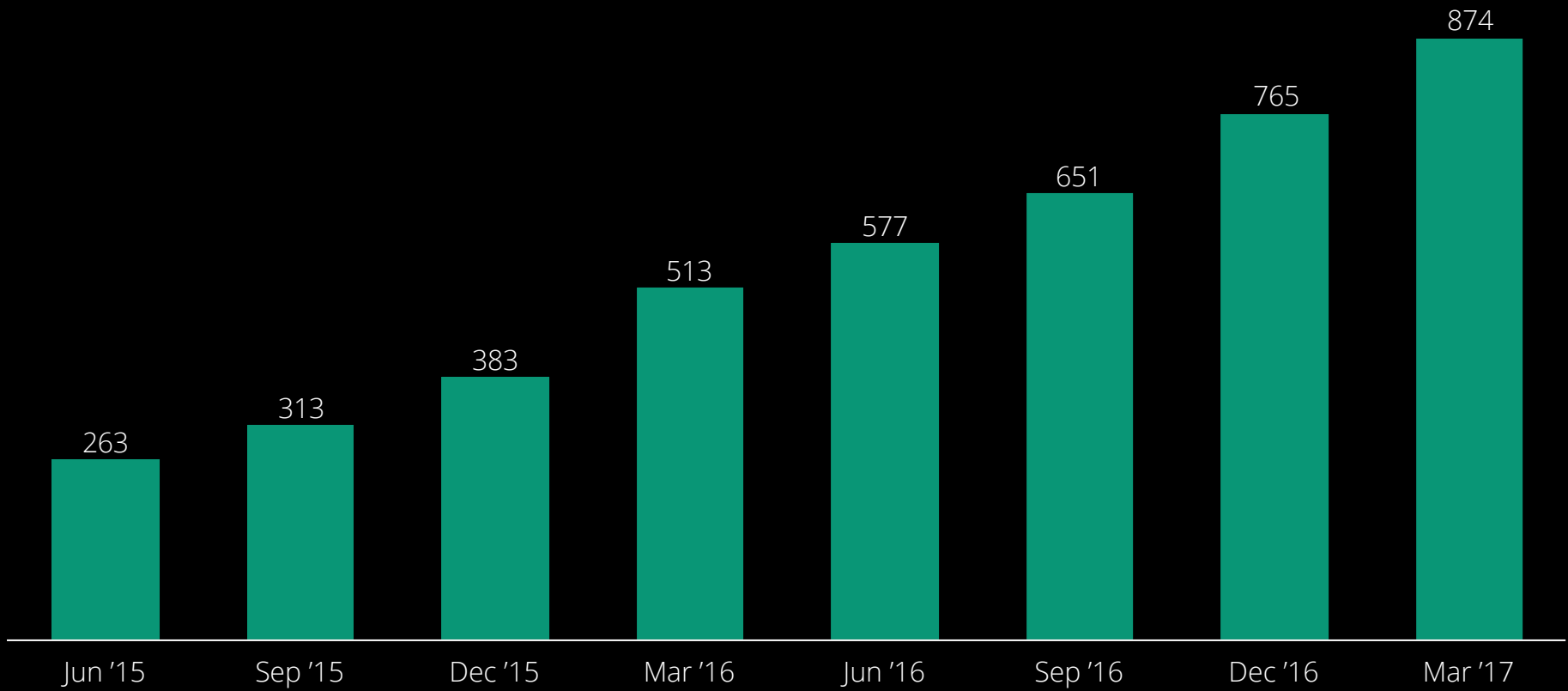



1: VAS = value-added services

Note: All figures are converted from RMB into US\$ using the exchange rate of RMB6.8832 per 1US\$

# Alibaba's cloud business had almost 900m customers by the end of FY2017

Paying customers of Alibaba's cloud computing business in million



The background of the entire image is a dense, overlapping field of pennies, likely US one-cent coins, rendered in a dark, monochromatic green color. The coins are scattered across the frame, creating a textured, repetitive pattern.

“ *Tencent is great at monetizing eyeballs [...]. That’s their core competency. They are making tons of money by scraping together pennies from tiny transactions.* ”

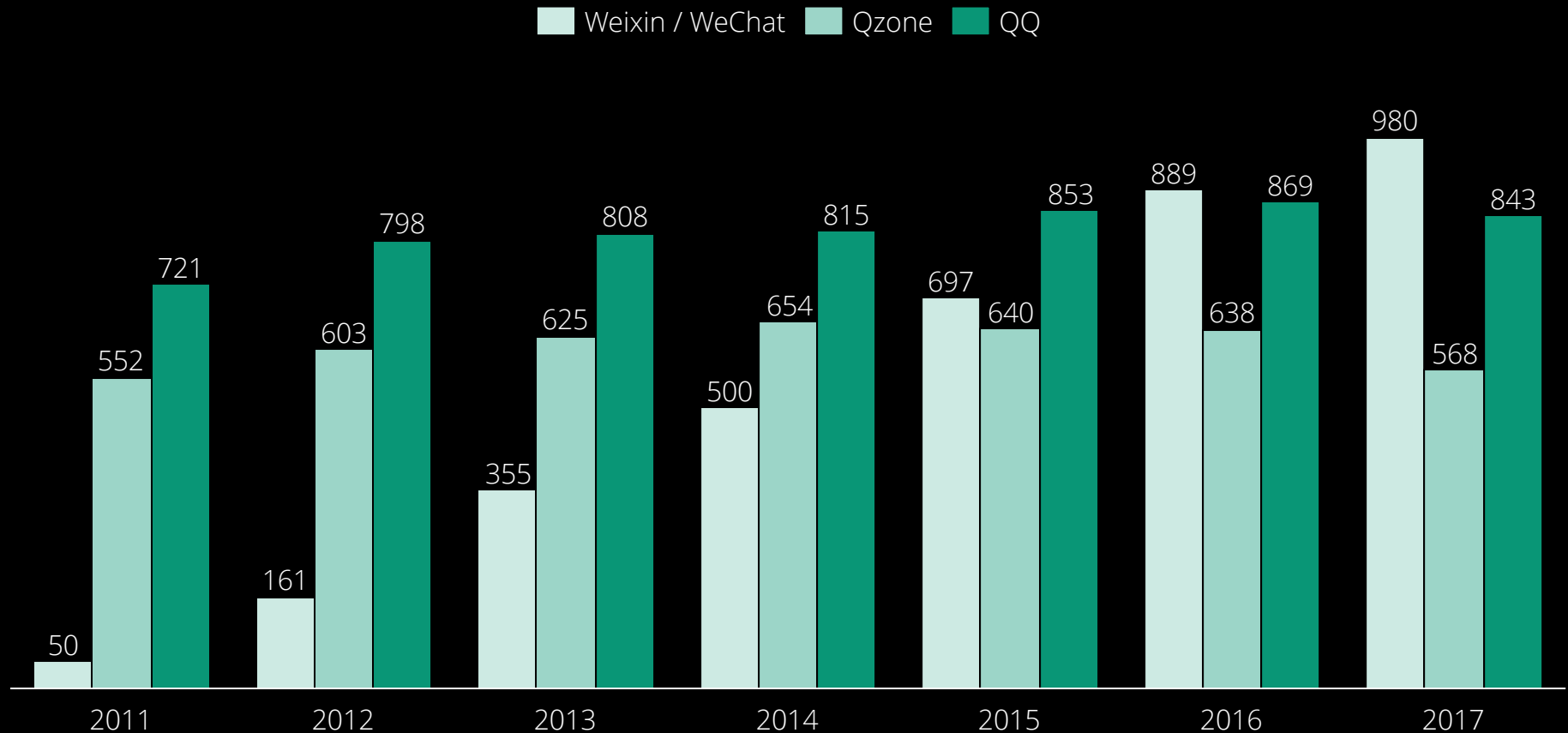
**Jeff Walters**

Partner and Managing Director of BCG Beijing Office

# WeChat is the fastest-growing Tencent service

Monthly active users of Tencent's social & messaging services in million

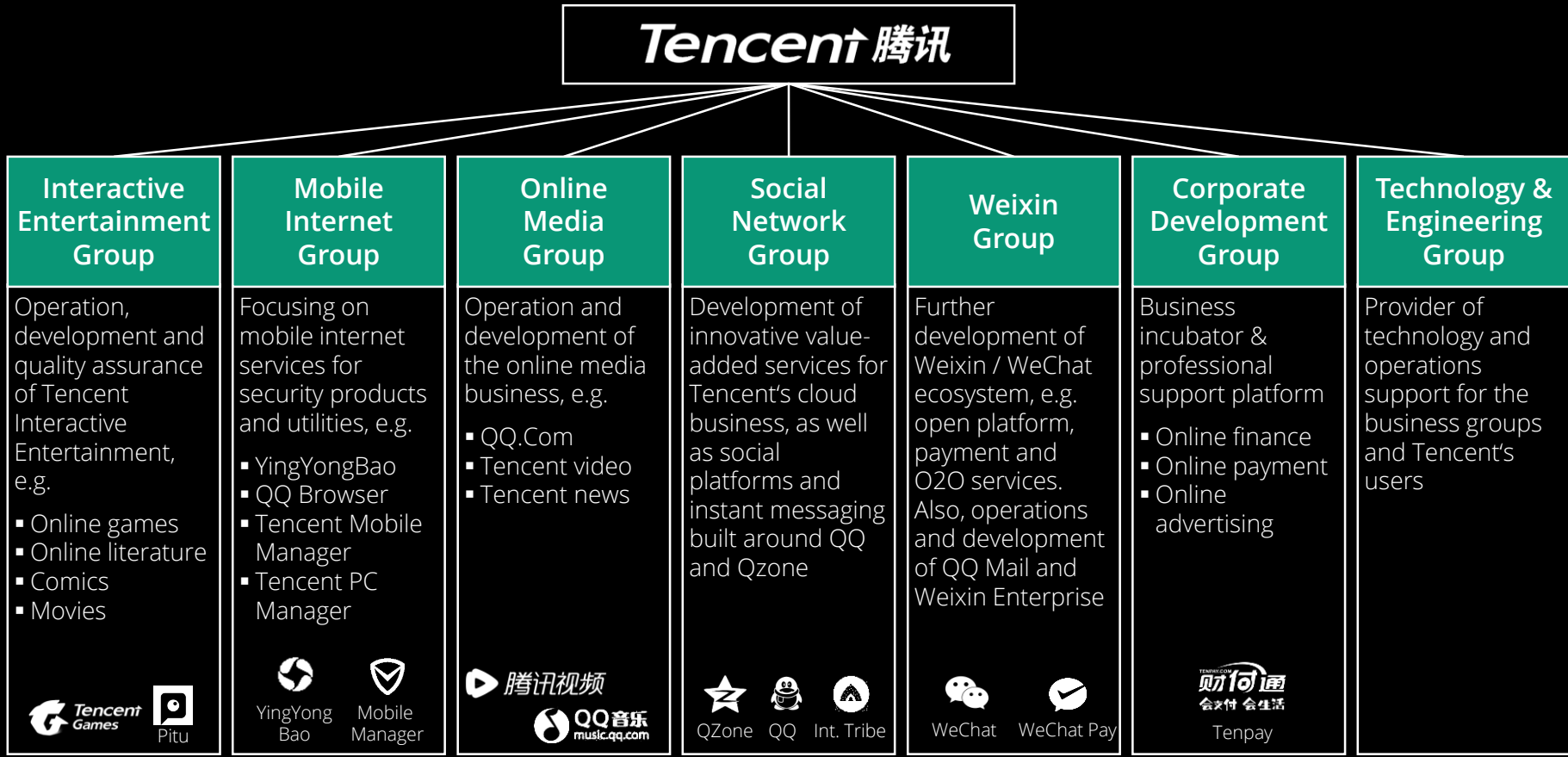
Tencent 腾讯



# Next to WeChat, Tencent provides a number of other digital services

Tencent's business structure

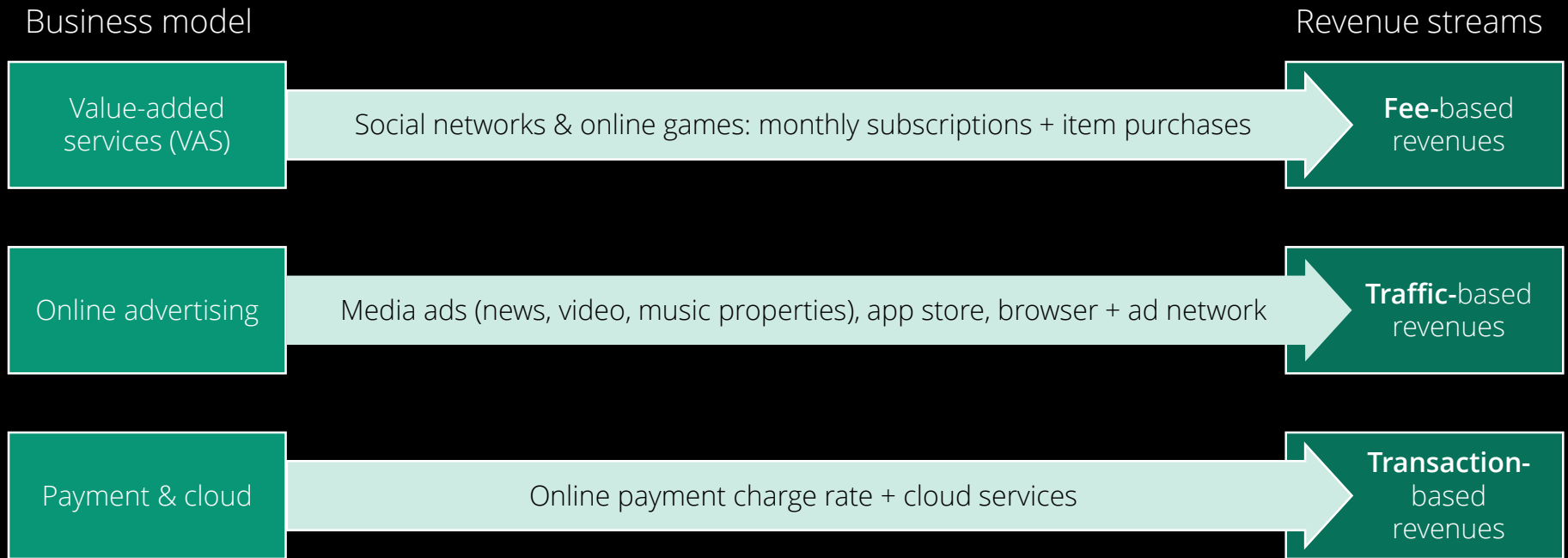
Tencent 腾讯



# Tencent monetizes digital business models: value-added services, advertising and payment & cloud

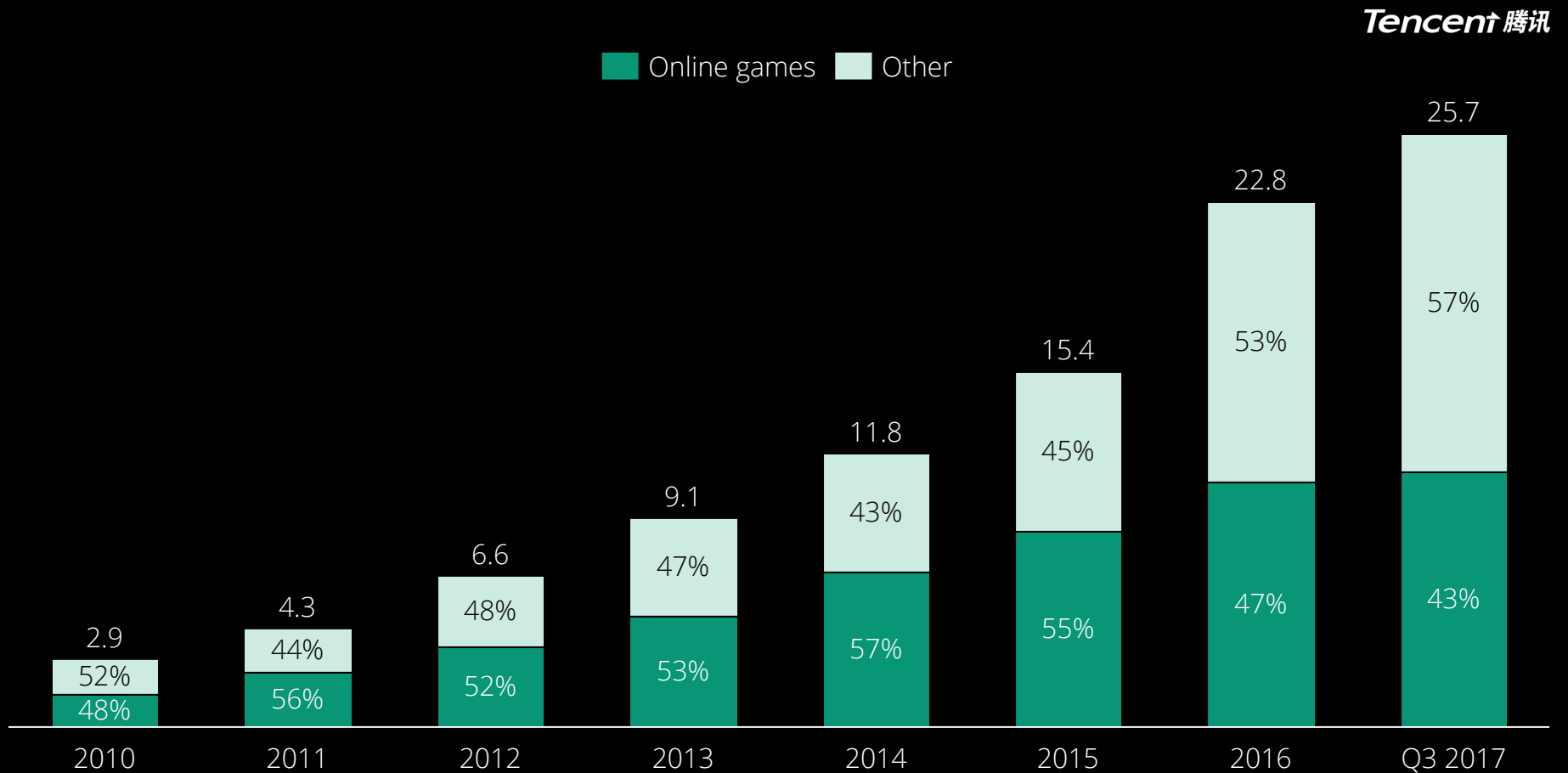
Tencent business model

Tencent 腾讯



# Online games contribute 43% to Tencent's revenue in Q3 2017, which makes it the most important segment

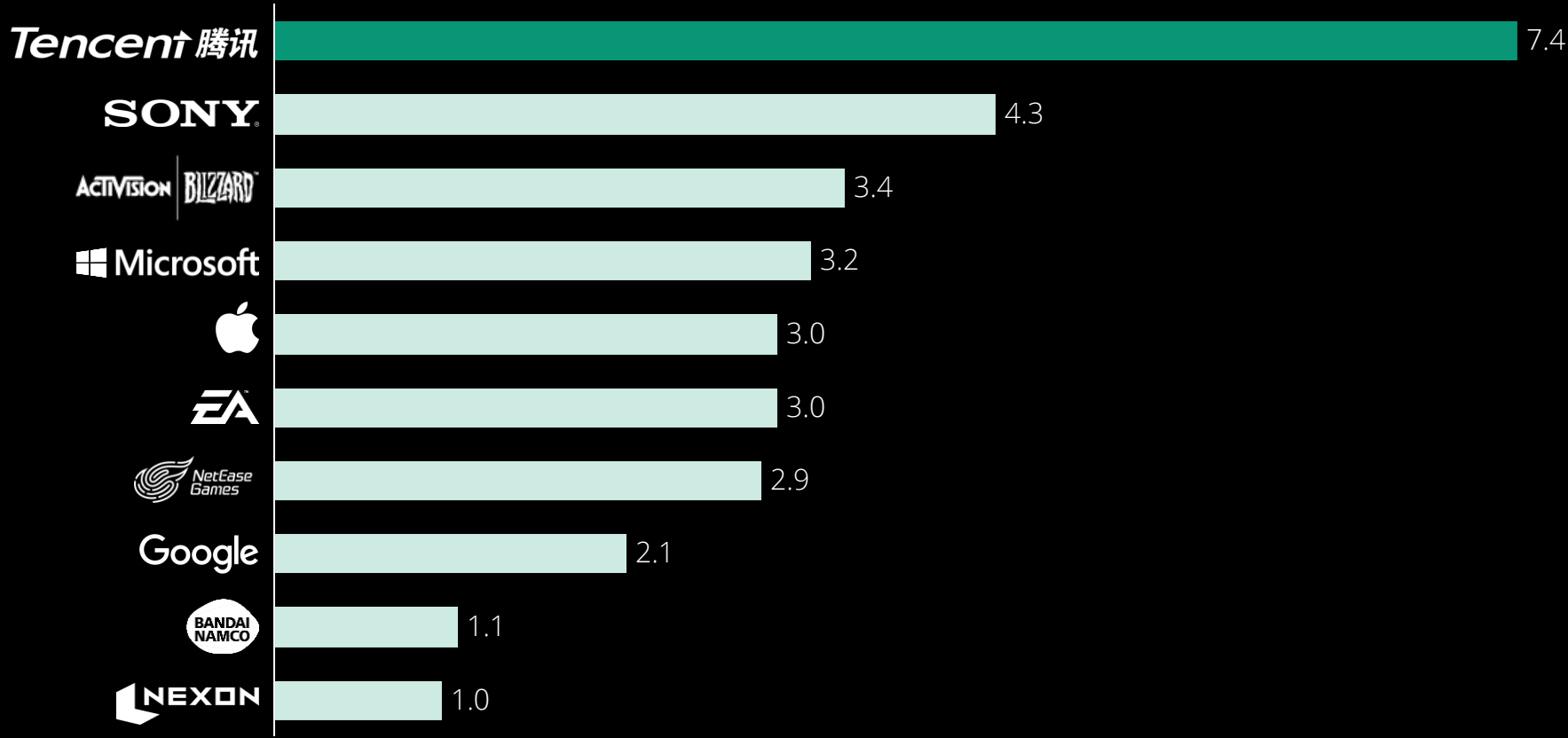
Annual revenues in billion US\$



# Tencent is #1 in the field of online gaming

Public companies with most revenues from gaming in the first half of 2017 in billion US\$

**Tencent 腾讯**



1: Estimated figures, as gaming revenues are not separately reporting in SEC filings  
 Note: Hardware sales are not included

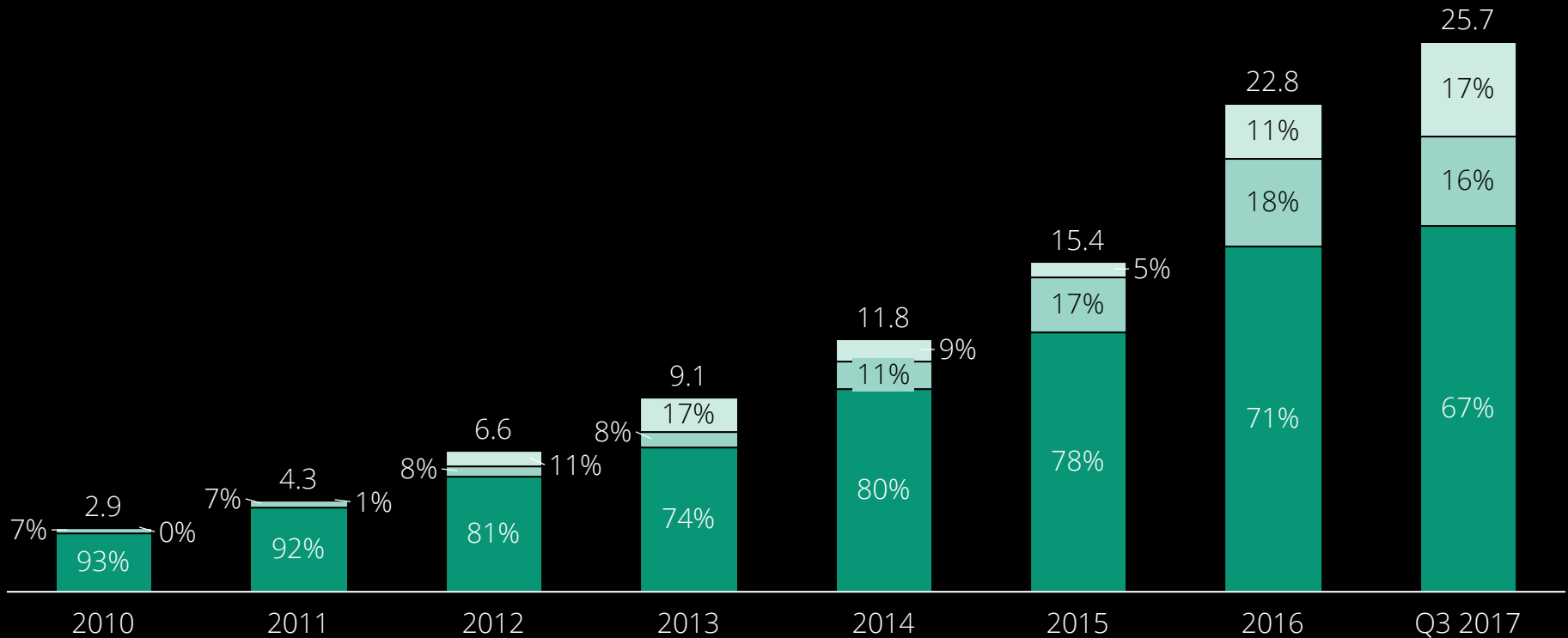


# Value added services are Tencent's main revenue source

Annual revenues in billion \$US

Tencent 腾讯

■ VAS (Value-Added Services)<sup>1</sup>
■ Online Advertising
 ■ Others



1: VAS Revenue calculated from internet value-added Services and mobile and telecommunications value-added Services

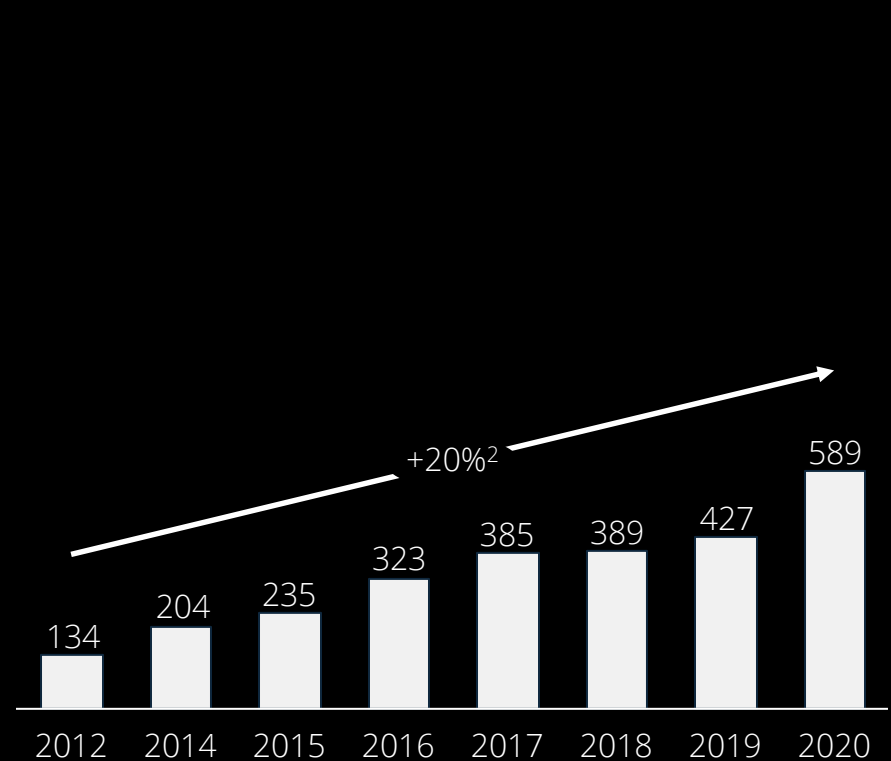
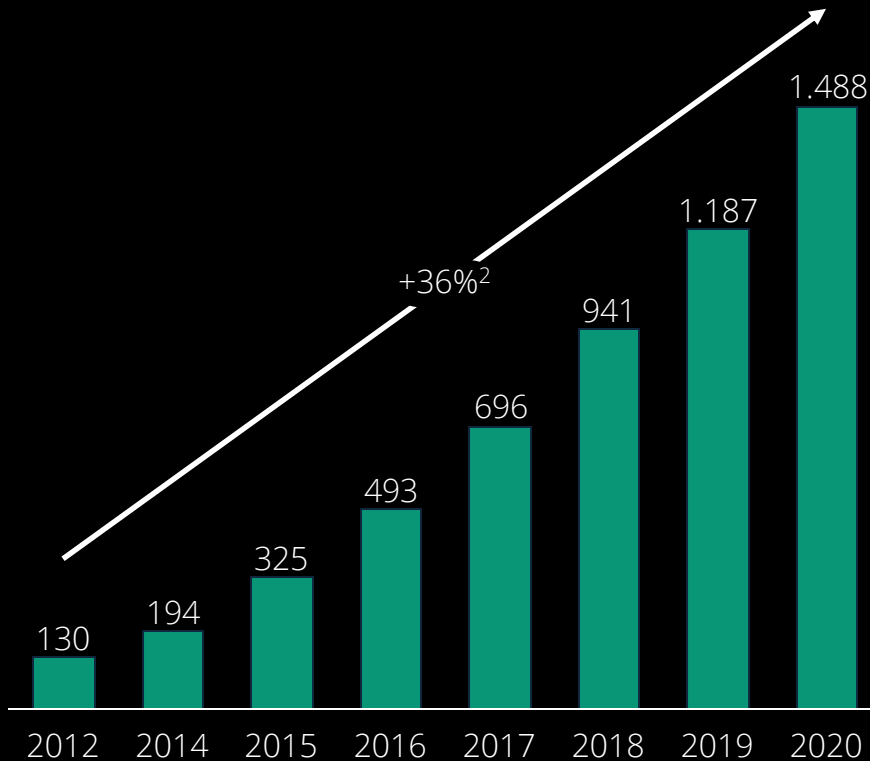
# Tencent's focus on games might be a smart decision as general interest in eSports is growing

Global eSports revenues and audience

**Tencent 腾讯**

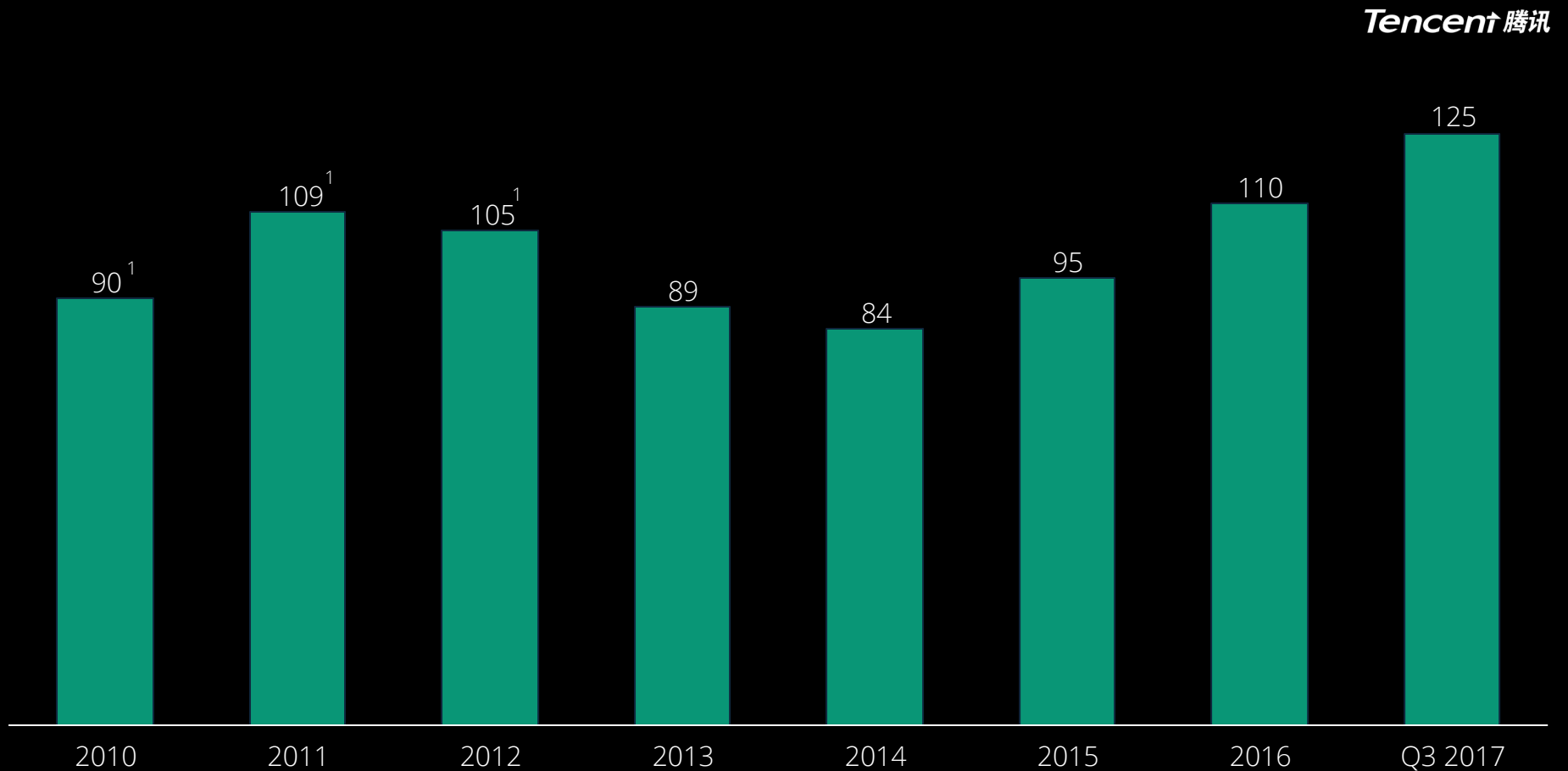
Global eSports revenues in million US\$

Global eSports viewers<sup>1</sup> in million



# The increase in fee-based registered subscriptions is fueling Tencent's revenue growth

Fee-based registered subscribers in million



1: VAS subscriptions calculated from internet value-added services and mobile and telecommunications value-added services

127 Source: Tencent

# Table of Contents: Statista's Digital Market Outlook

Part 2 – exclusive Statista content

› eCommerce .....	129
› eServices .....	146
› eTravel .....	159
› Digital Media .....	169
› FinTech .....	178
› Digital Advertising .....	189
› Smart Home .....	199
› Connected Car .....	208

# eCommerce

eCommerce is one of the hot topics when it comes to digitalization and disruptive changes to traditional industries. The rising number of internet as well as smartphone users, and the increasing time people spend online, shaped the term "always on". This development resulted in an ever-increasing online market with new types of purchasing processes appearing all over the world. At the same time, more and more different product categories and product ranges find their way into online trade.

Statista's Digital Market Outlook divides the eCommerce market into five product segments: Fashion, Electronics & Media, Food & Personal Care, Furniture & Appliances, and Toys, Hobby & DIY.

In 2017, the global<sup>1</sup> eCommerce market was worth US\$1.5

trillion. China was the biggest eCommerce market worldwide, generating revenues of US\$497 billion. Based on the high annual growth rate of 14%, the market is expected to exceed revenues of US\$959 billion by 2022. The second biggest eCommerce market is the U.S. with revenues of US\$421 billion in 2017, followed by Europe with US\$330 billion. In both markets, growth rates are expected to be significantly lower than in China, with 8-9% annually.

The steady fusion of online and offline shopping is a major eCommerce development: Amazon's acquisition of Whole Foods shows their ambition to shake up the grocery industry, while merging offline and online retail at the same time. Many other players from both the online and offline world move to multi-channel strategies, underlining this trend.

## Statista's Digital Market Outlook

Furthermore, the world's largest retailer in terms of revenues, Wal-Mart Inc., has embedded the digital mindset into their corporate DNA: They changed their official name from "Wal-Mart Stores" to "Wal-Mart", in order to show their effort to address all customers and abandon the apparent focus on offline-clients.

We observe a similar development in China: eCommerce giant Alibaba is gradually expanding towards the offline world and opening brick-and-mortar stores. According to Daniel Zhang, CEO of Alibaba, "[...] the future of new retail will be a harmonious integration of online and offline, and Hema is a prime example of this evolution that's taking place".

However, the Chinese eCommerce market is not at all a "one company show". In order to rival Alibaba, China's second biggest online marketplace JD.com partnered with internet giant Tencent Holding. They invested more than US\$800 million in Vipshop, one of the leading online discount retailers for luxury brand products.

Next to those most recent developments, we expect some major trends to take off in the near future: mobile and marketplaces.

Merchants increasingly understand the benefits of agile and short-acting platforms. Hence, they develop applications specifically designed for the mobile experience, rather than optimizing web shops for mobile devices.

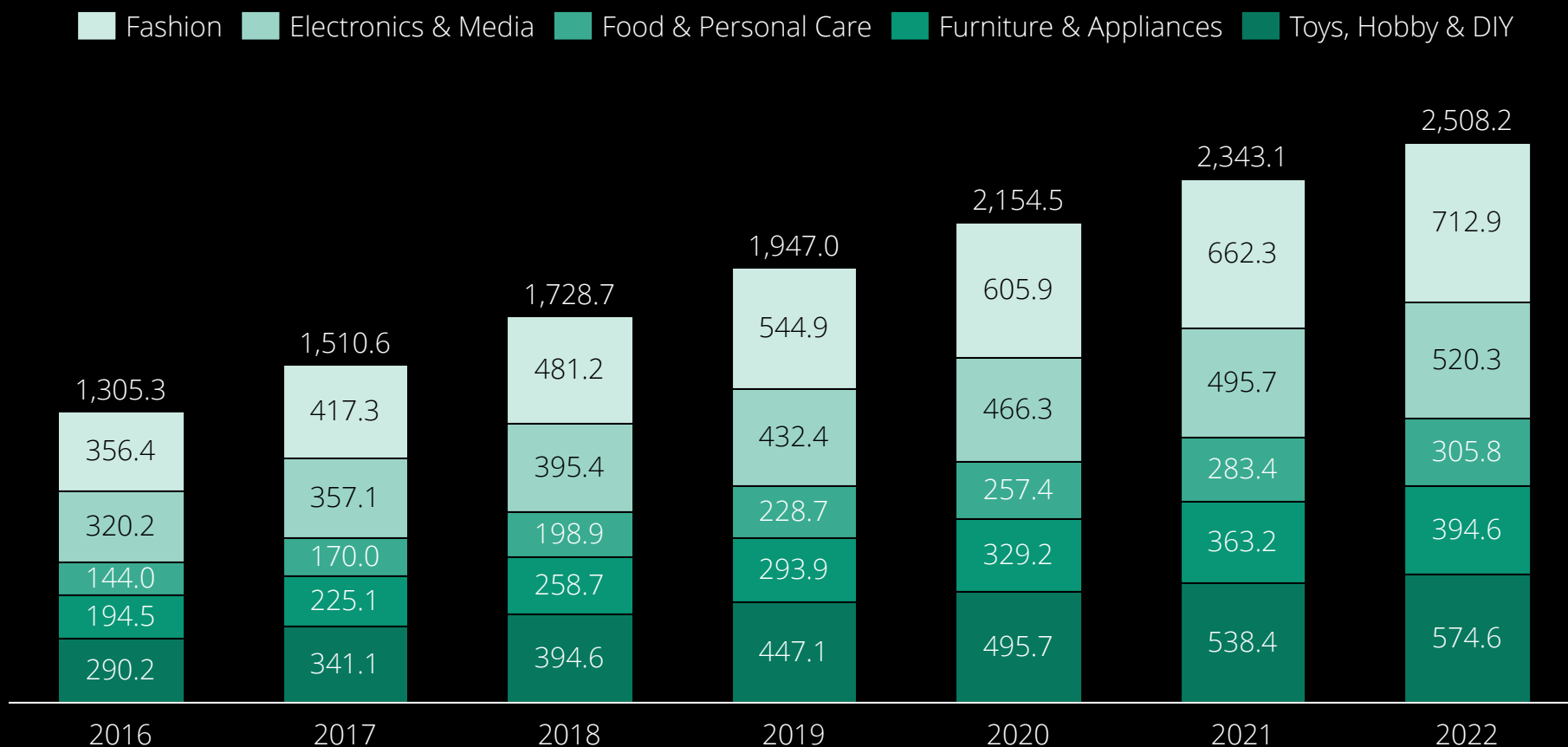
We expect marketplaces to become the best choice for almost all product categories (with the exception of only a few) with proven winners in terms of price or product quality. In categories relating to personal style or taste, such as clothing or interior design, independent players will always have their share of the market.



[f.wegener@statista.com](mailto:f.wegener@statista.com)

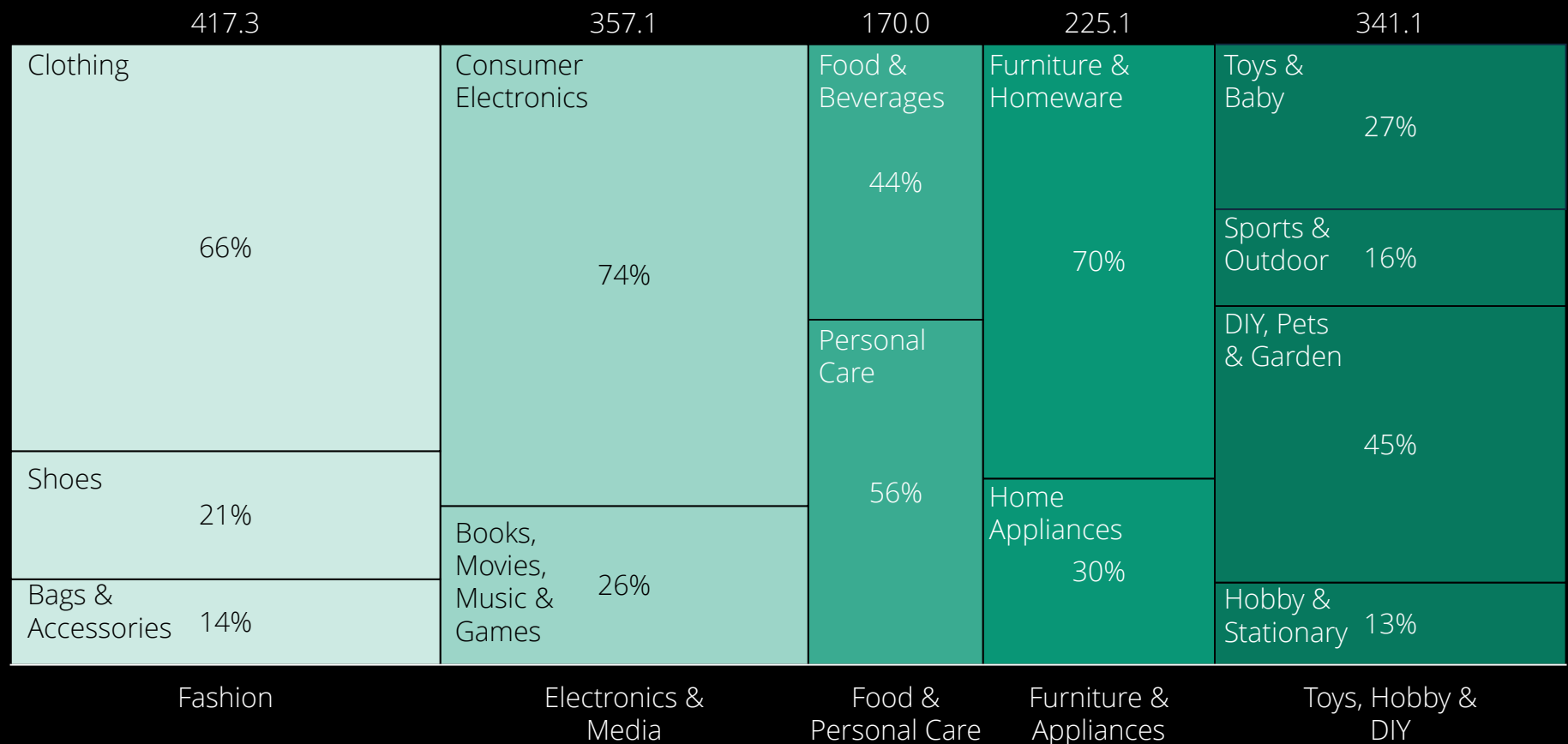
# The global<sup>1</sup> eCommerce market is expected to reach almost US\$2.5 trillion in revenues by 2022

Global<sup>1</sup> eCommerce revenue in billion US\$



# Clothing and Consumer Electronics are the biggest categories within eCommerce

Global<sup>1</sup> eCommerce revenue in billion US\$ and segment revenue shares in 2017

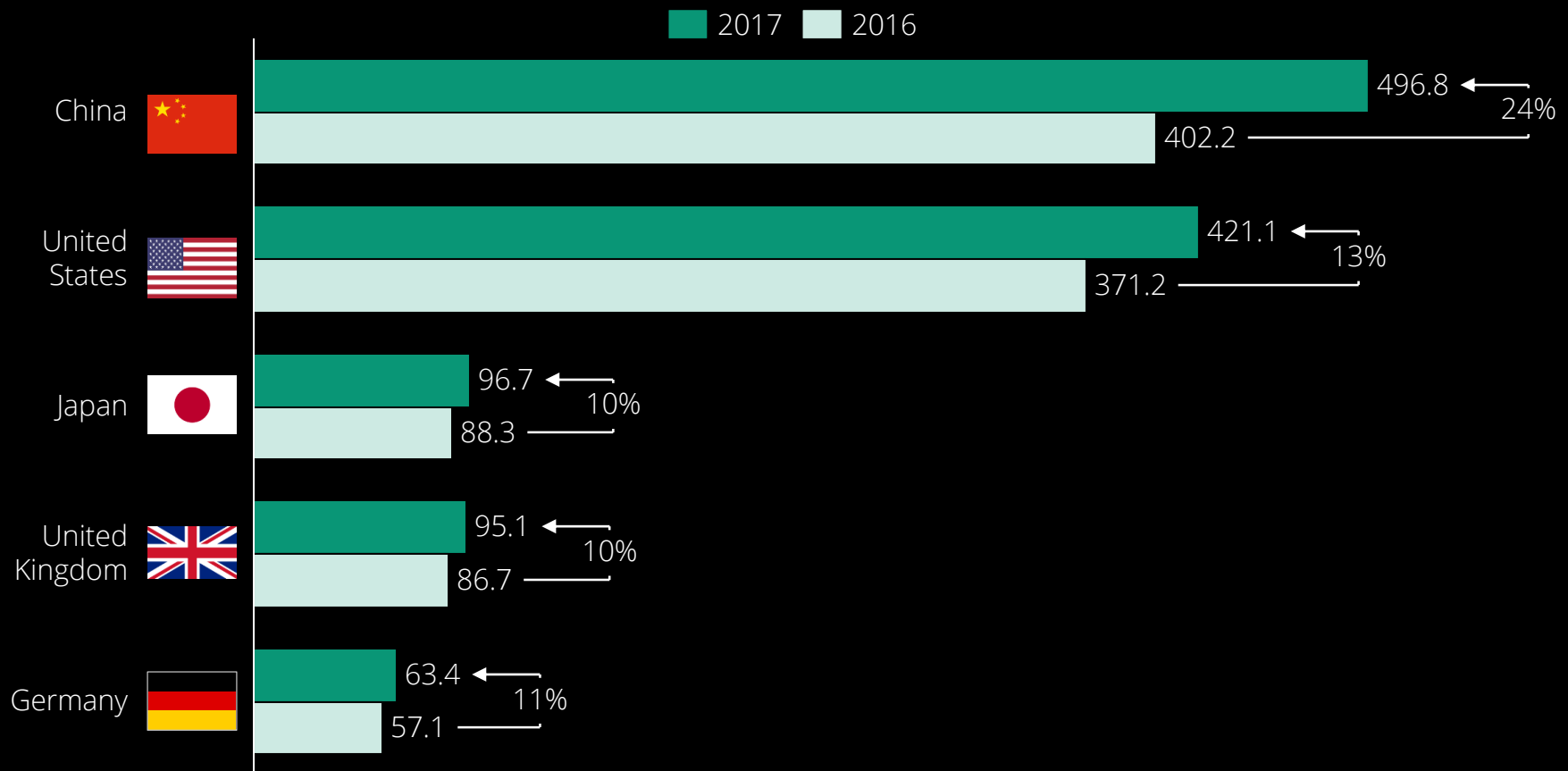


1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns



# It had already been #1 in eCommerce, but China still grew by 24% in 2017

Top 5 eCommerce countries by market revenue in billion US\$



# The online sales share of Consumer Electronics in the U.S. is expected to reach almost 75% by 2021

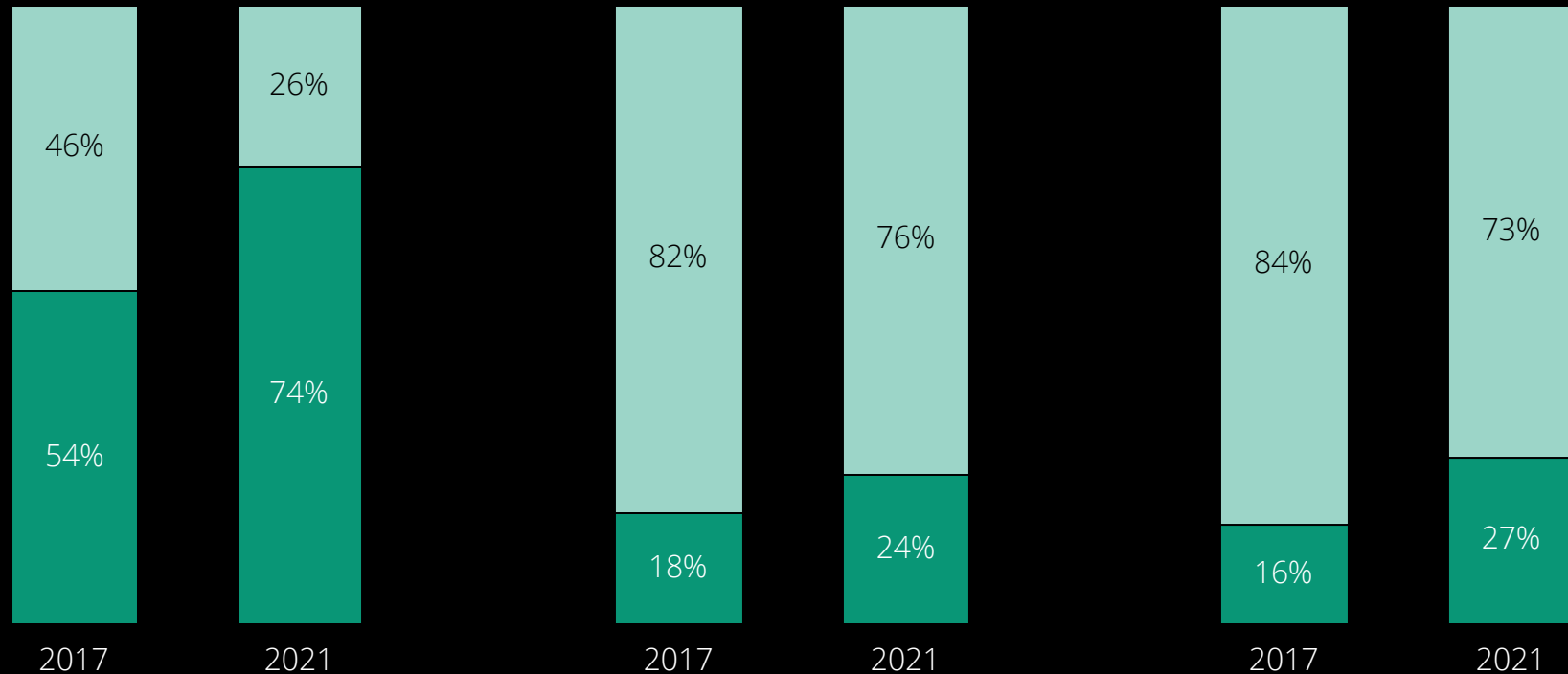
Sales channels in selected consumer product categories in the U.S. in 2017

Consumer Electronics

Apparel

Furniture

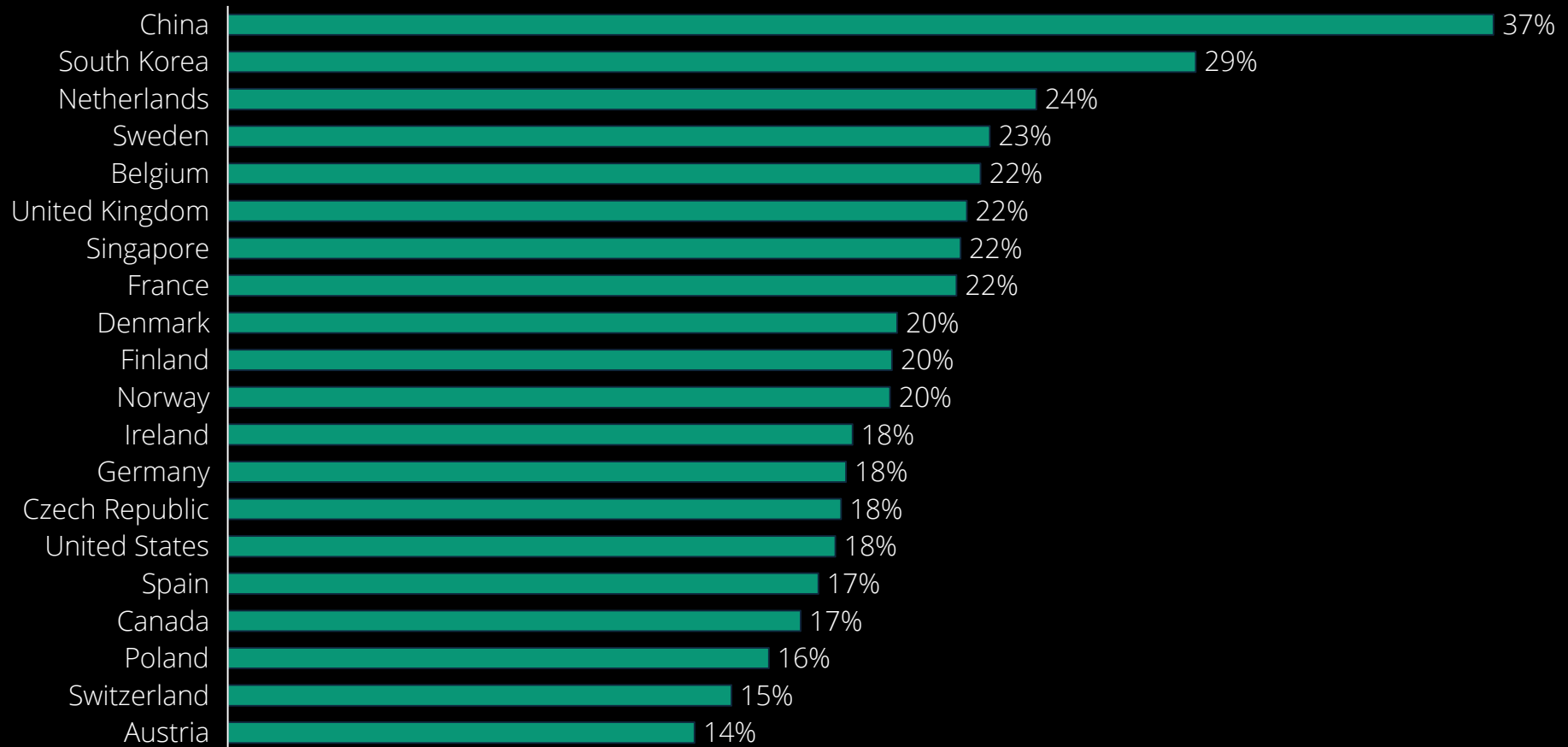
Offline Online



Note: The distribution channel Online refers to the purchase of physical goods in online retail. In other words, the purchase is concluded via the internet – on a desktop PC, tablet or smartphone. The distribution channel Offline covers all purchases in stationary stores, via telesale or mailorder (e.g. print catalogs)

# In China, 37% of Apparel sales are generated online, compared to only 18% in the U.S.

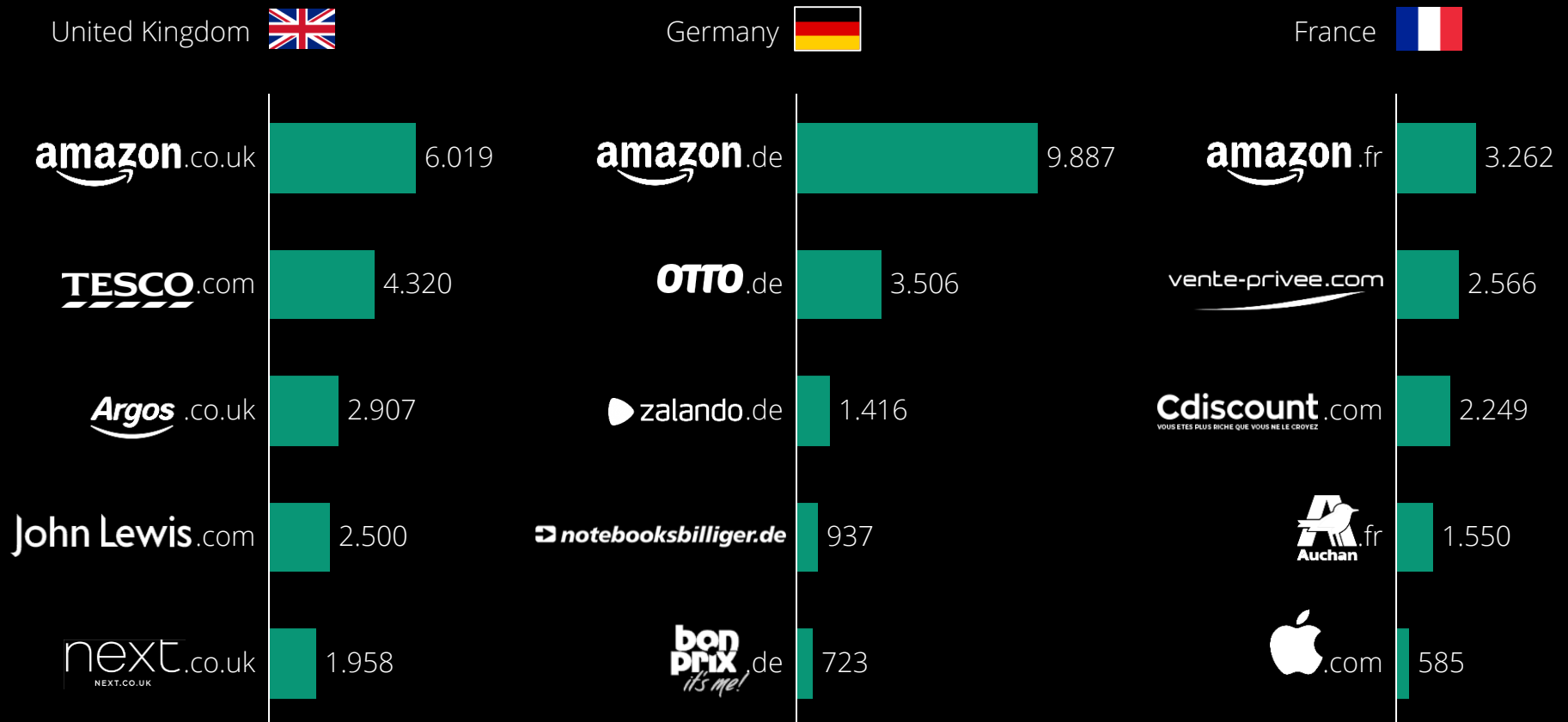
Online sales shares in the Apparel market in 2017



Note: The distribution channel Online refers to the purchase of physical goods in online retail. In other words, the purchase is concluded via the internet - on a desktop PC, tablet or smartphone. The distribution channel Offline covers all purchases in stationary stores, via telesale or mailorder (e.g. print catalogs)

# Amazon is the #1 online shop<sup>1</sup> in the most relevant European eCommerce markets





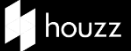


















































Top 5 online shops<sup>1</sup> in 2017 by revenue in million US\$



1: eCommerce net sales generated via the respective country domain only

# Next to large all-encompassing platforms, there are many product-specific eCommerce players

eCommerce key players by business model and region

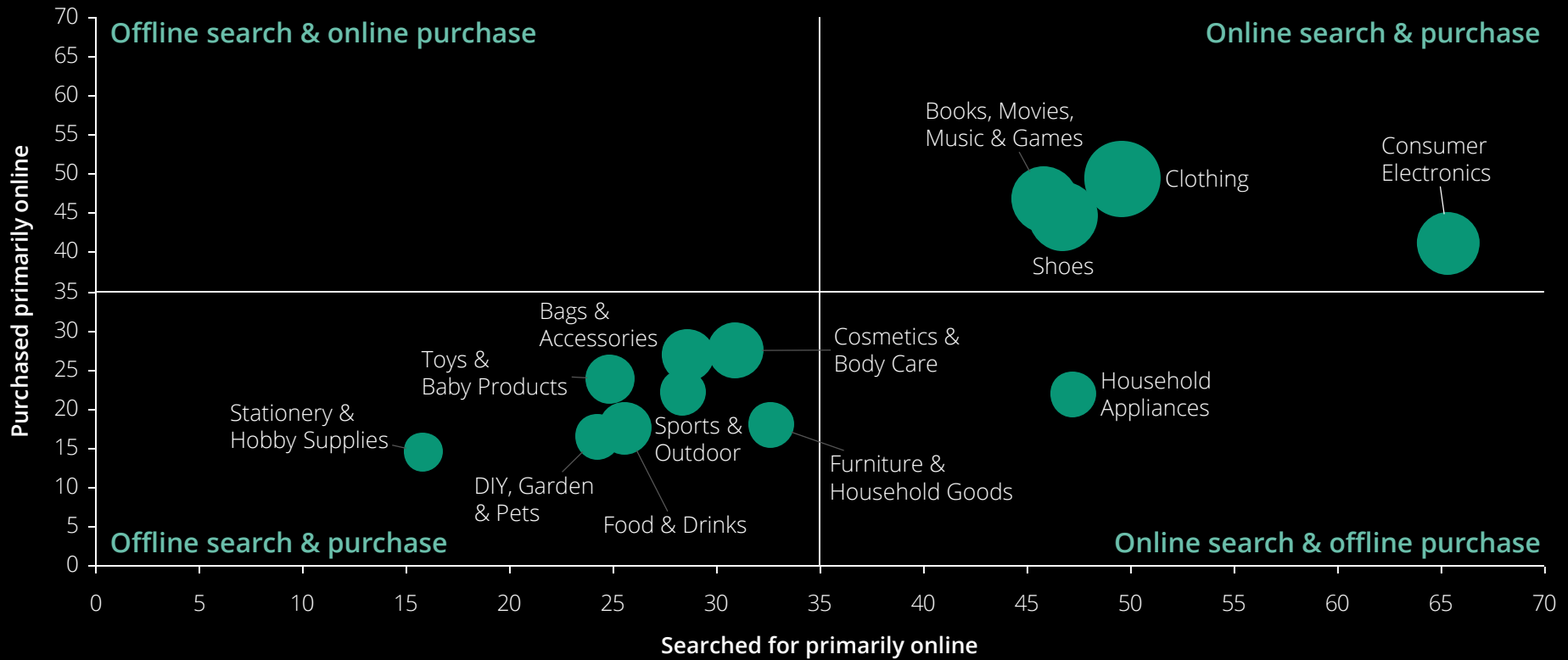
	Marketplaces	Online Retailers	Direct Sellers
United States 	   	        	         
China 	    	    	     
Europe 	  	         	     

# Consumer Electronics, clothing, shoes and media products are mainly searched for and bought online

Share of U.S. consumers who primarily search for / purchase a product online in %



● Share of U.S. consumers who ordered these items online in the past 12 months



138 "For which of these products do you mostly look for information online?"; Multiple response; "Which of these products do you mostly buy / order online?"; Multiple response; "Which of these items have you bought online in the past 12 months?"; Multiple response; n=2,010  
 Source: Statista Global Consumer Survey 2018

# Alibaba's sales on Singles' Day dwarf Thanksgiving weekend record sales

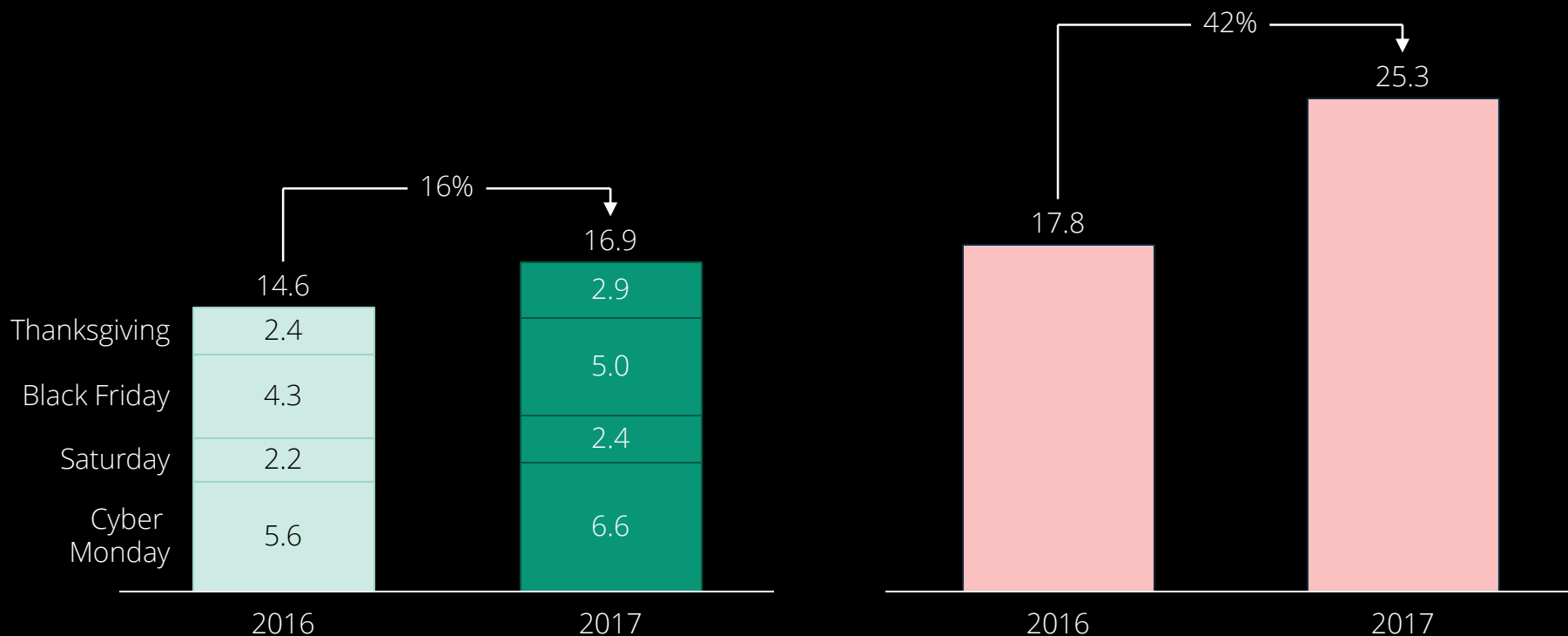
U.S. online retail sales on Thanksgiving weekend and Alibaba's GMV<sup>1</sup> on Singles' Day in billion US\$



Thanksgiving weekend



Singles' Day (Alibaba)

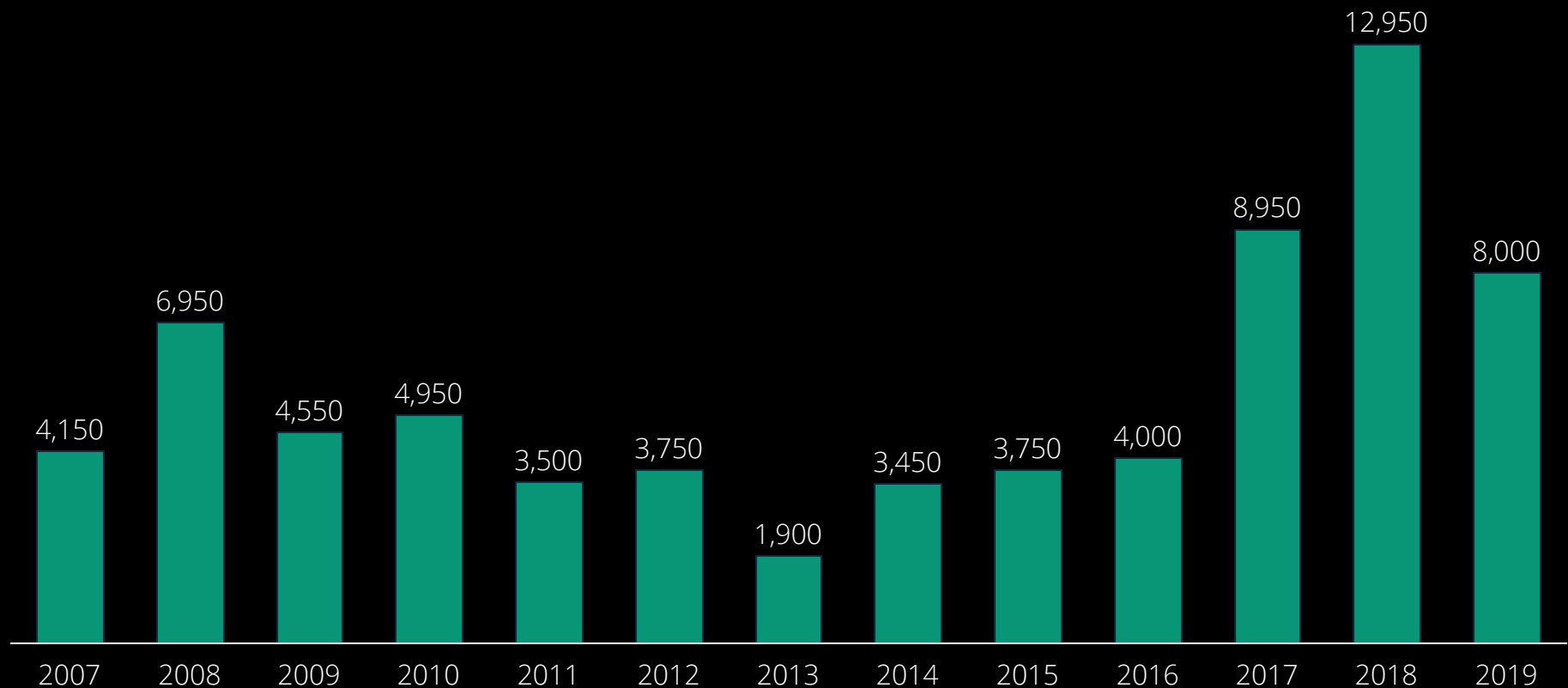


1: GMV = Gross merchandise value

Note: Adobe retail data is based on the analysis of one trillion visits to 4,500 retail websites and 55 million stock keeping units

# The rise of eCommerce is increasingly going to affect U.S. chain stores

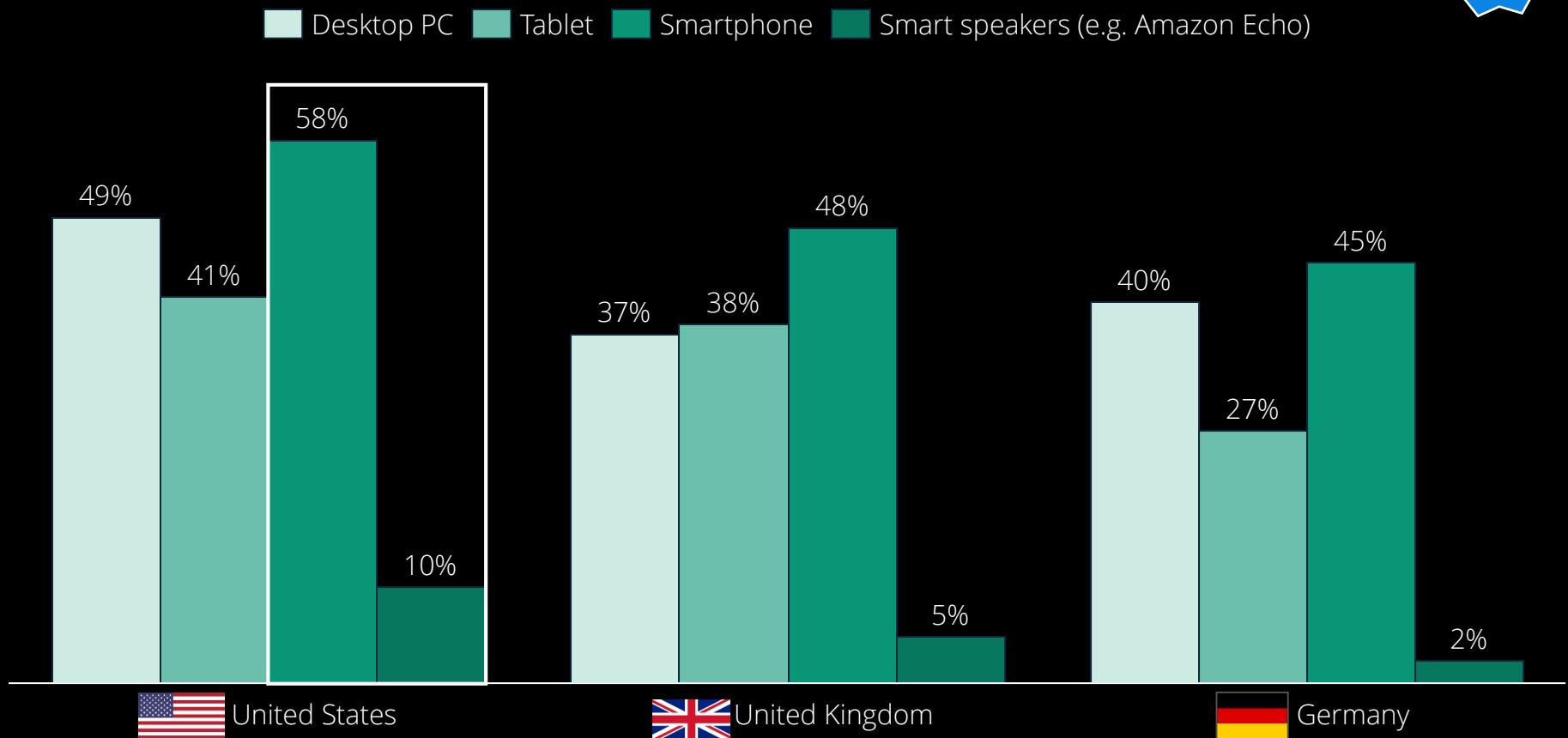
Past and forecast major U.S. chain store closures





# The U.S. has the highest mobile and voice shopping rates

Devices used for online shopping

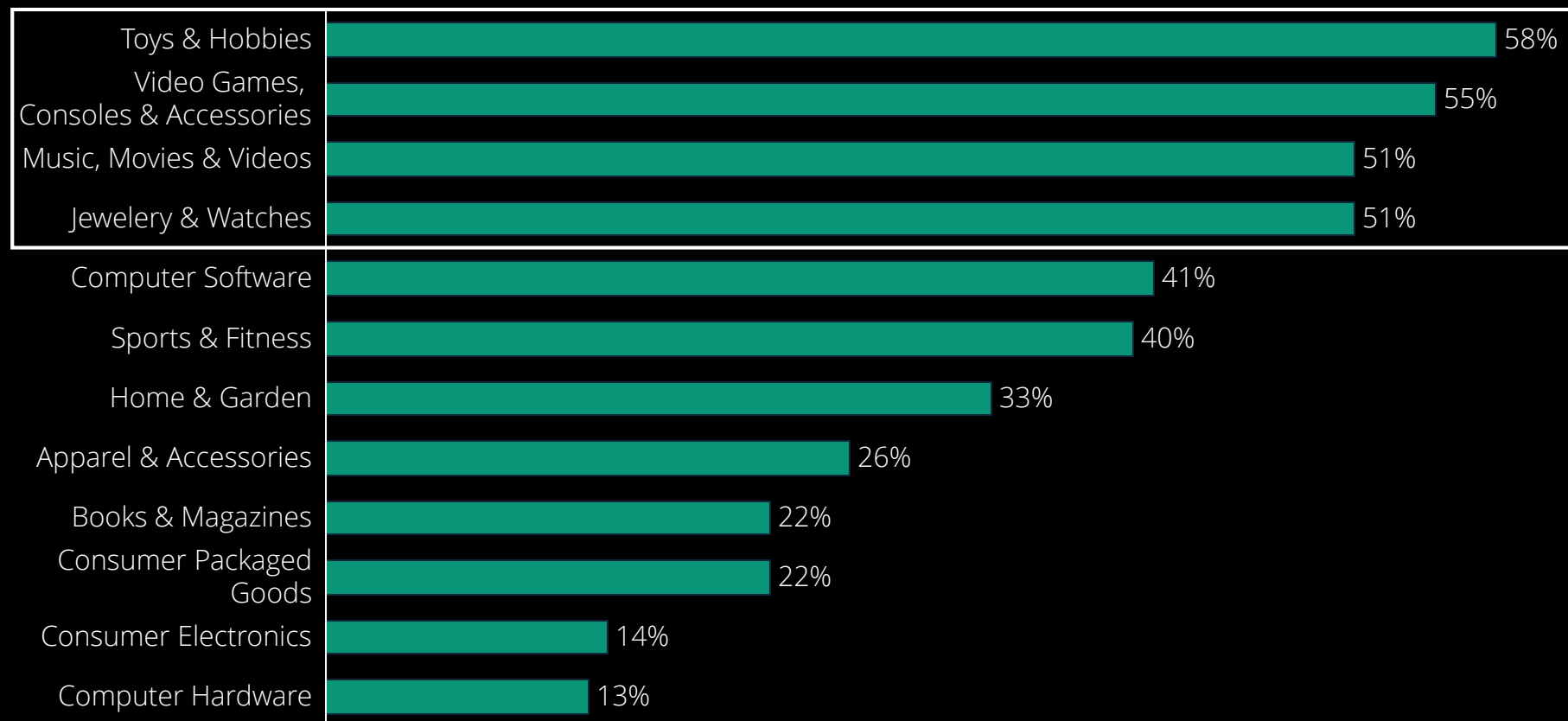


"Which of the following devices have you used for online shopping in the past 12 months?"; Multiple response; U.S.: n=2,010, UK: n= 2,011, DE: n=2,062

141 Source: Statista Global Consumer Survey 2018

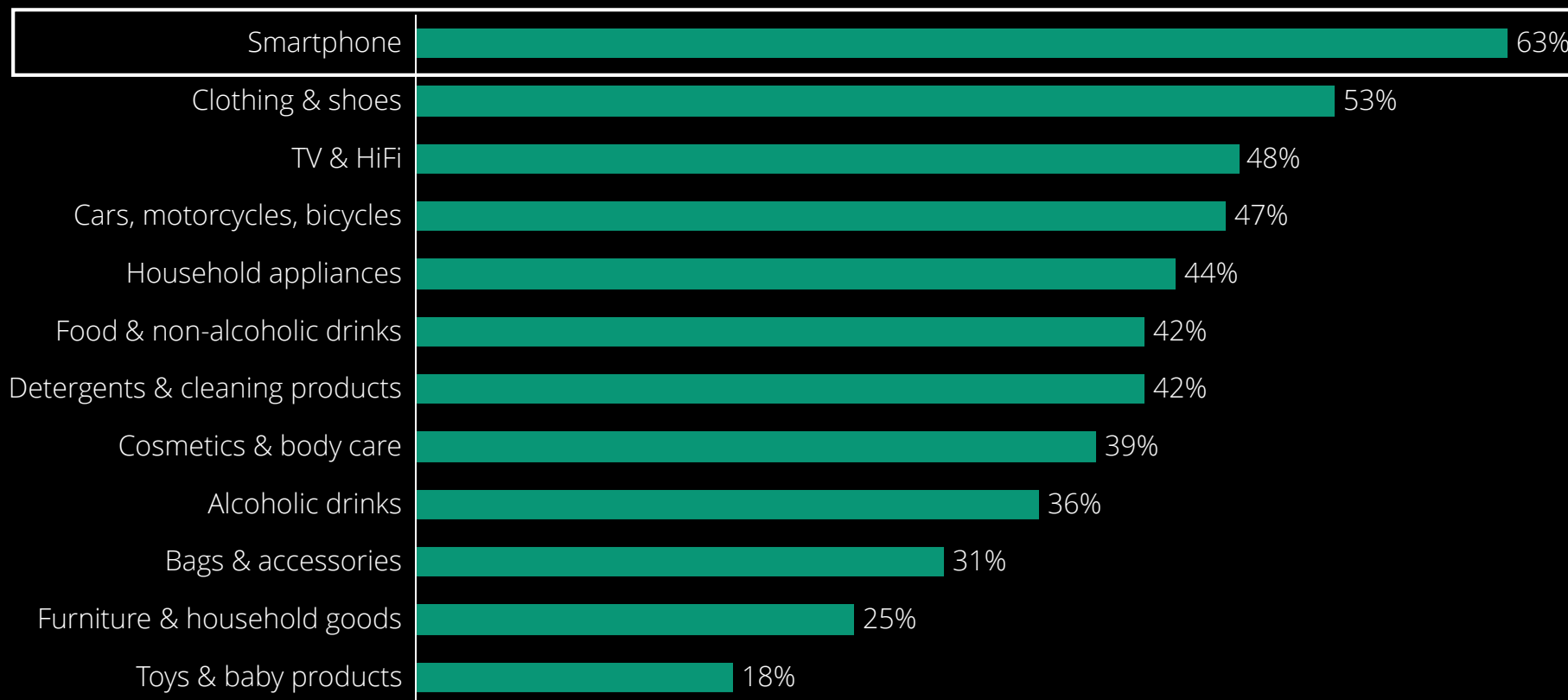
# In some categories, more than 50% of Americans already use their mobile device for shopping

Mobile share of U.S. eCommerce spending in Q3 2017



# To U.S. consumers, brands matter most when it comes to smartphones

Brand awareness by category in the U.S.

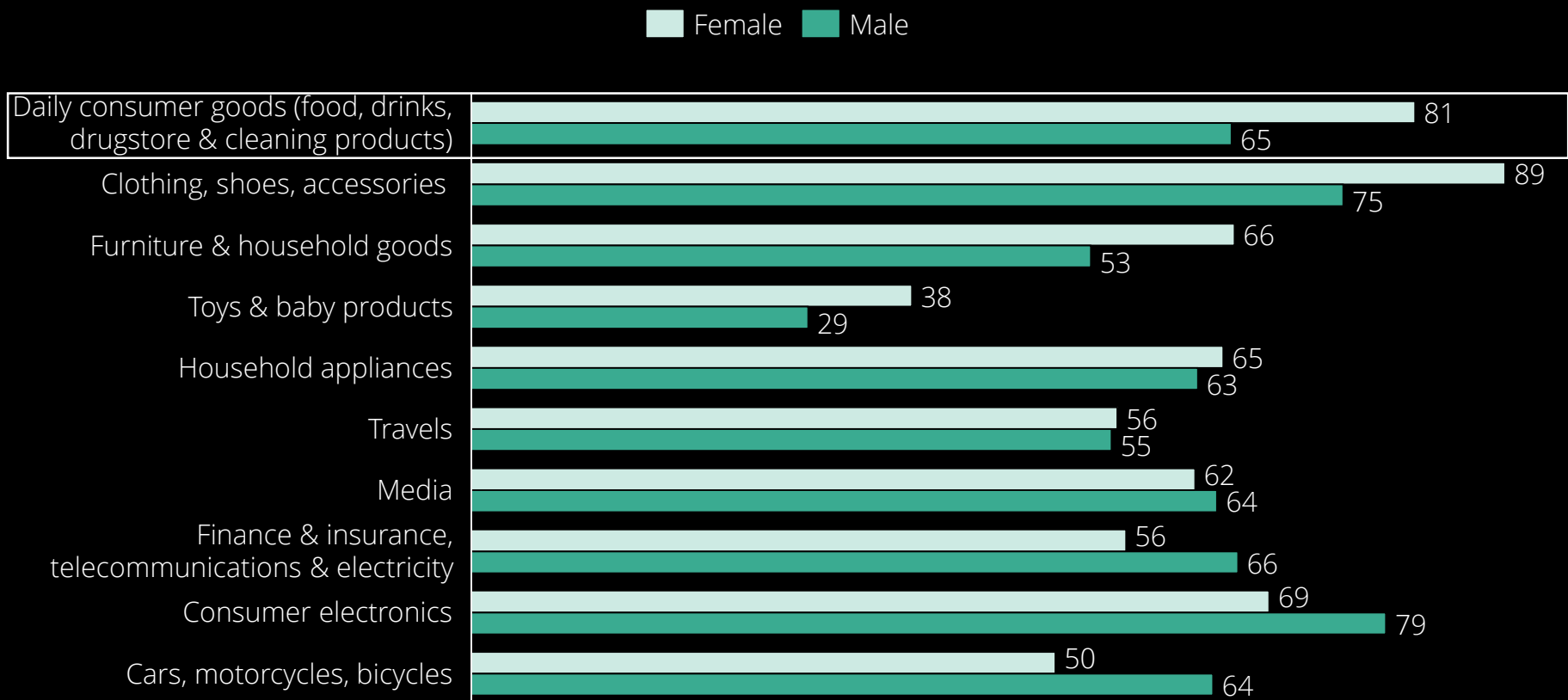


"In which of these categories do you pay particular attention to brands?"; Multiple response; n=10,150

143 Source: Statista Global Consumer Survey 2018

# 81% of women state that it's them who decide on which food to buy for their households

Purchase decision maker by gender in the U.S.



"In which fields do you personally make purchasing decisions?"; Multiple response; "What is your gender?", n=10,150

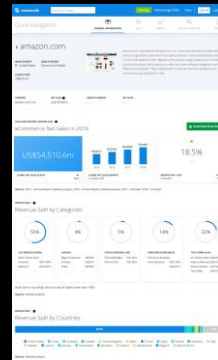
# ecommerceDB.com – Statista’s eCommerce database

Your starting point for market analytics, benchmarking and lead generation

More than 6,000 detailed store profiles

## Web sales information

Web sales from 2014 to 2017, growth forecast for 2018, relative market shares, cross border and product analytics



> Store profile

## In-depth KPIs

Providers of logistics services, payment methods, traffic metrics

> Customized Ranking

## Company information

Including information on company revenue, contact information (management, marketing, and eCommerce contacts)



Easy to use

ecommerceDB.com offers a clear design and intuitive navigation



Seamless workflow

Content can be instantly downloaded in Excel format



Daily updates

Information on online store revenues is updated on a daily basis



*Statista's ecommerceDB contains detailed data on online stores that is most useful for our analyses of the eCommerce market."*

Michael Üreyil, Research Analyst at  
EY Parthenon GmbH

Your provider of more than  
6,000 detailed store profiles



**ecommerceDB**

## Statista's Digital Market Outlook

[www.statista.io/eservices](http://www.statista.io/eservices)

# eServices

eServices are reaching out towards new horizons: Food Delivery players have started to cooperate with Ride Sharing companies to further improve customer experience and reduce costs. The most obvious example is the cooperation between Uber and UberEats. Yet Uber rival Ola has just bought Foodpanda India to get into the food delivery market as well. And Taco Bell is working with Lyft in order to deliver their meals to their customers.

The eServices market is divided into four segments in Statista's Digital Market Outlook: Event Tickets, Fitness, Dating Services, and Food Delivery. The eServices market<sup>1</sup> reached a revenue of US\$134 billion in 2017 with Food Delivery being the biggest segment. China has taken a leading role with a market size of US\$43 billion. This is due to the outstanding revenue generated in the Chinese Food

Delivery segment. It is also the fastest-growing market with a CAGR<sup>2</sup> of 19% through to 2022. With a revenue of US\$36 billion in 2017, the eServices market in Europe is smaller compared to China, but larger than the US\$31 billion U.S. market. The low numbers in the overall U.S. eServices market stem from a relatively weak Food Delivery segment, which is less than half the size of its Chinese equivalent.

Next to the cooperation between Food Delivery and Ride Sharing players, we expect an increasing integration of social networks (e.g. Facebook) and eServices platforms and apps. An example are ticketing platforms, where certain online ticket providers already cooperate with social media organizations. Fandango, for example, cooperates with Facebook and allows users to purchase movie tickets through the social network.

## Statista's Digital Market Outlook

Event Tickets is the second largest eServices segment. The biggest specter for event ticketing companies is probably Amazon. There are constant rumors that Amazon is planning to sell event tickets online. In August 2017, Amazon was said to be seeking cooperation with U.S. venue owners to sell event tickets. Amazon even tested the potential of selling tickets online in the UK. However, the latest news is that Amazon is not going to take over Ticketmaster and Co., so event ticketing companies can breathe a sigh of relief – for now.

In Fitness, we observe another exciting development: Fitbit, for example, is advancing into employee health care and coaching with its Twine Health acquisition. We believe that fitness trackers will in the future be able to make recommendations regarding the user's health and predict health conditions (e.g. heart attacks, diabetes, etc.). This might open up possibilities for new business models in several areas, such as the health and insurance sectors.

But not all is well in the eServices market: There are some bad news for Tinder. The top dating app on iOS had

introduced higher subscription fees for users above 30. But in February, courts decided that Tinder was no longer allowed to charge different fees based on age for discrimination reasons.

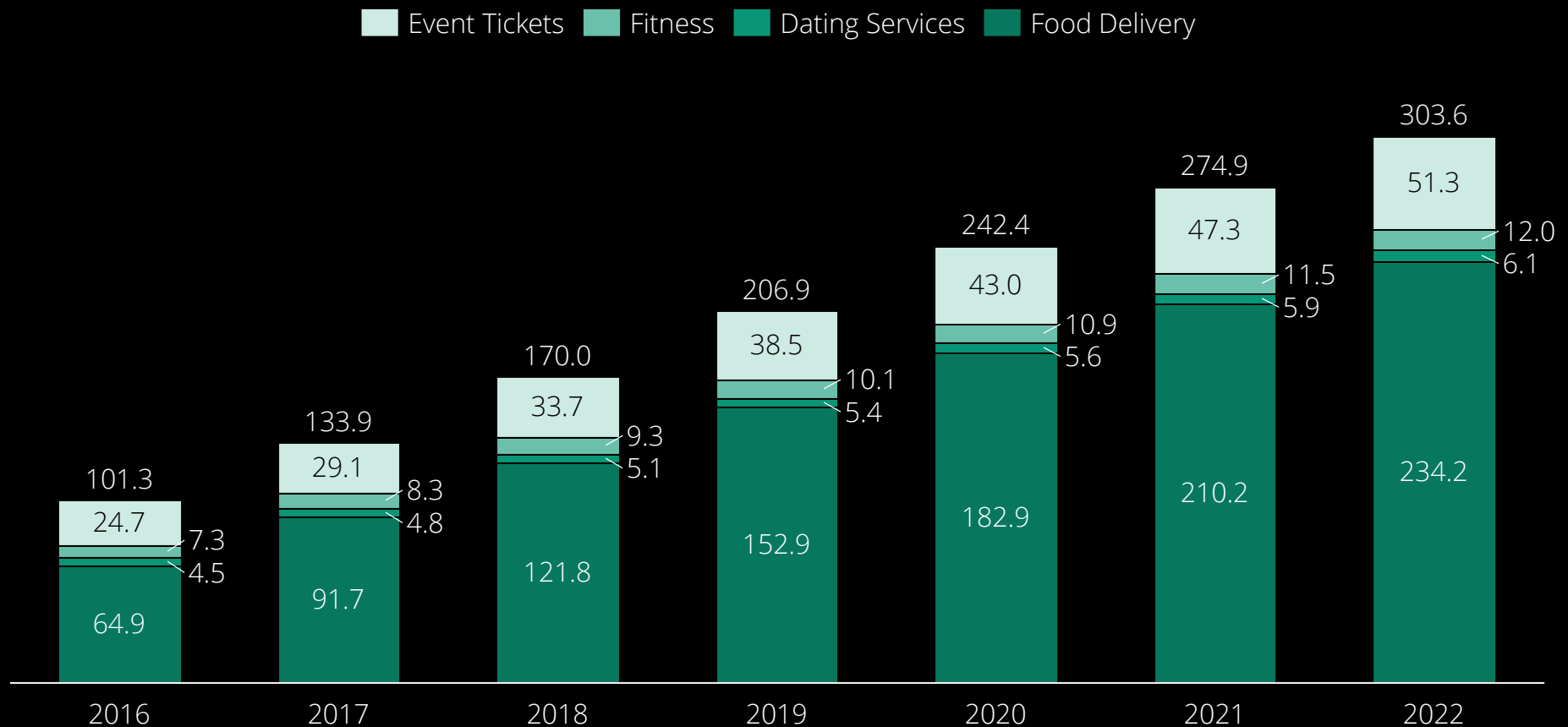
Furthermore, smartwatches will heavily impact Fitness and Dating Services. We anticipate an increasing convergence of smartwatches and fitness bands. Fitness trackers will include features like measuring heart rates, making payments, and controlling lighting. Secondly, dating apps will be used on smartwatches to access messaging functionalities. The new Apple Watch app "Hands-Free Tinder", for example, already provides a new way of swiping through Tinder profiles: The app automatically swipes on a profile based on the user's heart rate.

*K. Schreiber*

[kschreiber@statista.com](mailto:kschreiber@statista.com)

# Driven by the Food Delivery segment, the global<sup>1</sup> eServices market continues to grow

Global<sup>1</sup> eServices revenue in billion US\$



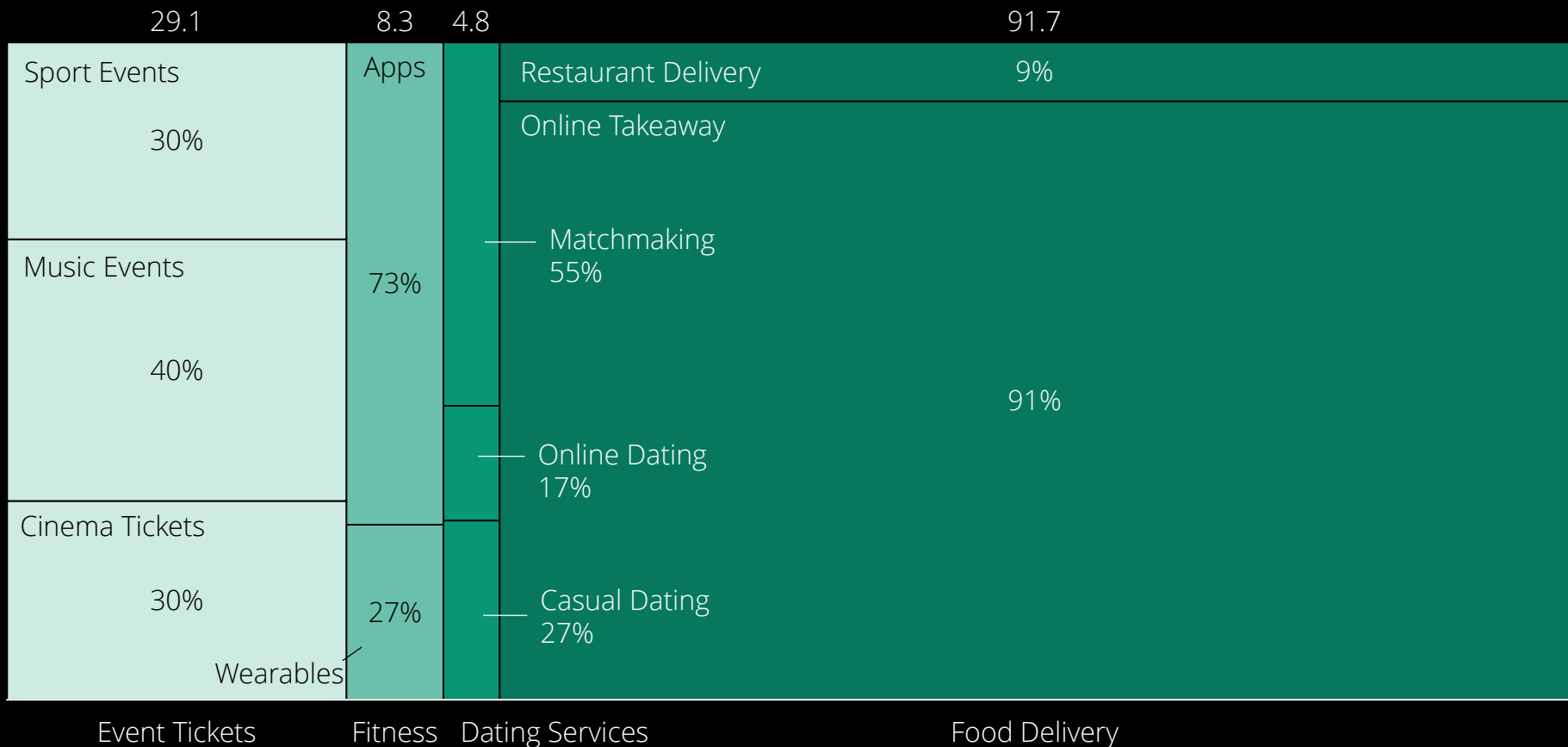
1: Only includes countries listed in Statista's Digital Market Outlook

148 Source: Statista Digital Market Outlook 2017



# The Online Takeaway segment dominates the global<sup>1</sup> eServices market in terms of revenue

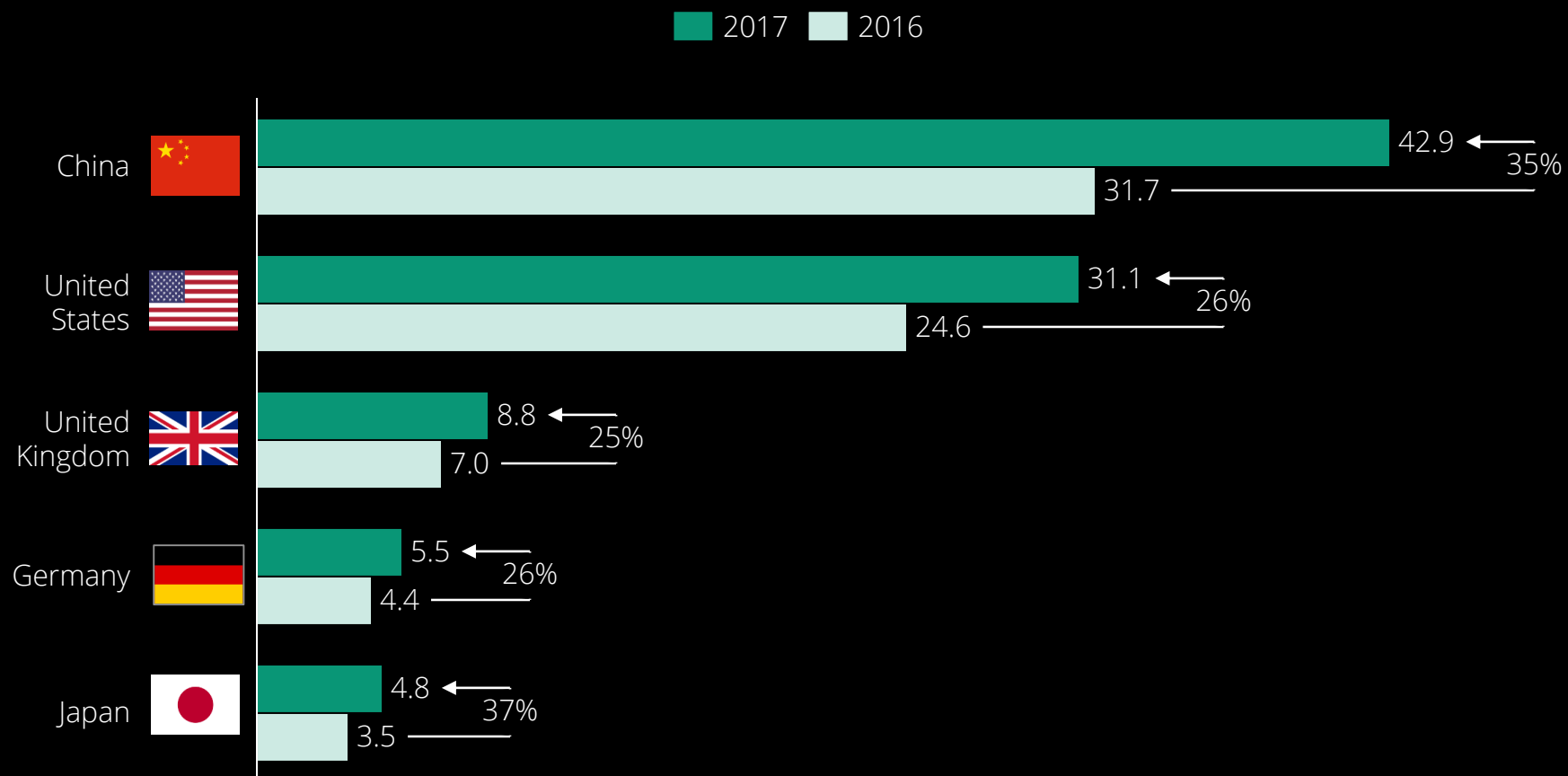
Global<sup>1</sup> eServices revenue in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns

# The eServices market grew in all top 5 countries by more than 25%

Top 5 eServices countries by market revenue in billion US\$



# The eServices landscape is highly competitive with many different established and new players

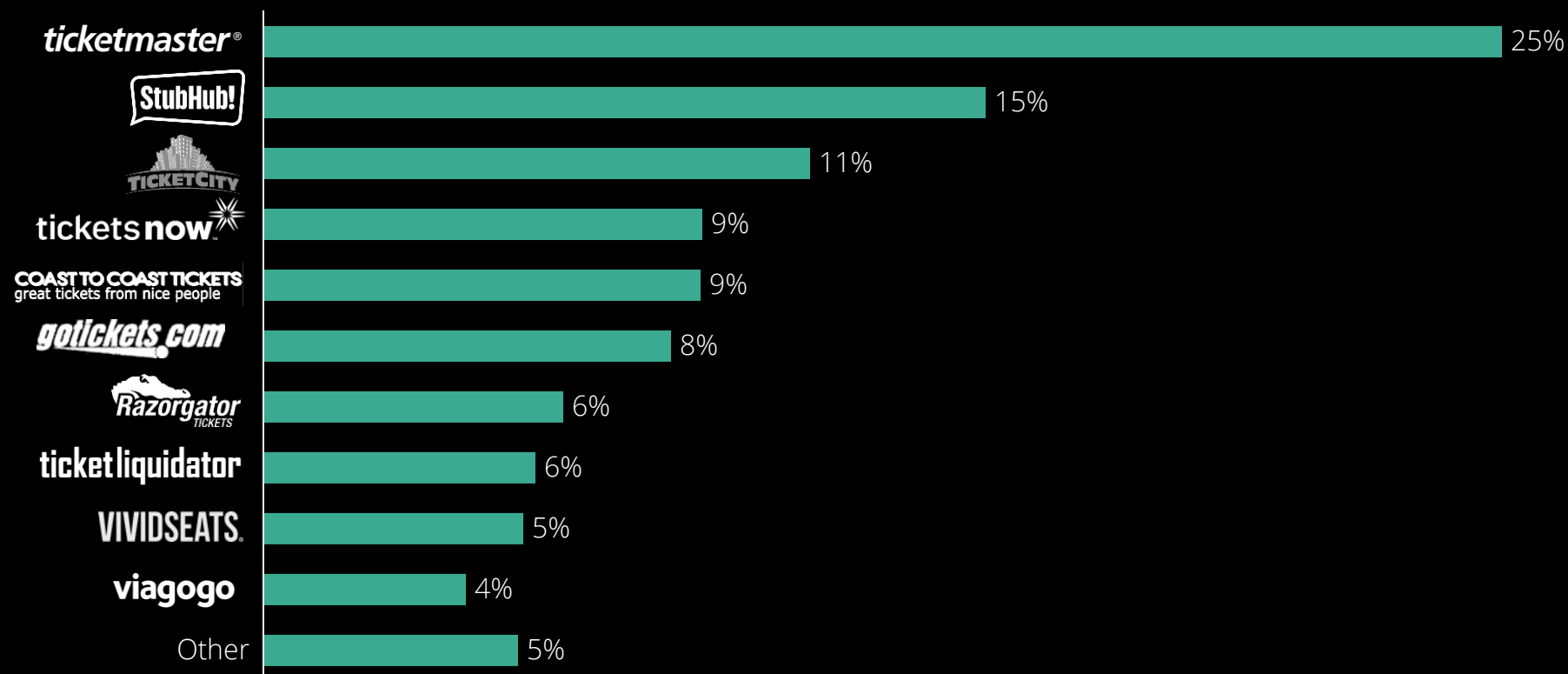
Selected providers of eServices

	Event Tickets	Fitness	Dating Services	Food Delivery
Start-ups <sup>1</sup>				
Established players				

1: Founded in or after 2007

# Ticketmaster is the market leader in online ticketing

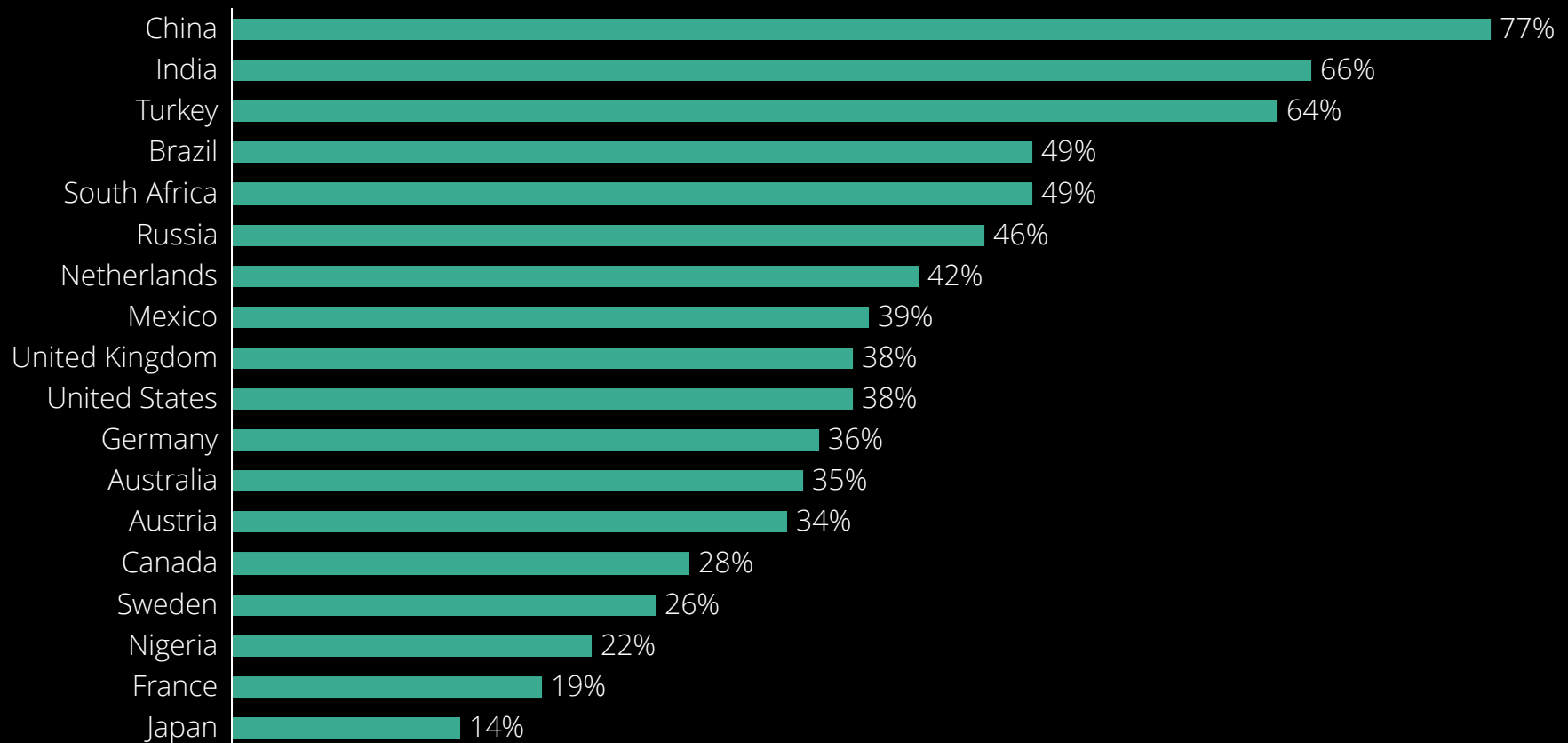
Websites and apps used to purchase event tickets in the U.S.



\*"Which of these online providers have you bought event tickets from (website or app) in the past 12 months?"; Multiple response; n=871, respondents who bought event tickets online

# Almost 80% of the Chinese order meals online, compared to only 14% of people in Japan

Share of respondents who ordered meals online



"Which of these online services (website or app) have you used in the past 12 months?"; Multiple response; U.S., UK, DE, FR: n~2,000, all other countries n~1,000

# The UK, Germany, and France all have a leading food delivery provider in the market

Online food providers used by respondents in the past 12 months



United States



United Kingdom



Germany



France



"Which of these online providers of food delivery have you used in the past 12 months?"; Multiple response; U.S.: n=774, UK: n=1,532, DE: n=750, FR: n=376; respondents who used meal orders online in the past 12 months

# Apple, Fitbit, and Samsung dominate the market for health trackers and smartwatches

Top 5 eHealth trackers / smartwatches



United States



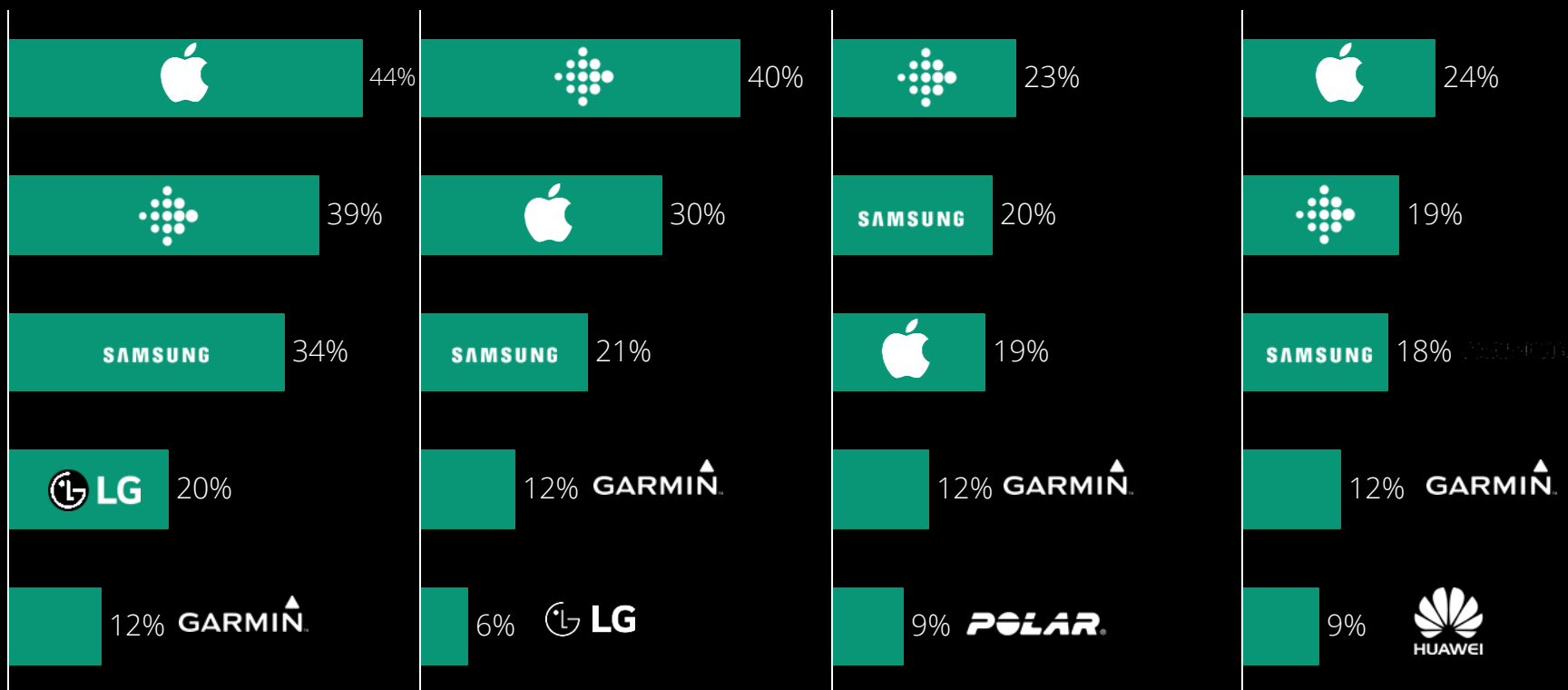
United Kingdom



Germany



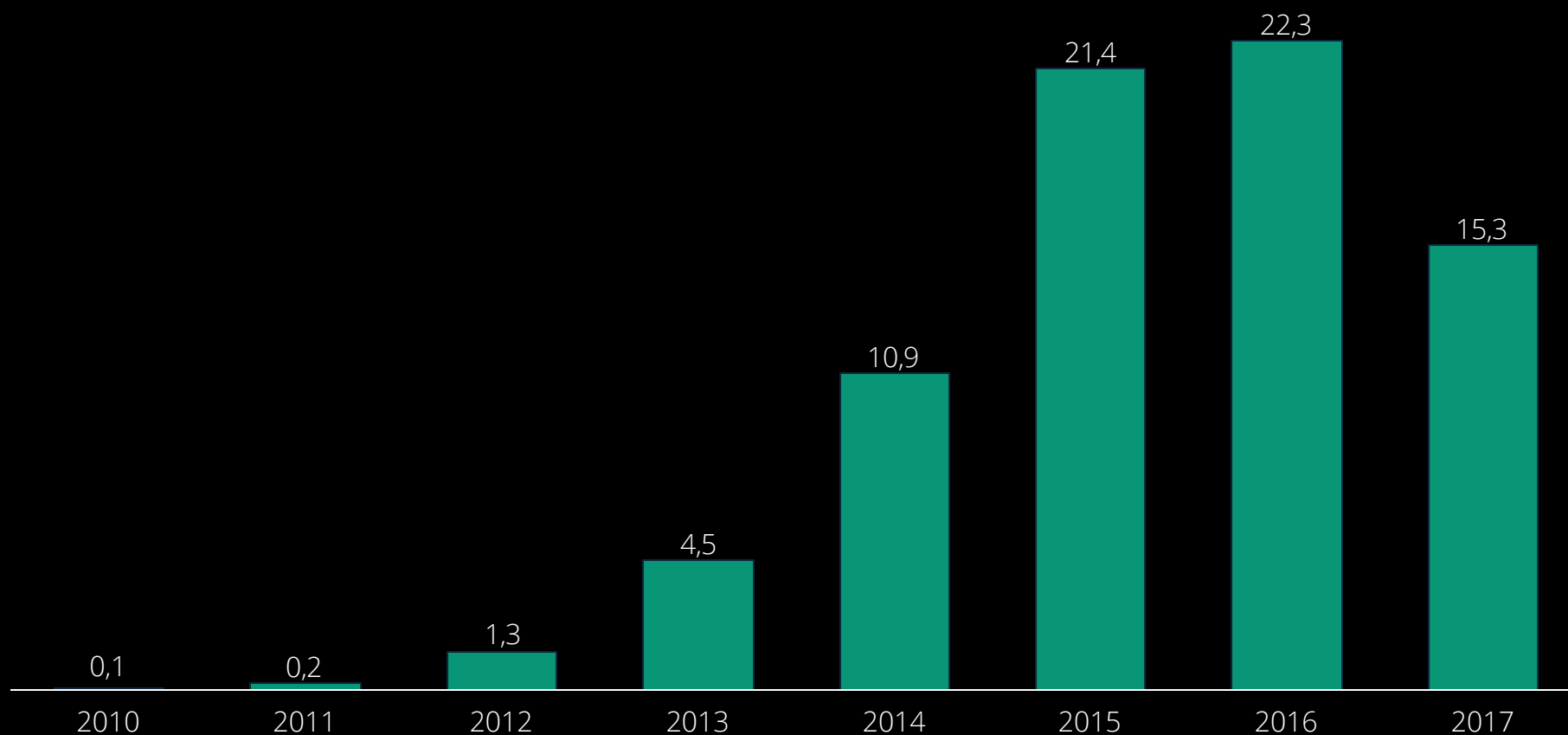
France



"Which of these providers do you own a fitness or health tracker or a smartwatch from?"; Multiple response; U.S.: n=834, UK: n=565, DE: n=449,, FR: n=363; respondents who use fitness trackers, smartwatches with fitness function, motion trackers or sleep tracking systems

# Fitbit suffered a sales decline to 15 million devices

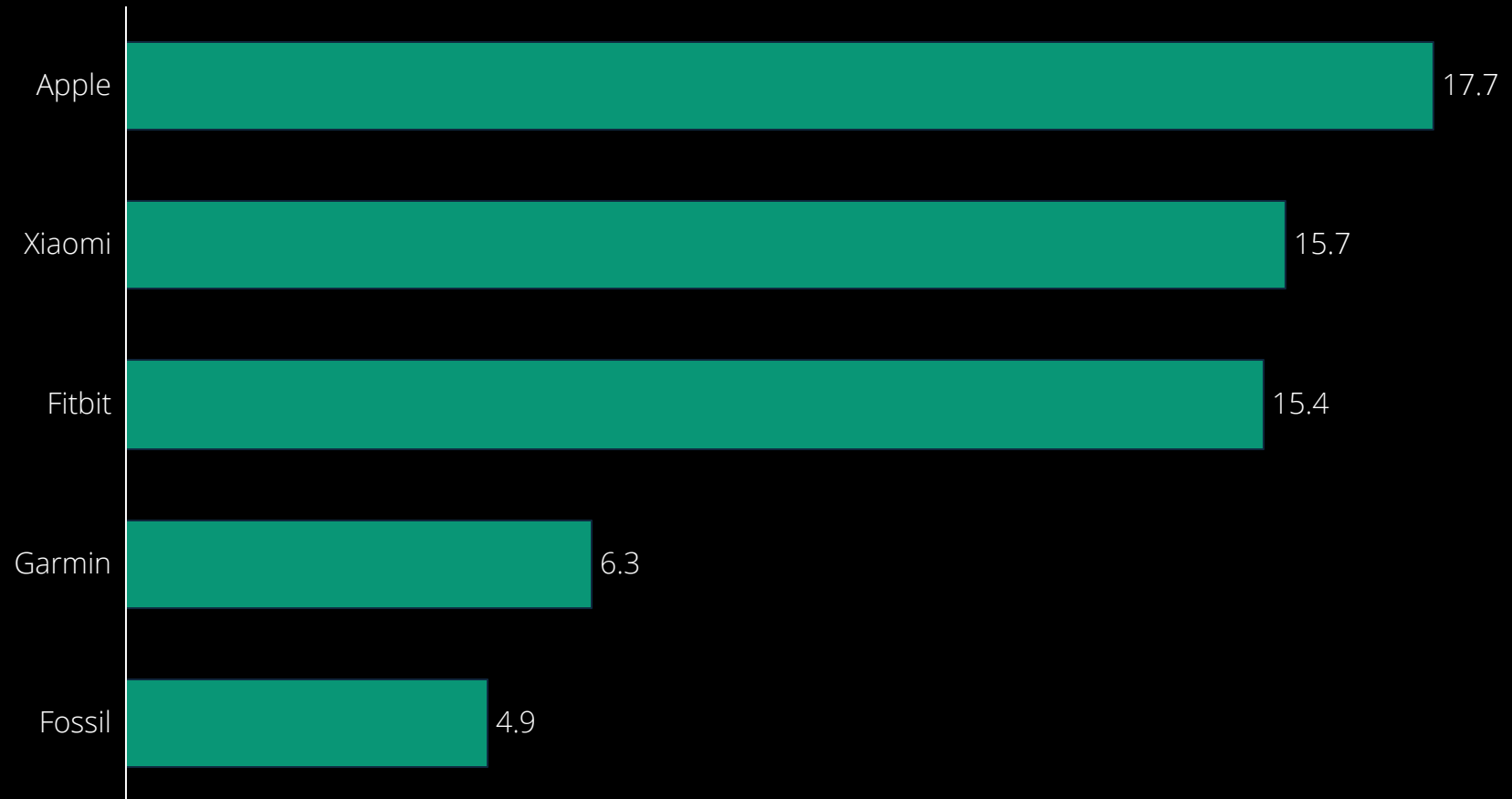
Number of Fitbit devices sold worldwide in million





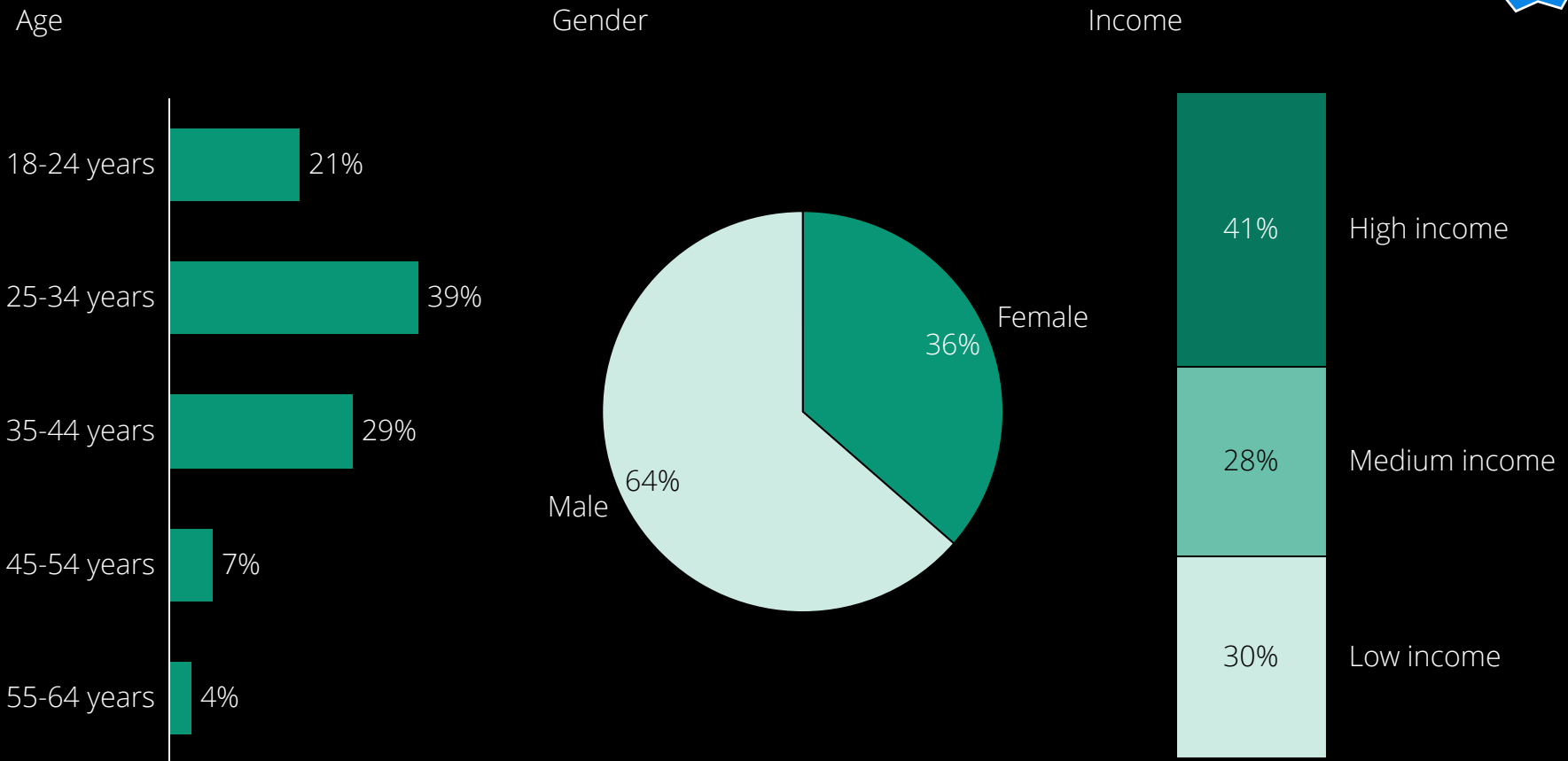
# With Fitbit suffering, Apple jumps to the top of the global wearables market

Top 5 wearable device companies based on worldwide unit shipments in million in 2017



# Online Dating users are young, male, and have a high income

Demographics of people that use Online Dating in the U.S.



"Which of these online services (website or app) have you used in the past 12 months?"; n=464; "What is your gender?"; "How old are you?"  
 "About how high is the monthly gross income that your total household disposes of, before tax and contributions?"; respondents who gave information about their income

## Statista's Digital Market Outlook

[www.statista.io/etravel](http://www.statista.io/etravel)

# eTravel

The mobility and travel markets have been heavily disrupted by digital business models. And this trend is far from over: Self-driving cars and similar innovations interfere with processes both in commercial and personal transportation.

In Statista's Digital Market Outlook, the eTravel market consists of two segments: Mobility Services and Online Travel Booking. With revenues of US\$213 billion in 2017, the United States takes the leading role within the eTravel market. User penetration and growth in Europe are lower, due to concerns about private data abuse and many growth-hampering regulations and laws. This leads to a revenue of US\$180 billion. Although the Chinese market is even smaller, with revenues of US\$113.5 billion, it is the fastest-growing region and we expect it to overtake Europe by 2022 in some segments.

Ride Sharing is probably the most exciting part of the eTravel market: It is likely the most lucrative field of application for self-driving cars and therefore a driver of innovation. In the future, the cost of travel per mile will probably be lower in a driverless Uber than in a private car, even for long trips in rural areas. We also expect self-driving cars to increase road safety, reduce traffic accidents, free up space in cities (car parks, etc.), and reduce congestion.

Not surprisingly, many Ride Sharing companies cooperate with automakers like General Motors, Ford, Volvo, and Tesla to develop driverless cars. Uber, for example, is partnering with Volvo and has acquired Otto, a start-up developing driverless trucks. Thus far, Uber is making great progress and already testing a self-driving fleet in Pittsburgh. Yet it is currently still supervised by humans in the driver's seat.



## Statista's Digital Market Outlook

Profitability is another hot topic in digital markets. While Airbnb reached full-year profitability in 2017, many other eTravel players are still struggling. Airbnb achieved this feat mainly thanks to its expansion towards China and the development of new products like additional travel experience offerings.

An example of a company that is not (yet) making profit is Uber. 2017 was a year full of scandals for Uber, which eventually drove CEO Travis Kalanick out of the company. In addition to that, competition in the Ride Sharing space is fierce: Indian ride-hail player Ola is taking up the fight against Uber, starting with the Australian market. Didi – Uber's Chinese competitor – is going to buy Brazil's 99 in a US\$1bn deal to take on Uber in Latin America.

One major trend within online travel bookings is the shift towards mobile: The overall amount of mobile searches and bookings is increasing at a fast pace. In particular last-minute and same-day bookings are often made on mobile devices. Hence, hotels and online travel agencies are

investing heavily in mobile technologies to expand their services and products within this area.

The showpiece for this trend is Hotel Tonight, a smartphone-only same-day hotel booking app. When it comes to mobile devices, design and usability are the most critical factors influencing users in their decision whether or not to book a hotel. The usability and simplicity of the Hotel Tonight app is a model for all mobile hotel booking systems.

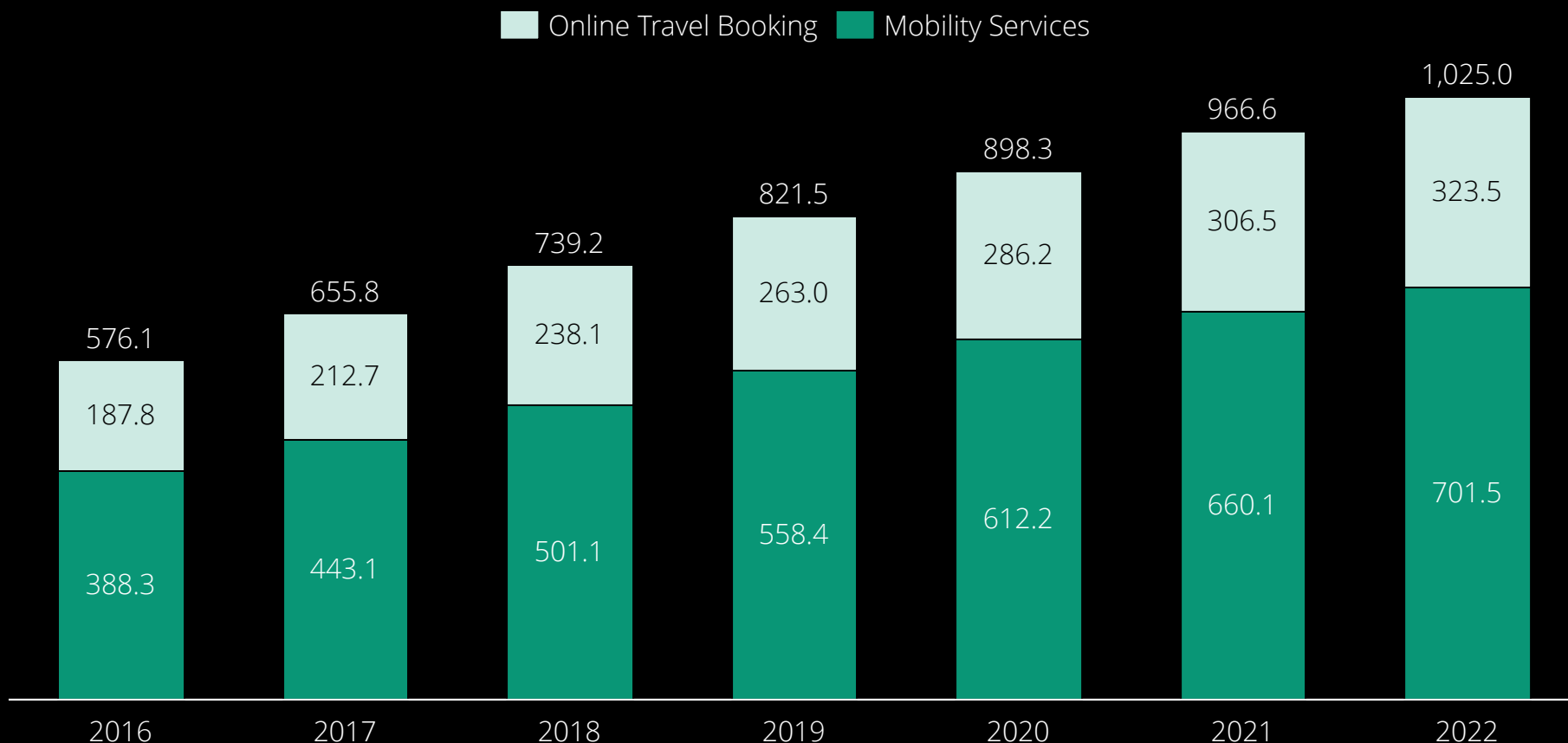
Another good example is the Booking Now app created by Booking.com: After only one tap, the app retrieves all available hotels in the immediate area. Hotels can then be booked via a quick two-step booking process.

*G. Noeldeke*

[g.noeldeke@statista.com](mailto:g.noeldeke@statista.com)

# The global<sup>1</sup> eTravel market is expected to hit US\$1 trillion in revenues by 2022

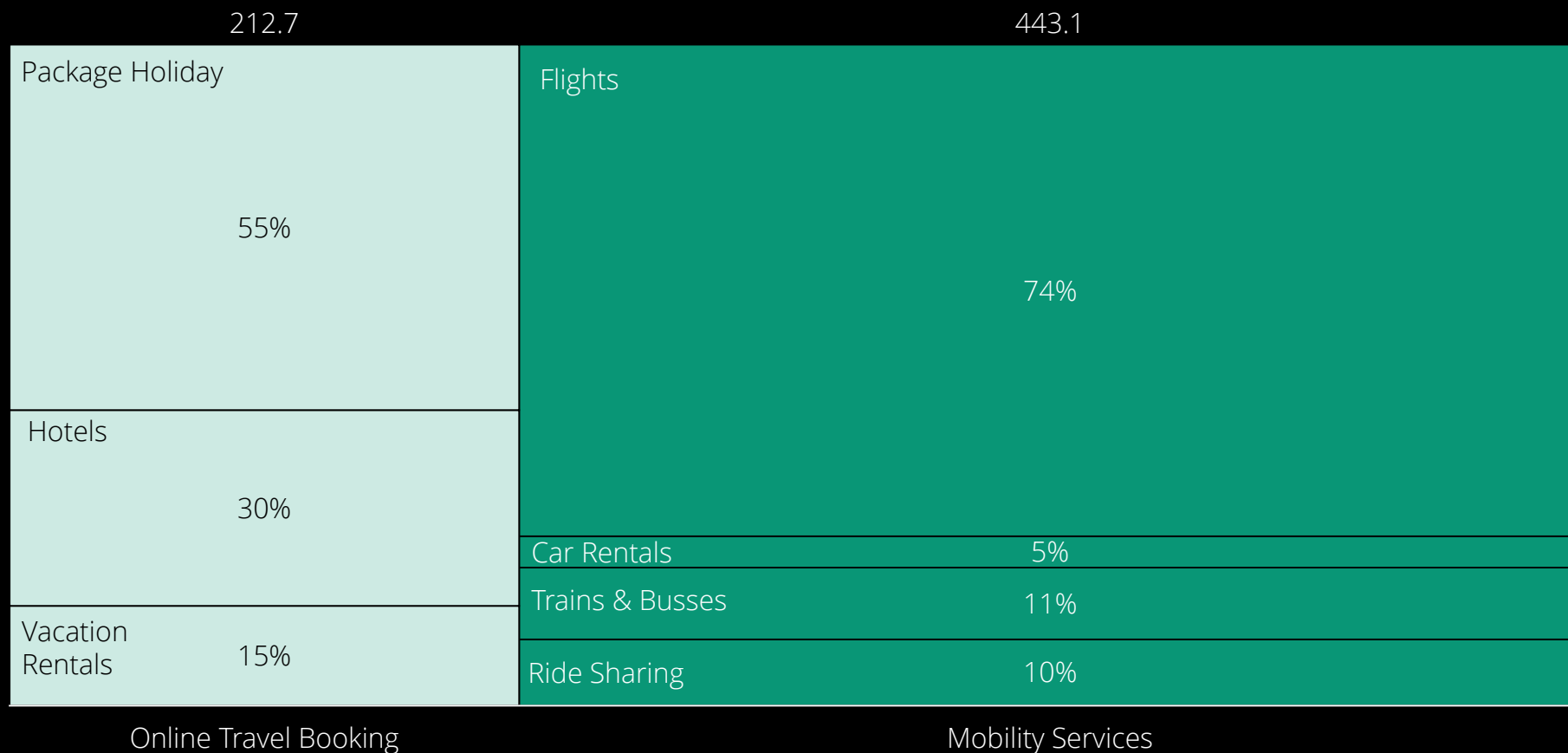
Global<sup>1</sup> eTravel revenue in billion US\$



1: Only includes countries listed in Statista's Digital Market Outlook

# Online flight bookings is by far the largest segment in the global<sup>1</sup> eTravel market

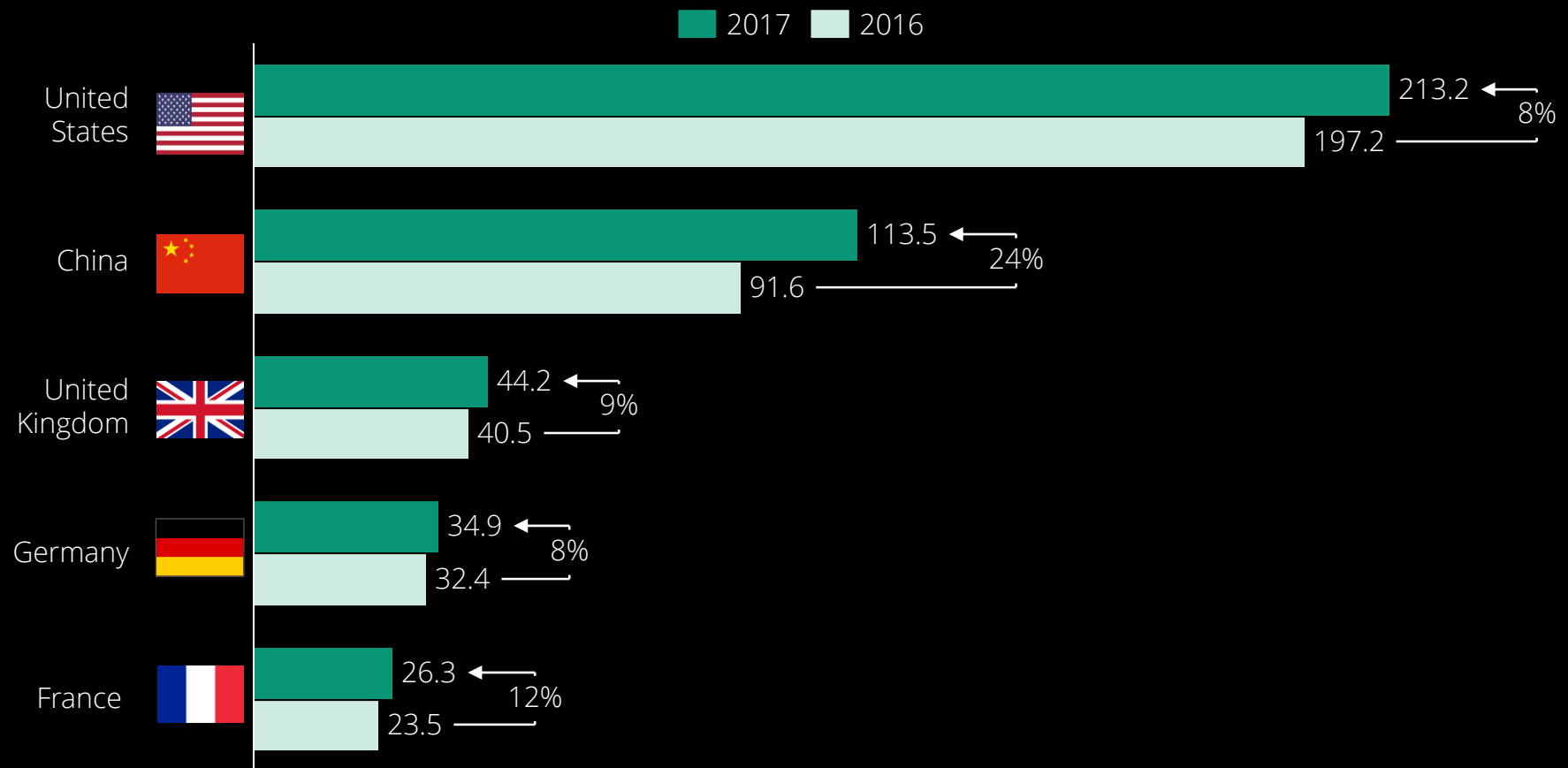
Global<sup>1</sup> eTravel revenue in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns










































# The Chinese eTravel market grew by 24%, which is way above average

Top 5 eTravel countries by market revenue in billion US\$



# The eTravel market is dominated by new players such as Uber and Airbnb

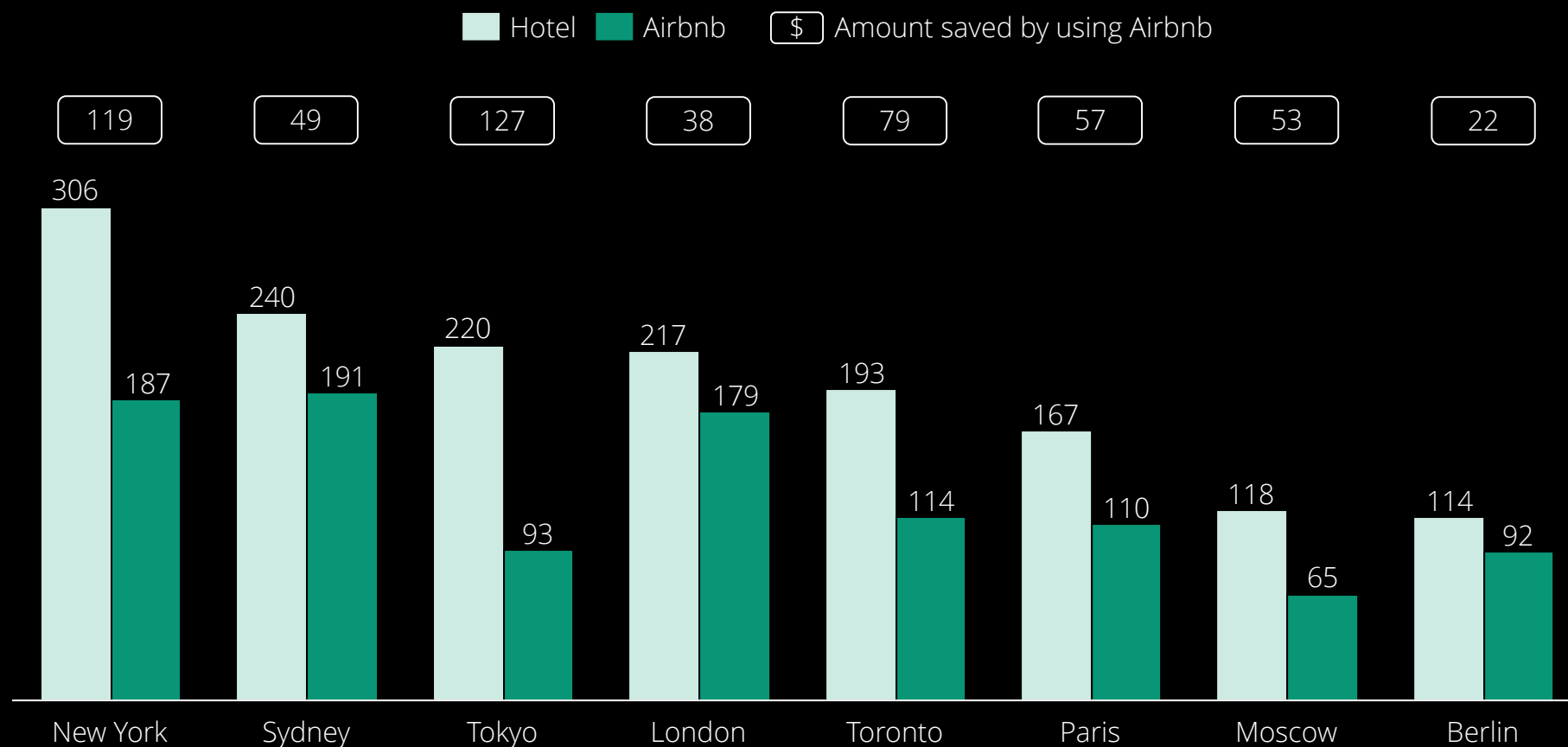
Selected companies in the eTravel sector

	Online Travel Booking	Mobility Services
Start-ups <sup>1</sup>	       	          
Established Players	         	           



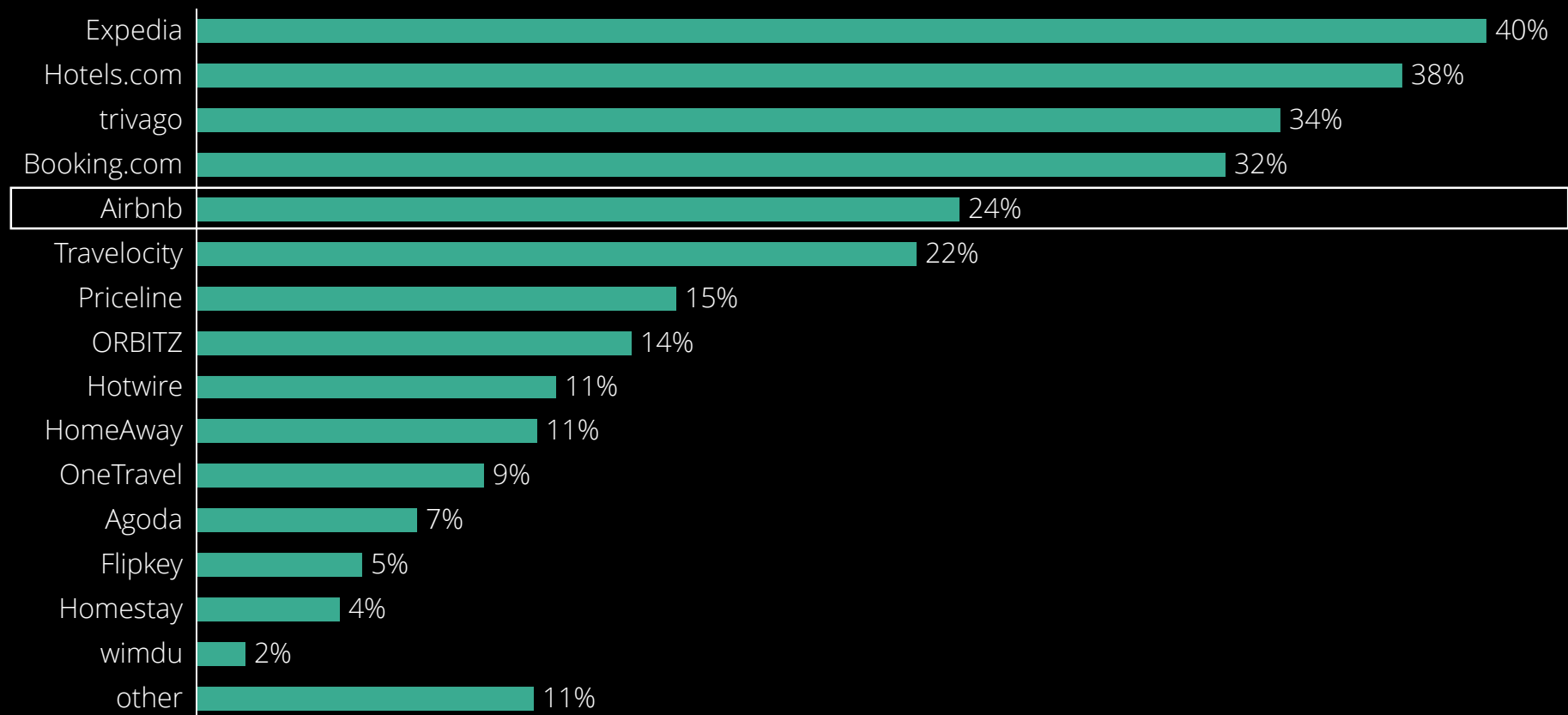
# Airbnb is cheaper than hotel stays

Average room price per night in selected major cities in January 2018<sup>1</sup> in US\$



# Airbnb is the #5 platform for accommodation booking in the U.S.

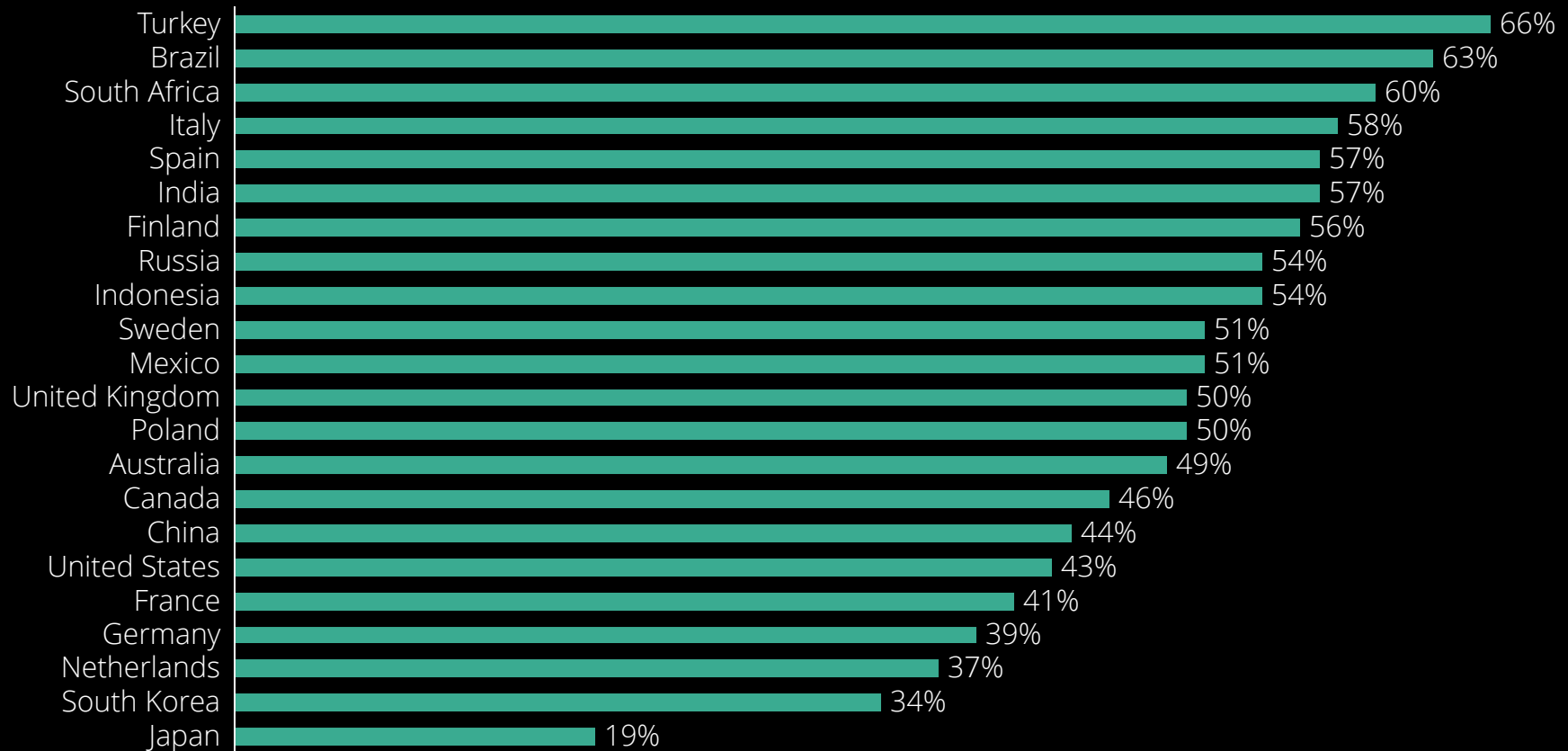
Share of respondents who used online providers to book accommodation in the U.S.



"From which of these online providers have you booked an accommodation – hotel or private accommodation – in the past 12 months (website or app)"; Multiple response; n=1,160 respondents who booked hotels, vacation apartments or houses online in the past 12 months

# Turkey, Brazil, and South Africa are the countries where online travel offers are most appreciated

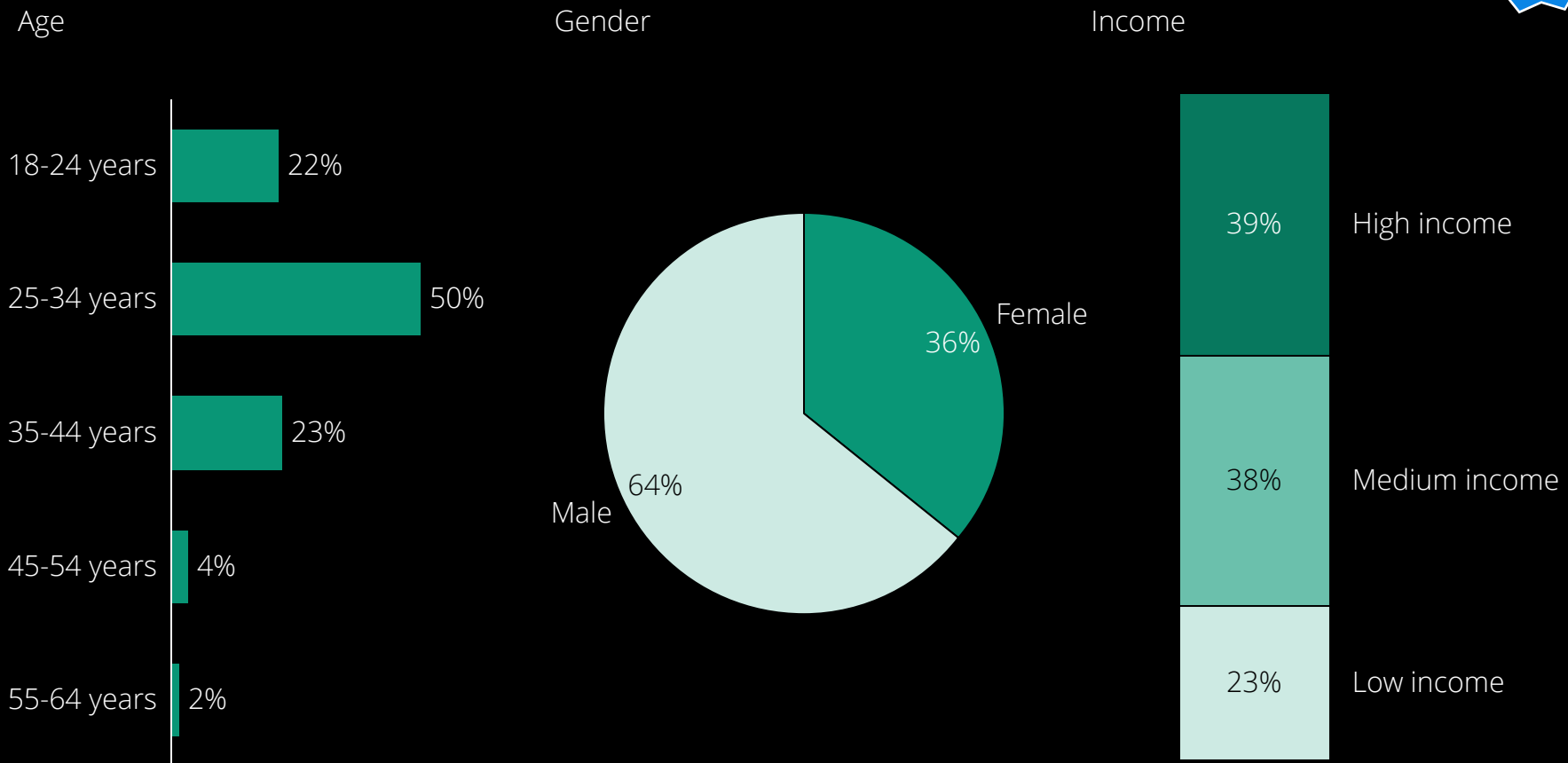
Respondents who agree that the best travel deals can be found online



"Which of these statements do you agree with?"; Multiple response; U.S., UK, DE, FR: n~2,000, all other countries n~1,000

# Ride Sharing users are young, male, and have a high to medium income

Demographics of people that use Ride Sharing in the U.S.



"Which of these services have you booked online (website or app) in the past 12 months? / Ride Sharing" n=221; "What is your gender?"; "How old are you?" "About how high is the monthly gross income that your total household disposes of, before tax and contributions?"; respondents who gave information about their income

## Statista's Digital Market Outlook

[www.statista.io/digitalmedia](http://www.statista.io/digitalmedia)

# Digital Media

Digital Media is one of the oldest digital markets next to eCommerce and thus the big disruption of the media industry is already a battle of the distant past. Now the big question is how business models adapt to a time when customers demand all kinds of content everywhere and at all times for little money.

The Digital Media market in Statista's Digital Market Outlook is segmented into Video-on-Demand, Digital Music, Video Games, and ePublishing.

The by far biggest market in 2017 was Video Games with US\$63 billion in global<sup>1</sup> revenue, a share of 57% of the whole Digital Media market. The Video Games market benefits highly from a desktop to mobile shift: Every 3rd US-Dollar in Digital Media is generated by Mobile Games.

Video-on-Demand is the fastest-growing Digital Media market with a CAGR<sup>2</sup> of 7% up to 2022. Subscription-based services are the main reason for this over-proportional growth, whereas Pay-per-View and the Video Download services stagnate in almost every region.

The next smaller segment is ePublishing, which is expected to grow to US\$22 billion by 2022. A growth that is mainly driven by emerging markets.

Digital Music is the smallest segment with a size of US\$14 billion in 2017. The market totally depends on Music Streaming. This is due to the fact that Music Downloads is one of the very few shrinking markets in the digital economy, which underlines how mature the entire Digital Media market is.

## Statista's Digital Market Outlook

The media business had to endure difficult times when illegal distribution and downloads of digital content became common among users. This development especially threatened the music and video business and caused sales to decline. With changing customer behavior and their evolving demands, companies thus had to find new ways of monetizing their content.

Customer requirements have become clear over time: Easy access to a wide range of media content at any time, in any place and at a good price. This need triggered the birth of online streaming and lending, a trend which can especially be observed in the rising popularity of music and video streaming as well as mobile gaming.

Companies such as Amazon, Apple, Netflix or Spotify have successfully responded to these needs and provide huge content libraries and convenient purchasing models to their customers. Some players even go a step further: For instance, Spotify as well as Netflix consider different living situations of customers and now offer single, family or student licenses.

Competition remains fierce in the Digital Media market and companies have to constantly reassess their business strategy to be ahead of their competitors. Netflix and Amazon for example are increasingly investing in the production of own and exclusive series and movies to decrease their dependency on production companies and to increase their competitive advantage. This strategy seems to pay off: Although Netflix has increased prices recently, it announced another big boost in streaming subscribers at the beginning of 2018.

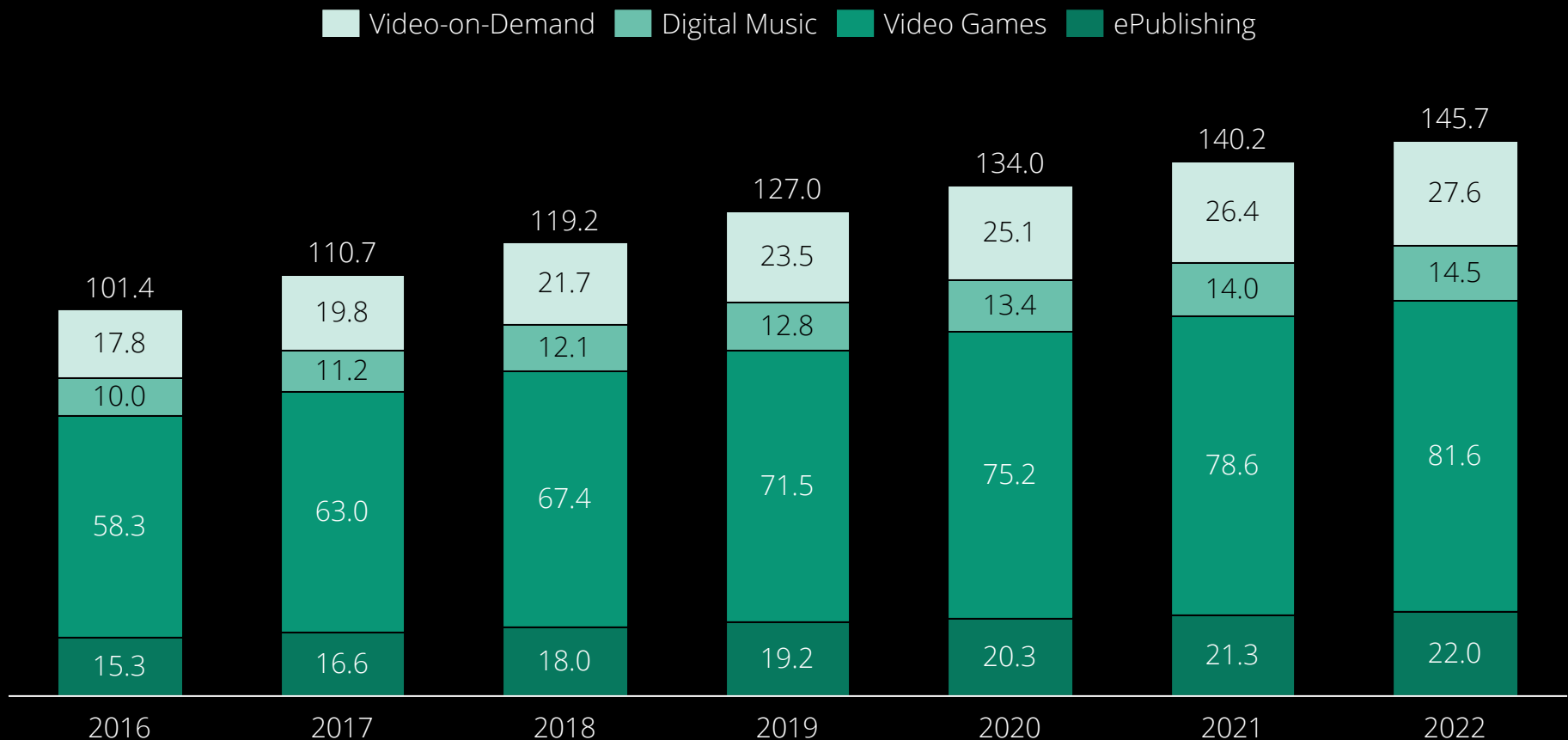
In the gaming business, big companies such as Nintendo participate in the huge and fast-growing field of Mobile Games by releasing their content on third-party platforms, be it in the form of own games or in cooperation with developers as franchise partners.

*Theresa Berthelmann*

*t.berthelmann@statista.com*

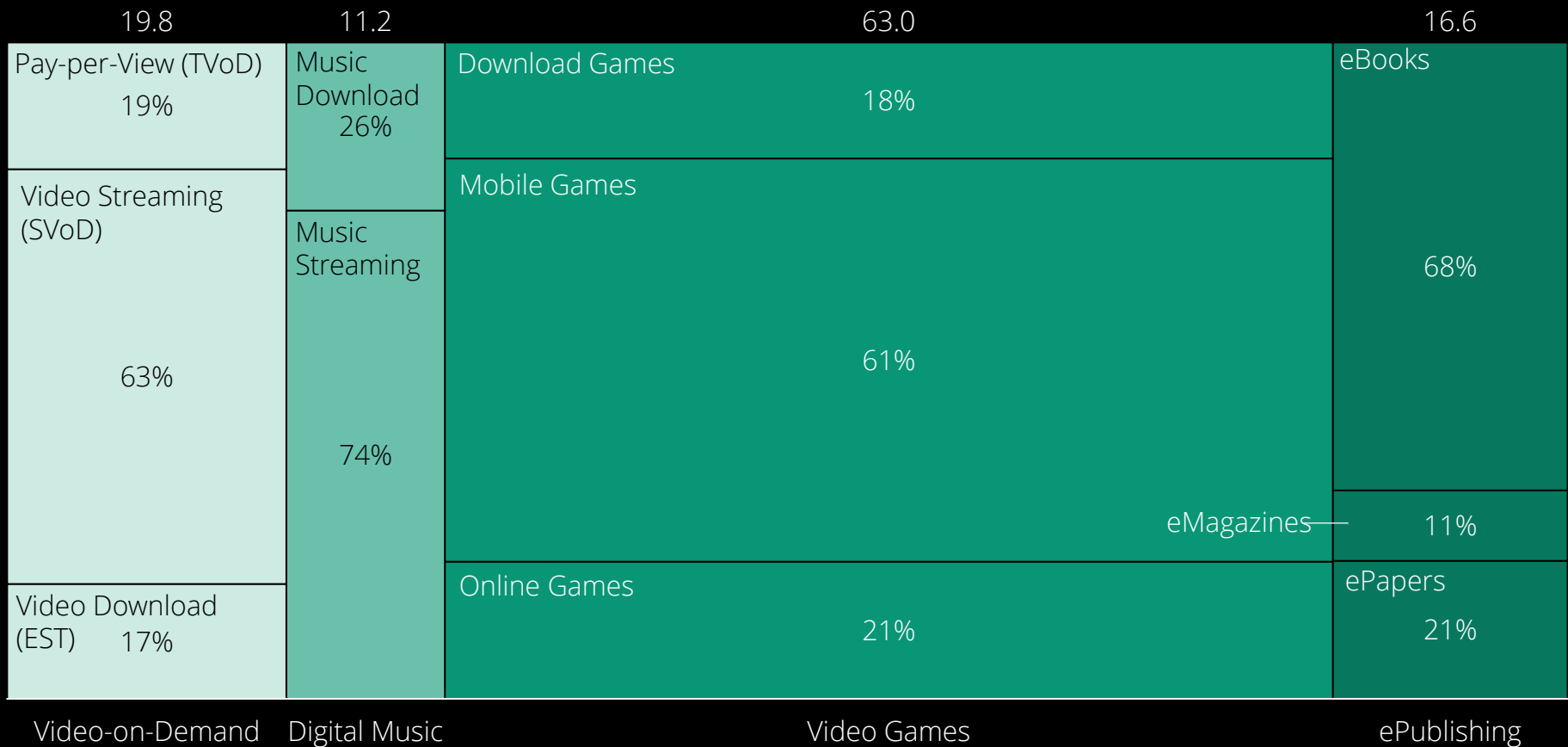
# The global<sup>1</sup> Digital Media market is expected to reach a value of US\$146 billion by 2022

Global<sup>1</sup> Digital Media revenue in billion US\$



# The Mobile Games segment leads global<sup>1</sup> Digital Media sales

Global<sup>1</sup> Digital Media revenue in billion US\$ and segment revenue shares in 2017

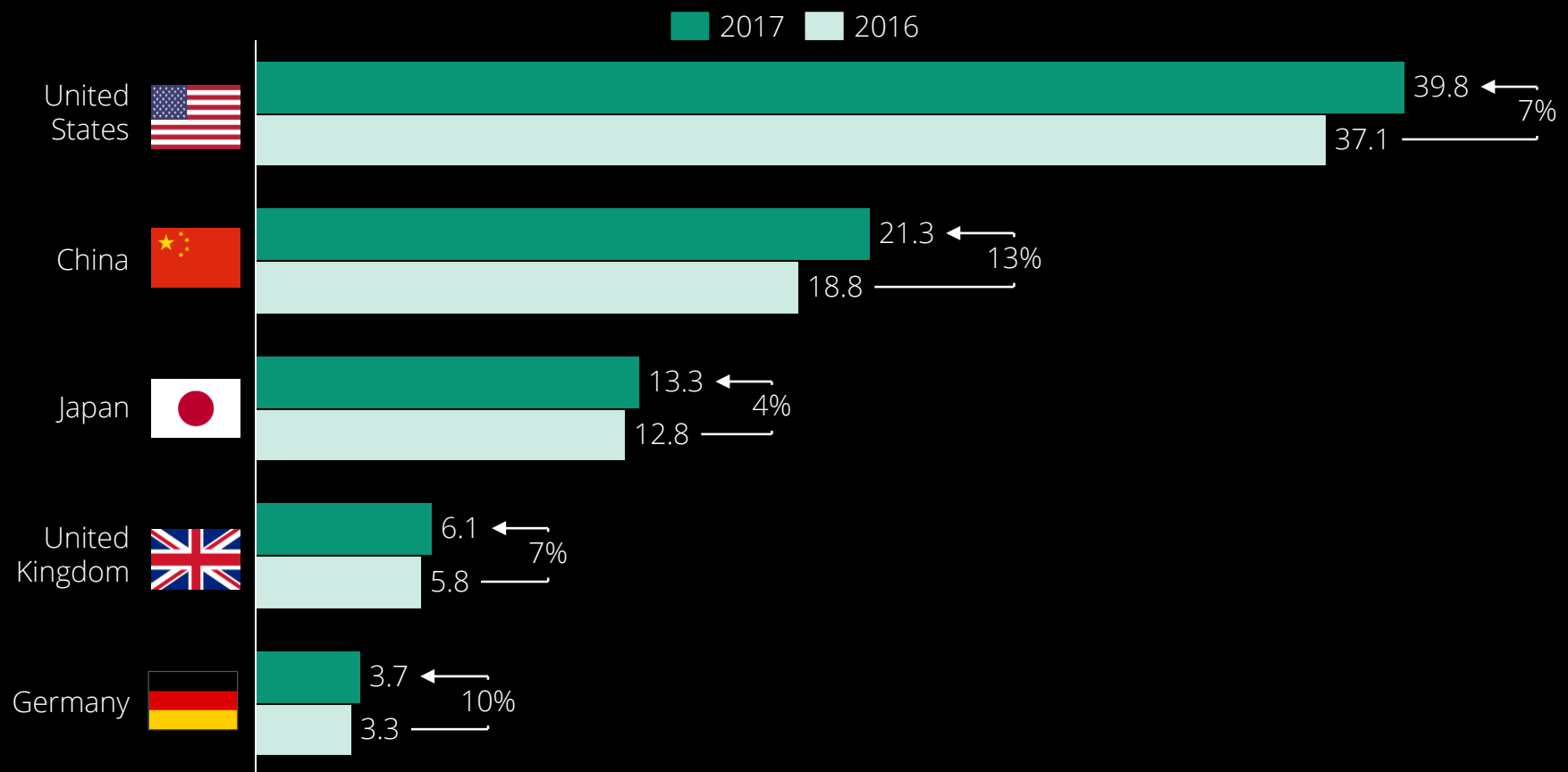


1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns



# China and Germany show the highest growth in Digital Media revenues

Top 5 Digital Media countries by market revenue in billion US\$



# The Digital Media landscape is split into content specialists and those with a diversified portfolio

Selected digital media players by service and focus of value creation

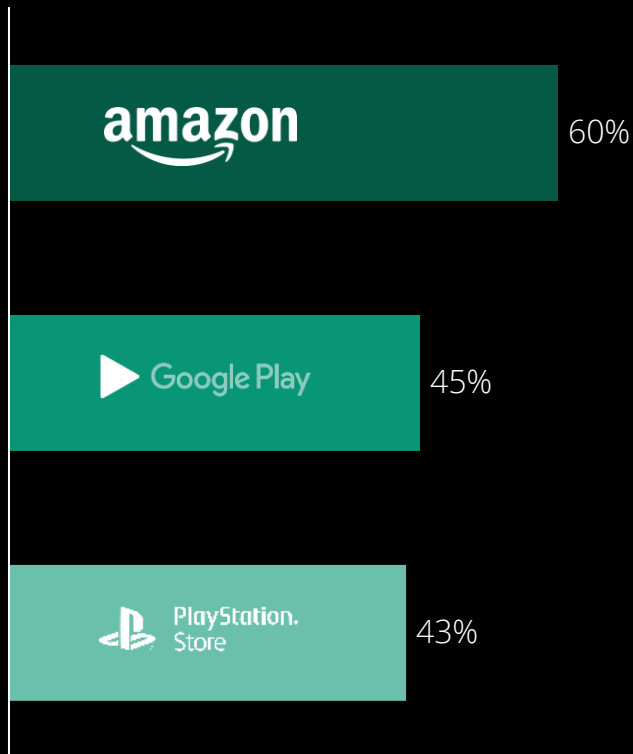
	VOD	Digital Music	Video Games	ePublishing
Pure Players				
Diversified Players				

# Amazon is the preferred online video games provider

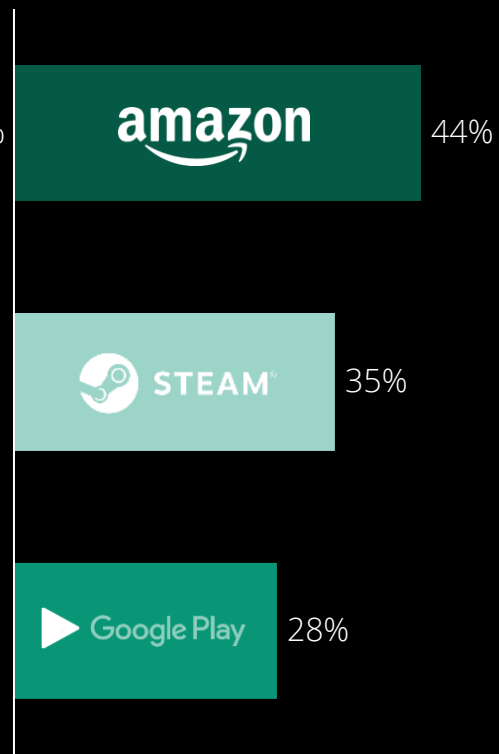
Share of respondents who purchased online video games of selected providers



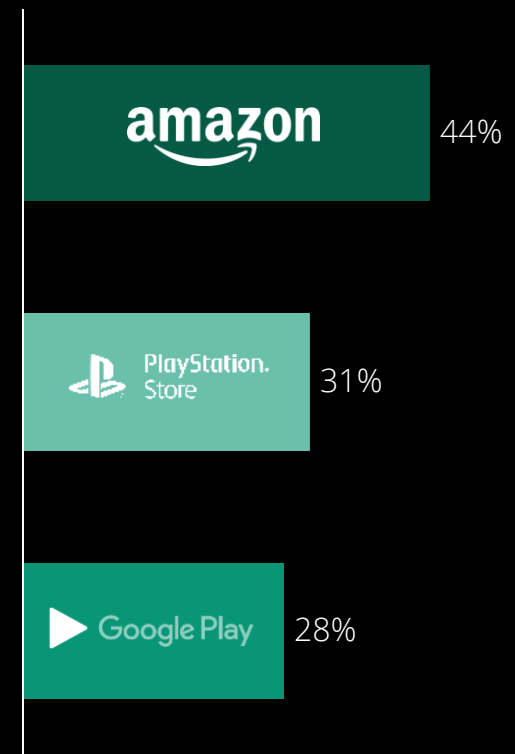
United States



Germany



United Kingdom



"Where have you spent money on online video games in the past 12 months (downloads, in-app purchases, subscriptions)?"

Multiple response; U.S.: n=931, DE: n=453, UK: n=600 respondents who play video games regularly and spent money on downloads, in-app purchases and subscriptions in the past 12 months

Source: Statista Global Consumer Survey 2018

# Netflix in Germany still lacks customers over 50, while it is evenly popular among age groups in the U.S.

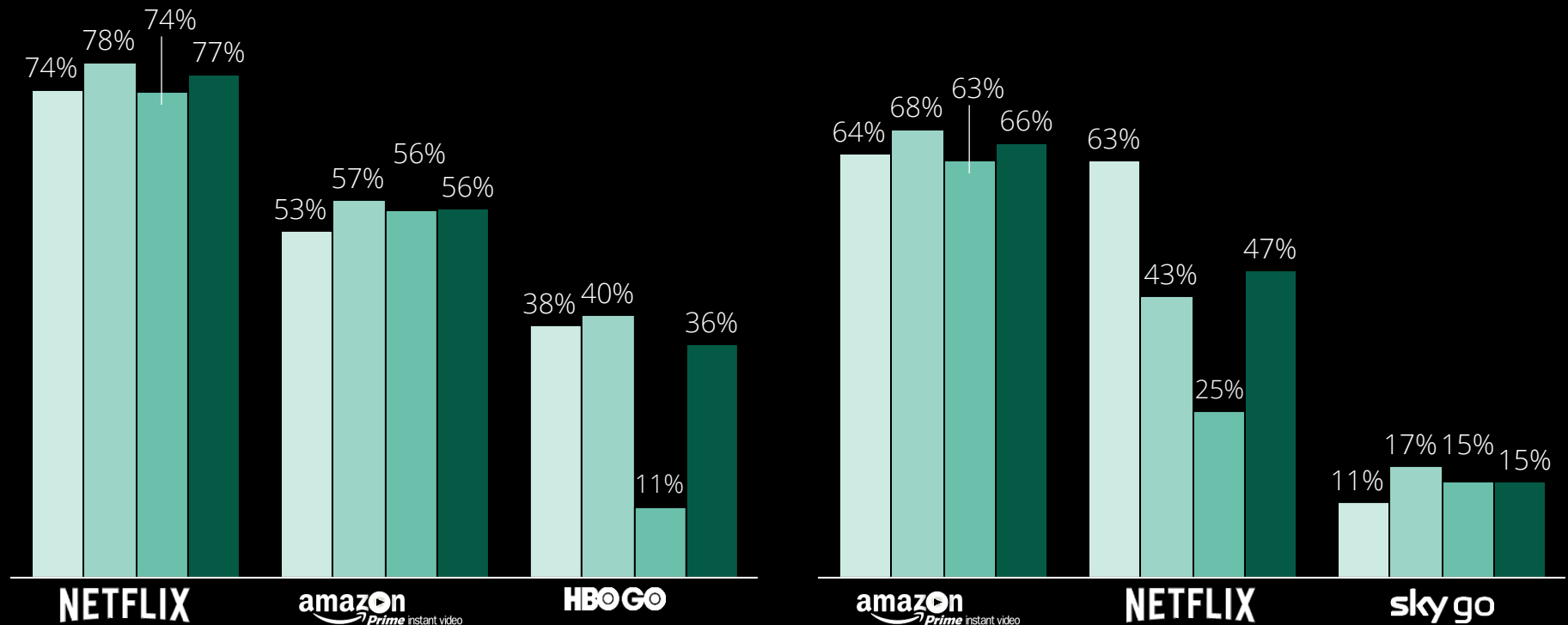
Share of respondents who purchased video-on-demand services of selected providers by age



United States

Germany

18-29 years 30-49 years 50-64 years All

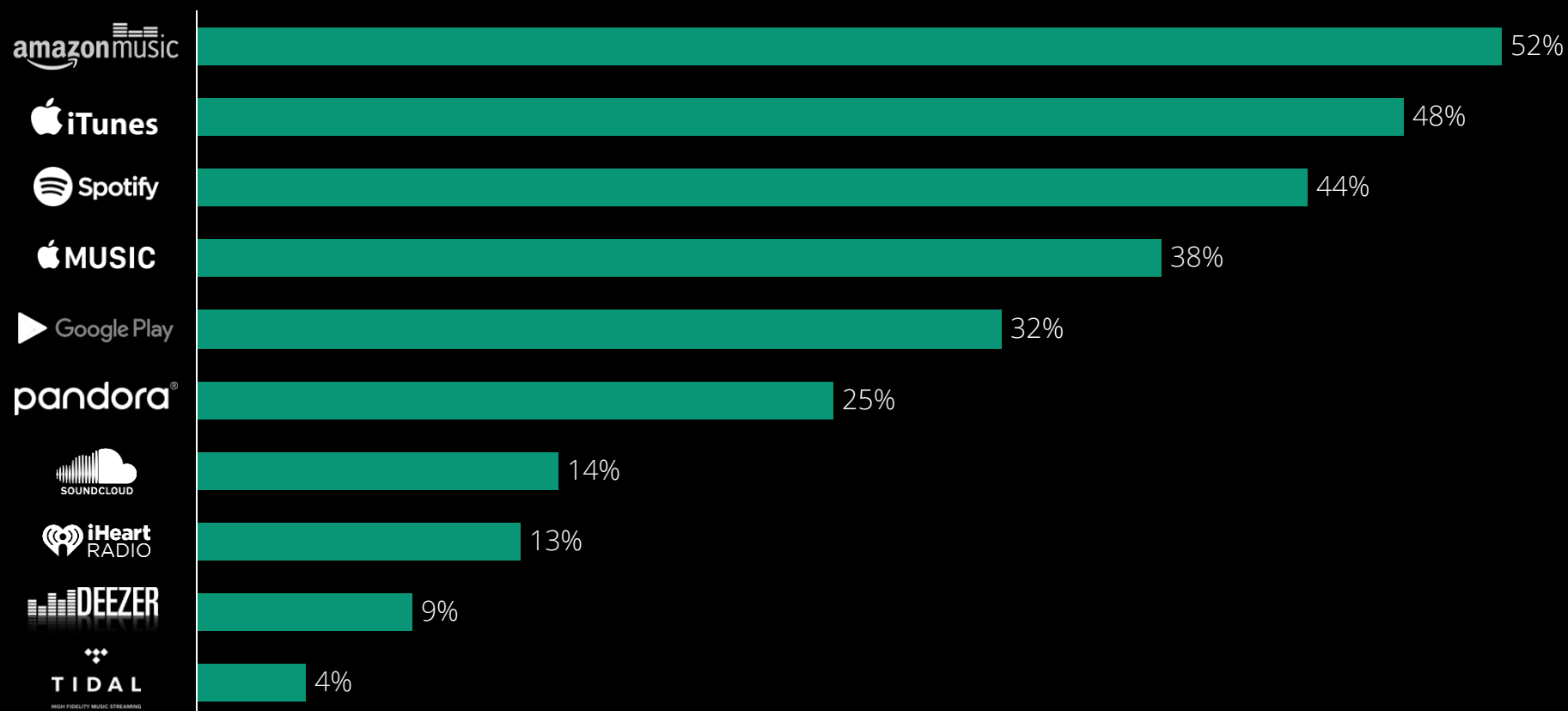


"Which of these video-on-demand providers have you used in the past 12 months as a paying customer?"; Multiple response; U.S.: n=1,183, Germany: n=708 respondents who spent money on digital video content in the past 12 months

# Amazon also tops the list of digital music services

Share of respondents who use the digital music services of selected providers in the U.S.

Statista  
Global  
Consumer  
Survey



"Which of these providers have you bought music downloads or streaming services from in the past 12 months?"; Multiple response; n=1,249 respondents who spent money on digital music content in the past 12 months



## Statista's Digital Market Outlook

[www.statista.io/fintech](http://www.statista.io/fintech)

# FinTech

The FinTech sector shows no signs of slowing down, as numerous start-ups continue to challenge the established value chains in banking and financial services. Common features of FinTech solutions are a fast transaction speed and high levels of automation and usability for customers and stakeholders.

The FinTech market in Statista's Digital Market Outlook includes the segments Digital Payments, financing platforms for small businesses or innovative projects (Alternative Financing), Alternative Lending for business purposes as well as Personal Finance services, such as automated private asset allocation and peer-to-peer money transfer.

The global<sup>1</sup> FinTech transaction value was US\$3.5 trillion in 2017 and is expected to reach US\$8 trillion by 2022,

following the projected annual growth rate of 18%. While China and the U.S. lead the FinTech market with transaction values of over US\$1 trillion, Europe is lagging behind. There is an evolving FinTech start-up landscape in Europe, but market dynamics and pervasion of innovative FinTech solutions are not comparable to China or the U.S.

Thanks to the global rise of smart devices and online (and mobile) shopping, the FinTech revolution is already in full swing in some areas, especially in the field of Digital Payments. Digital Payments contributed 80% to the worldwide FinTech transaction value in 2017. They are by far the largest FinTech segment and can be considered an evolutionary step towards further financial services that might even replace currently ubiquitous payment methods.



## Statista's Digital Market Outlook

The most important driving force for the adoption of any FinTech innovation are minimal entrance barriers for both consumers and providers, as well as convenient handling, especially for people that are not tech savvy.

Different cultural mindsets and the overall state of an economy also play a significant role in the speed of innovation in international comparison. While cash is still king in cautious Germany, mobile payments in China (e.g. Alipay and WeChatPay) have already reached offline stores and practically replaced cash as the most frequently used way of payment in everyday life. This is happening due to the country's tech-savvy population, as well as the under-developed banking industry and a favorable regulatory environment.

Alternative Lending is currently the second biggest FinTech segment, accounting for US\$381 billion in global transaction value. Borrowing money from an online community instead of going to a bank (or family members) is gaining popularity especially in growing economies, where traditional bank

loans are less easy to get. The peer-to-peer lending sector in China has exploded in recent years and reached US\$325 billion in transaction value. It is forecast to grow even further, at an astonishing rate of 24% per year up to 2022.

Personal Finance, including Robo-Advisors, wrote US\$299 billion in transactions in 2017. As common banks often fail to keep up with consumers' expectations in terms of digital technology adoption, the broad spectrum of personal finance services that are emerging hold high disruption potential.

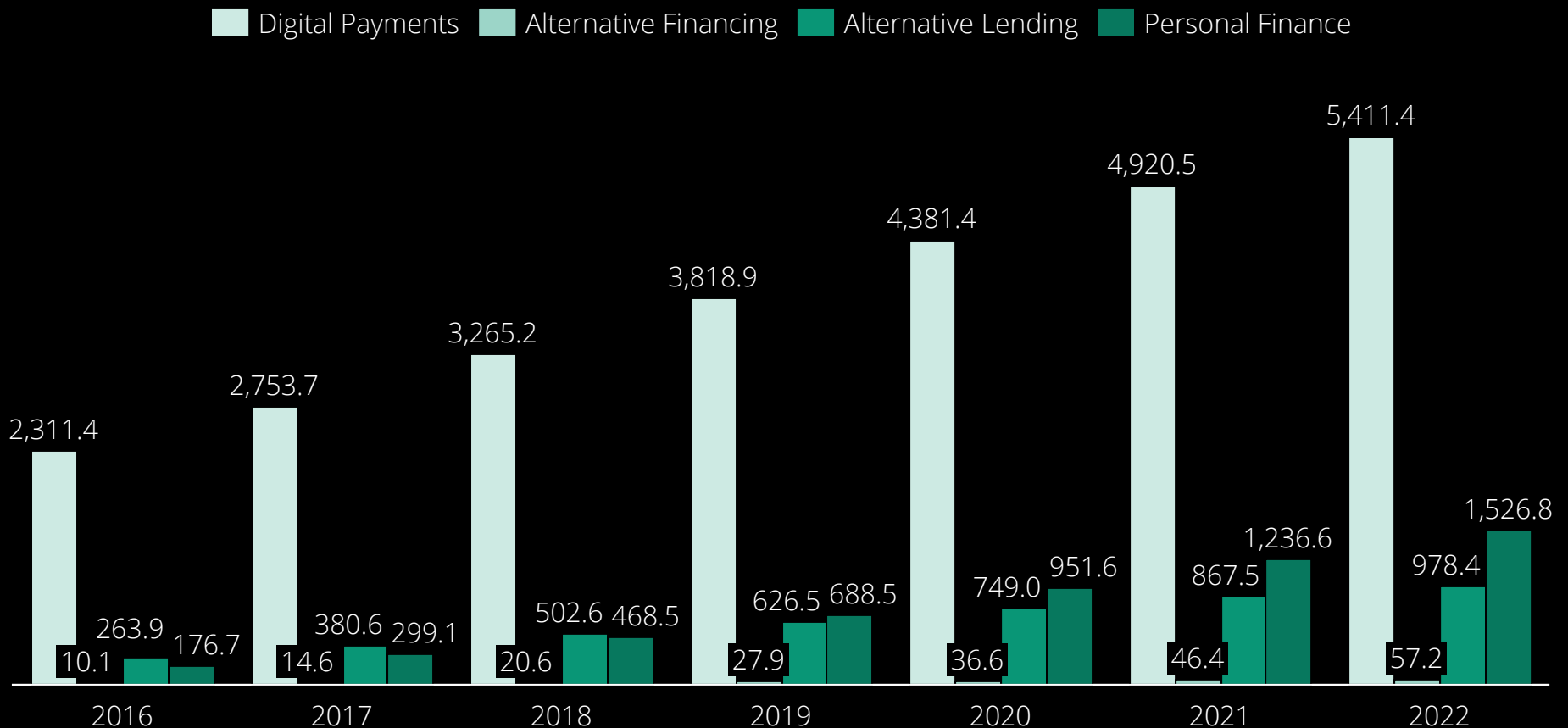
Last but not the least, Alternative Financing is currently the smallest segment with a global transaction value of US\$15 billion in 2017, but it shows a promising average annual growth rate of 33% up to 2022, as many entrepreneurs and small business owners are starting to recognize its benefits.

*Ksenia Striapunina*

[k.striapunina@statista.com](mailto:k.striapunina@statista.com)

# The global<sup>1</sup> FinTech market will grow to a striking US\$8 trillion by 2022

Forecast of global<sup>1</sup> FinTech transaction value in billion US\$

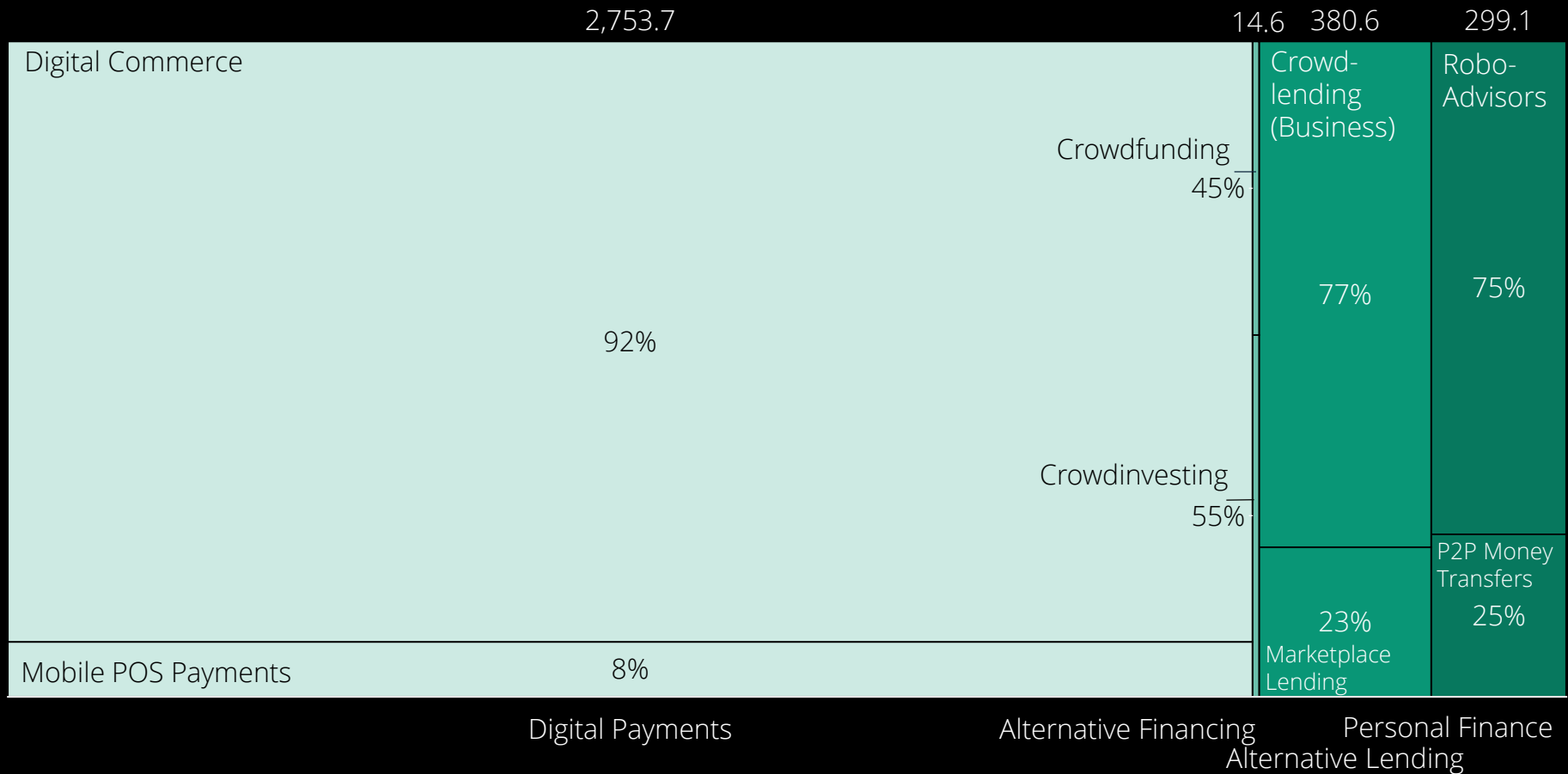


1: Only includes countries listed in Statista's Digital Market Outlook



# Digital Commerce dominates the FinTech market

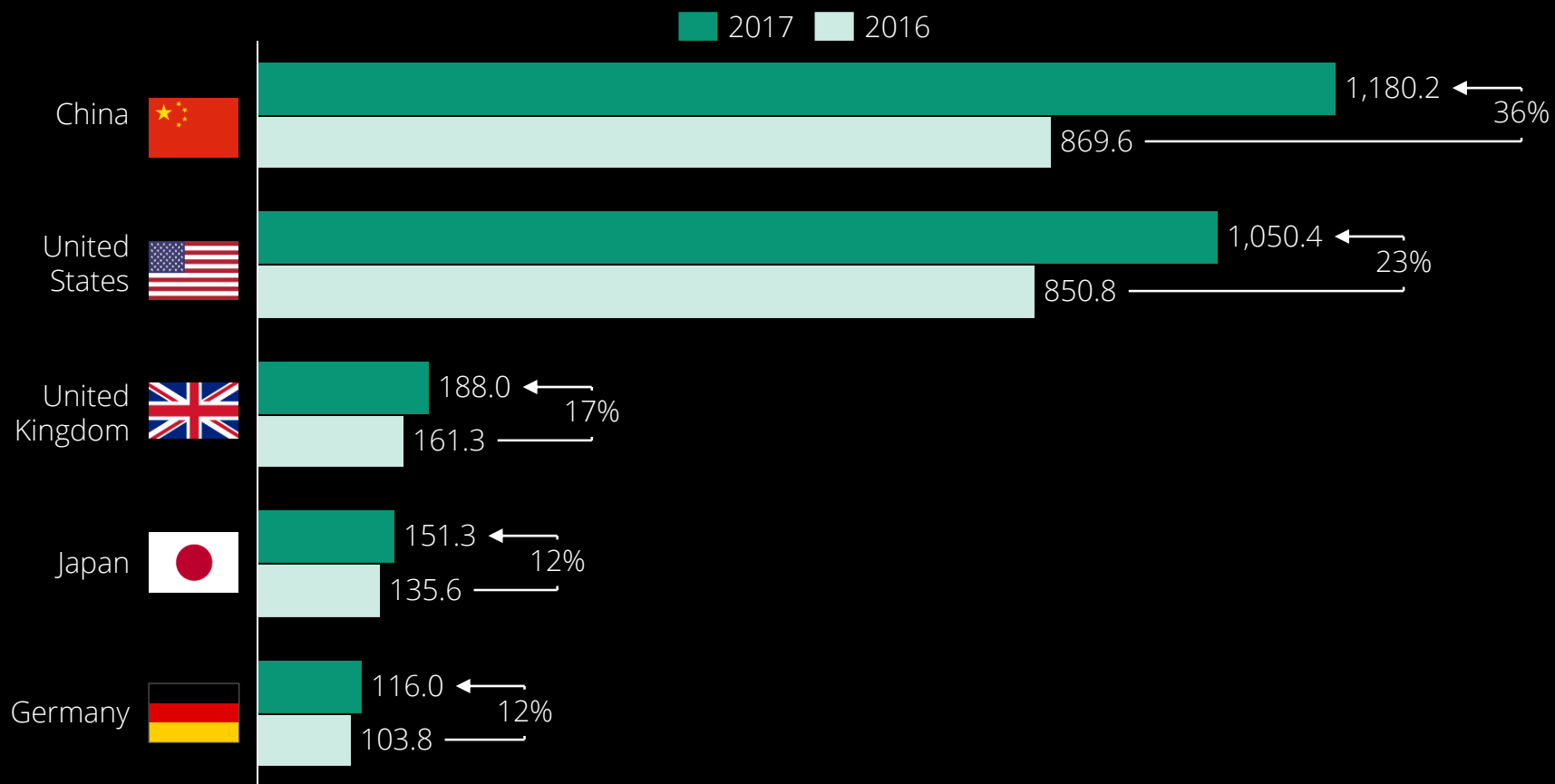
Global<sup>1</sup> FinTech transaction value in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns

# The Chinese FinTech market grew by 36% from 2016 to 2017

Top 5 FinTech countries by transaction value in billion US\$



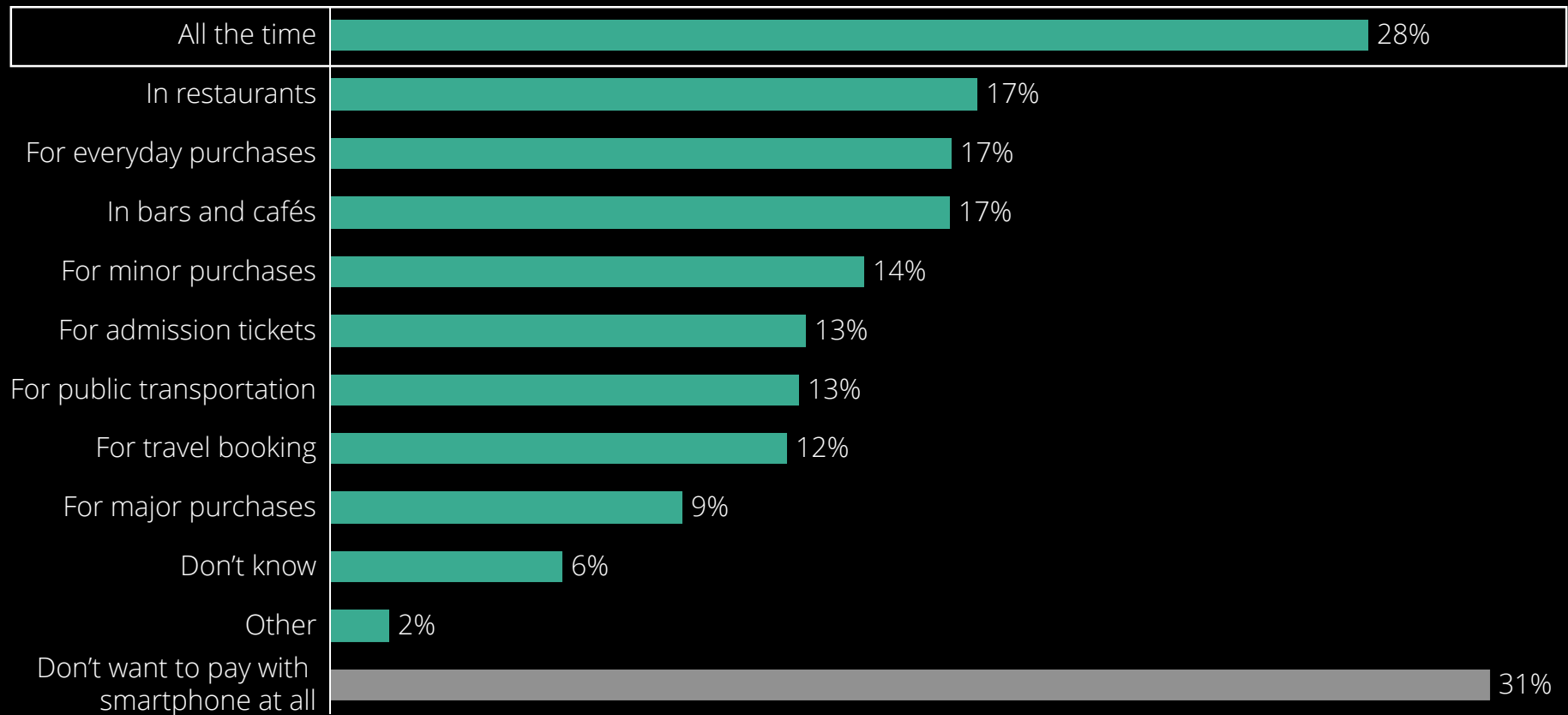
# The FinTech landscape is highly competitive with a lot of different players

Selected players in the FinTech sector

Digital Payment	Alternative Financing	Alternative Lending	Personal Finance
<p>Digital Commerce</p>	<p>CrowdFunding</p>	<p>CrowdLending</p>	<p>Robo-Advisors</p>
<p>Mobile POS Payments</p>	<p>CrowdInvesting</p>	<p>P2P Marketplace Lending</p>	<p>P2P Money Transfers</p>

# 28% of U.S. consumers would like to pay mobile at all times

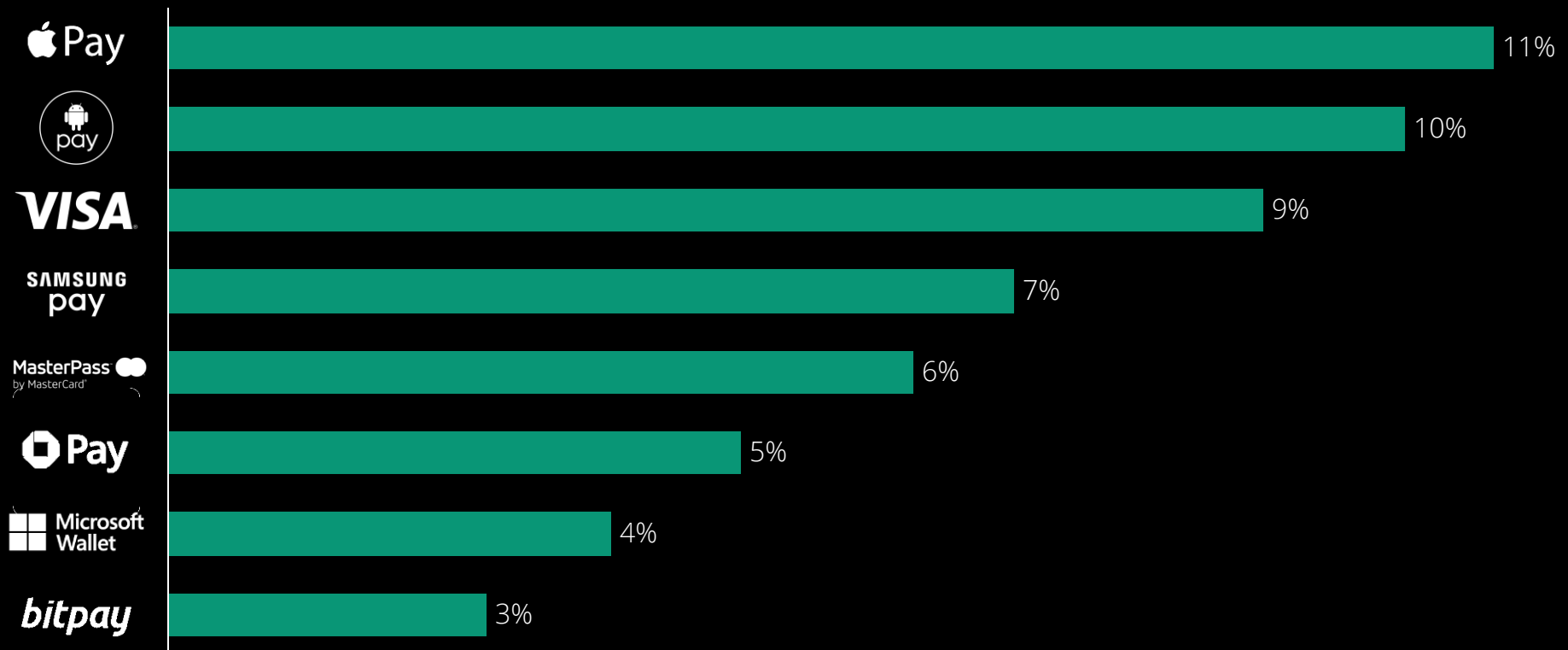
Relevance of mobile payment methods by situation in the U.S.



"In what situations would you like to be able to pay with your smartphone (without debit / credit card or cash)?: Multiple response; n=2,045

# Apple Pay is the most popular mobile payment method in the U.S., followed by Android Pay

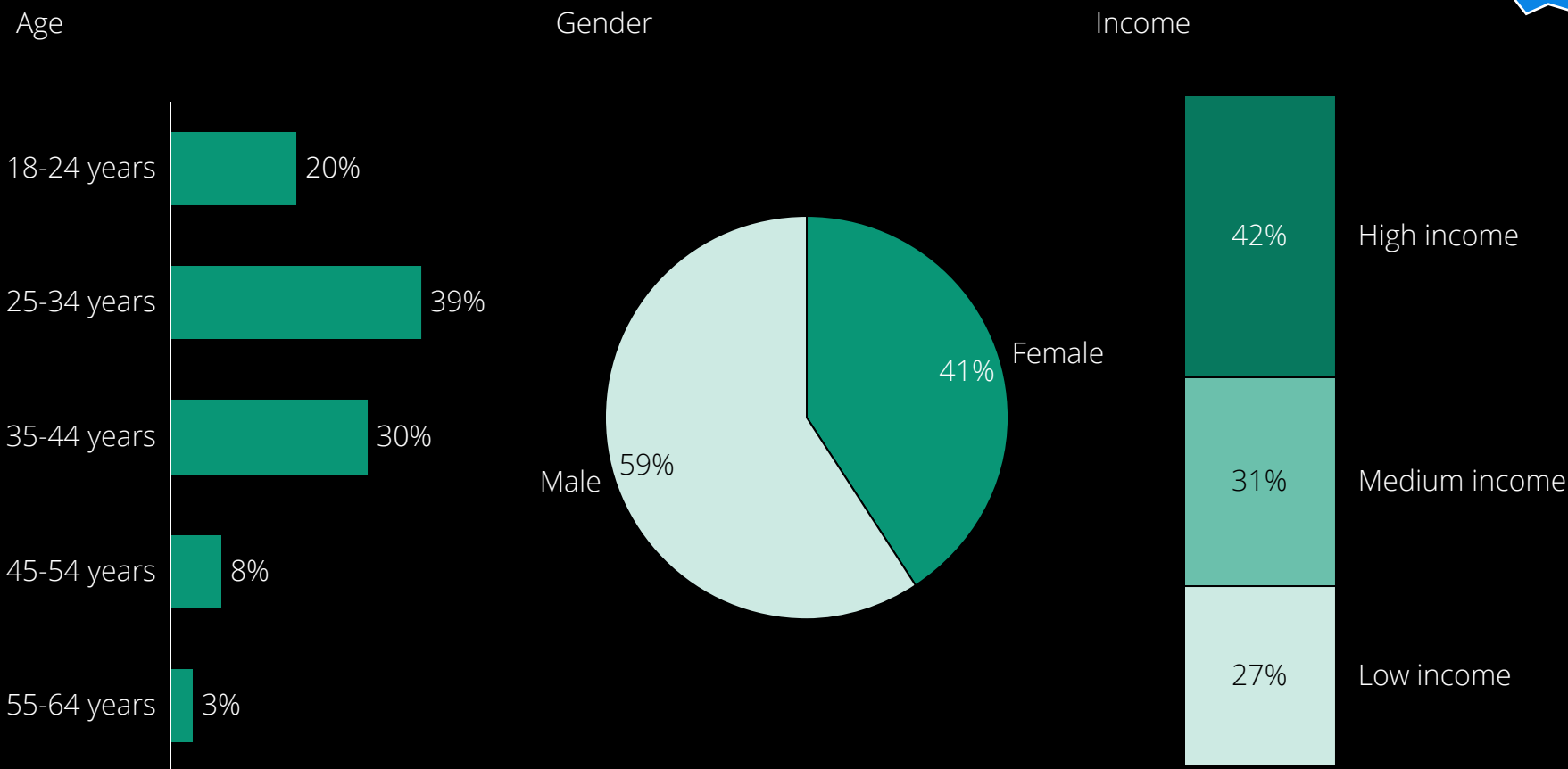
Share of respondents who use selected mobile payment methods by brand in the U.S.



"Which of these services have you used in the past 12 months to pay in stores, restaurants or other points of sale with your smartphone?"; Multiple response; n=2,045 respondents who used mobile payment in restaurants, stores and other points of sale in the past 12 months

# Younger generations in the U.S. tend to use more mobile payment than people above 45

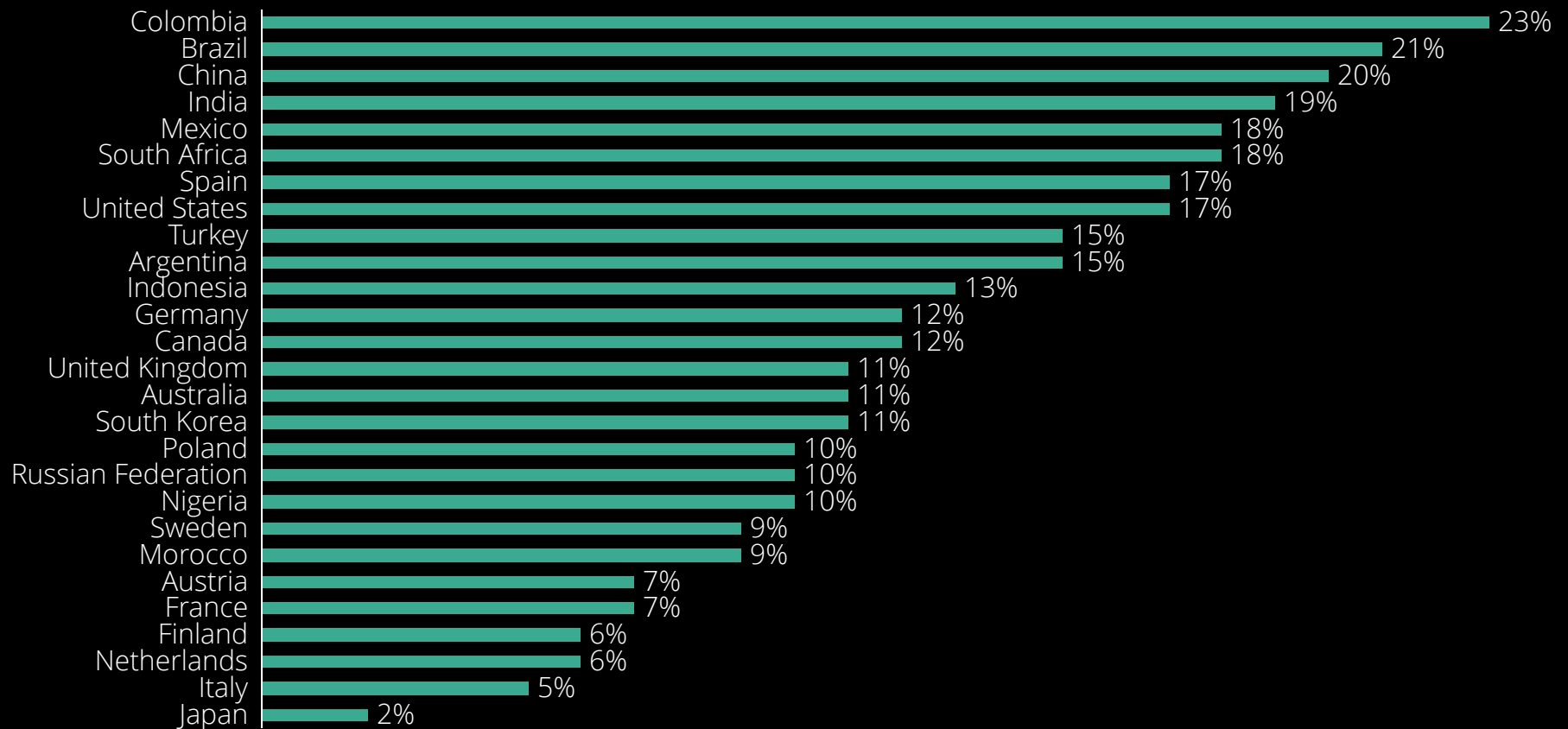
Demographics of people that use mobile payment in the U.S.



"How have you paid in stores, restaurants and other points of sale in the past 12 months?"; Multiple response; "What is your gender?"; "How old are you?"; "About how high is the monthly gross income that your total household disposes of, before tax and contributions?"; n=435, respondents who use mobile payment (via smartphone) at POS (past 12 months)

# RoboAdvisors hardly attract customers in Japan, Columbia has the highest potential

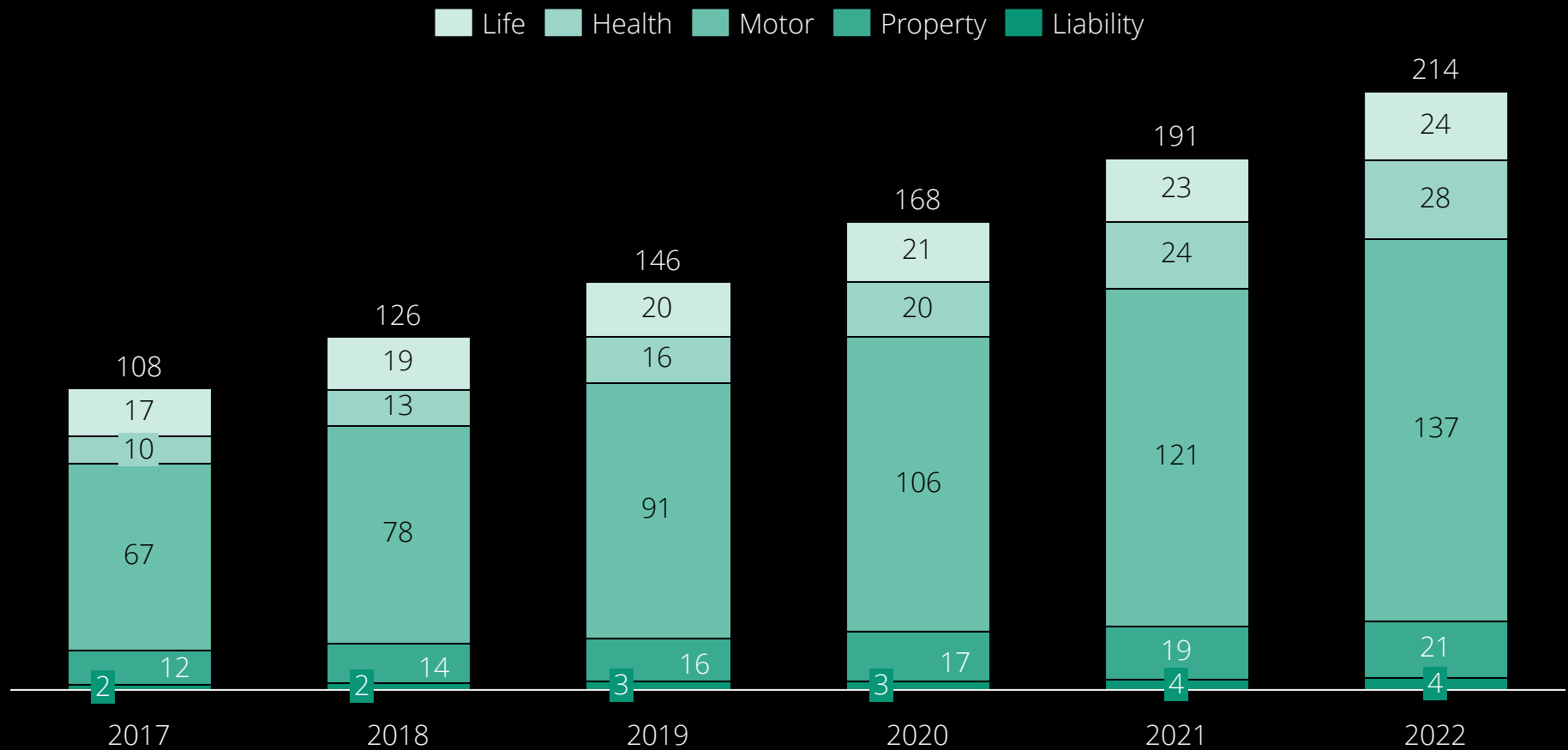
Respondents who could imagine consulting a digital program (RoboAdvisor) for personal finance advice



"Which of these statements apply to you? / I could imagine consulting a digital program (RoboAdvisor) for advice on finance issues"; Multiple response; U.S., UK, DE, FR: n~2,000, all other countries n~1,000

# InsurTech: Motor insurance is the main driver for growth in the online insurance sector in the U.S.

Number of policies sold online in millions per year





## Statista's Digital Market Outlook

[www.statista.io/digitaladvertising](http://www.statista.io/digitaladvertising)

# Digital Advertising

Worldwide spending on Digital Advertising outreached TV-ad spending for the first time in 2017. Considering how great a role television used to play for generations of media consumers, this is quite a revolutionary development, which shows how important Digital Advertising has become.

Statista's Digital Market Outlook segments the Digital Advertising market according to the environment where the ads are played. In-page ads are categorized as Banner Ads, while in-stream ads – be it videos or text overlays – are considered Video Advertising. Together with Social Media Advertising, Search Advertising, and Online Classifieds, these five segments make up the Digital Advertising market.

The dominating segment is Search Advertising with a global<sup>1</sup> market volume of US\$112 billion in 2017, making up a

market share of 45%. With keywords as an underlying basis, Search Advertising enables marketers to reach a relevant target group in a very simple and precise way. These keywords can be complemented with a range of options like location-based factors, website and audience types, or remarketing based on user behavior.

Social networks usually work with newsfeeds, where user-specific content and shared information are shown. This presents an ideal advertising environment that bears numerous opportunities for customized and personalized user targeting. But it also makes advertisers vulnerable to changes in algorithms, as can be seen now in shrinking Facebook traffic after their latest update. The global Social Media Advertising market size was about US\$44 billion in 2017.

## Statista's Digital Market Outlook

Although we can observe an advancement in the field of targeting solutions, Banner and Video Advertising still face the challenge of reaching the right audiences, as the advertising environment in their field is much more random than in social networks or search engines.

This difficulty is reflected in the market sizes of both Banner and Video Advertising: With a volume of US\$47 billion, Banner Advertising has a share of only 19% of the total Digital Advertising market. As advertising spaces within video players are much more limited than Banner spaces, Video Advertising has an even smaller share of 11%, corresponding to a market volume of US\$26 billion.

Nevertheless, we believe that the development of targeting solutions is still in an early stage and once it is in full swing, it will have noticeable effects on the advertising market in general and the Digital Advertising market in particular.

Furthermore, in the field of Banner Advertising, we are observing a positive impact of native ads, which match the environment in which they appear in terms of form and

function. In other words, these native ads appear as paragraphs within articles in a form and style which is similar to the content provided by the actual platform's editorial staff.

This format works very well on smaller displays and is ideal for advertisements on mobile devices. The proximity to editorial contributions increases consumer engagement and the acceptance of the ads.

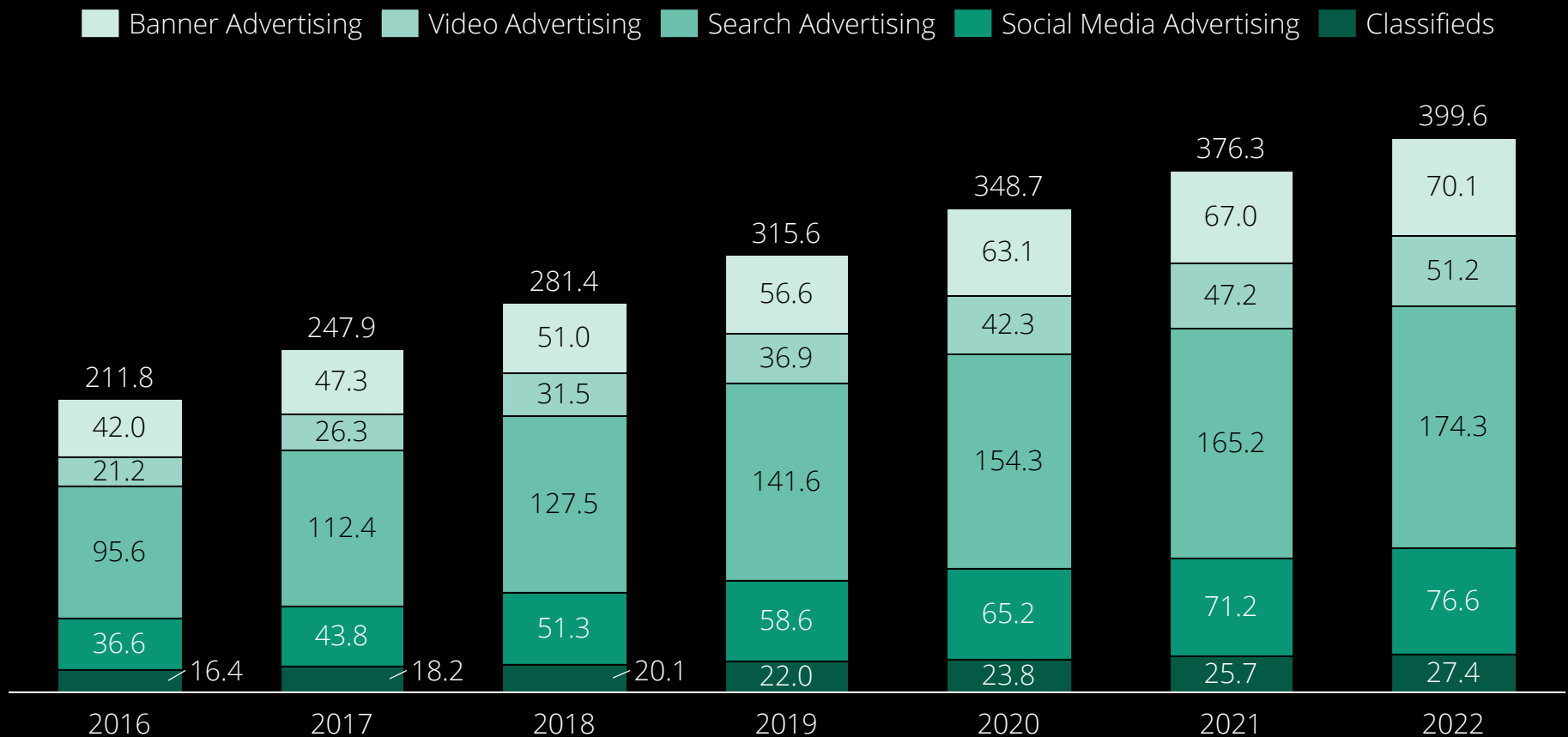
Online Classifieds make the smallest contribution to overall market revenues with US\$18 billion globally in 2017. Revenues are more or less equally distributed across categories like automotive, recruiting or real estate.

*Sebastian Buss*

[s.buss@statista.com](mailto:s.buss@statista.com)

# The global<sup>1</sup> Digital Advertising market is expected to grow to almost US\$400 billion by 2022

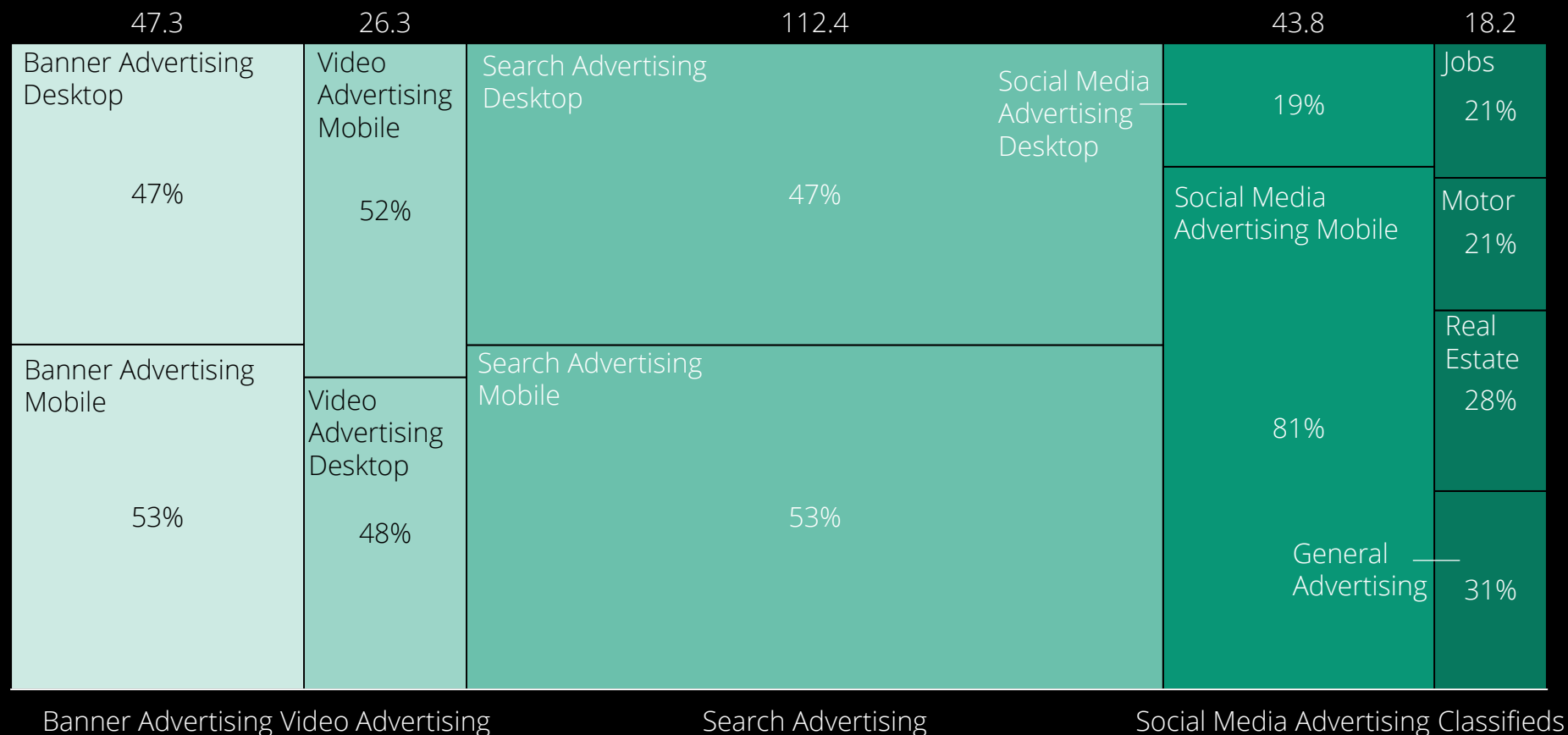
Global<sup>1</sup> Digital Advertising revenue in billion US\$



1: Only includes countries listed in Statista's Digital Market Outlook  
 191 Source: Statista Digital Market Outlook 2017

# Mobile Advertising is gaining relevance in each category of the global<sup>1</sup> Digital Advertising market

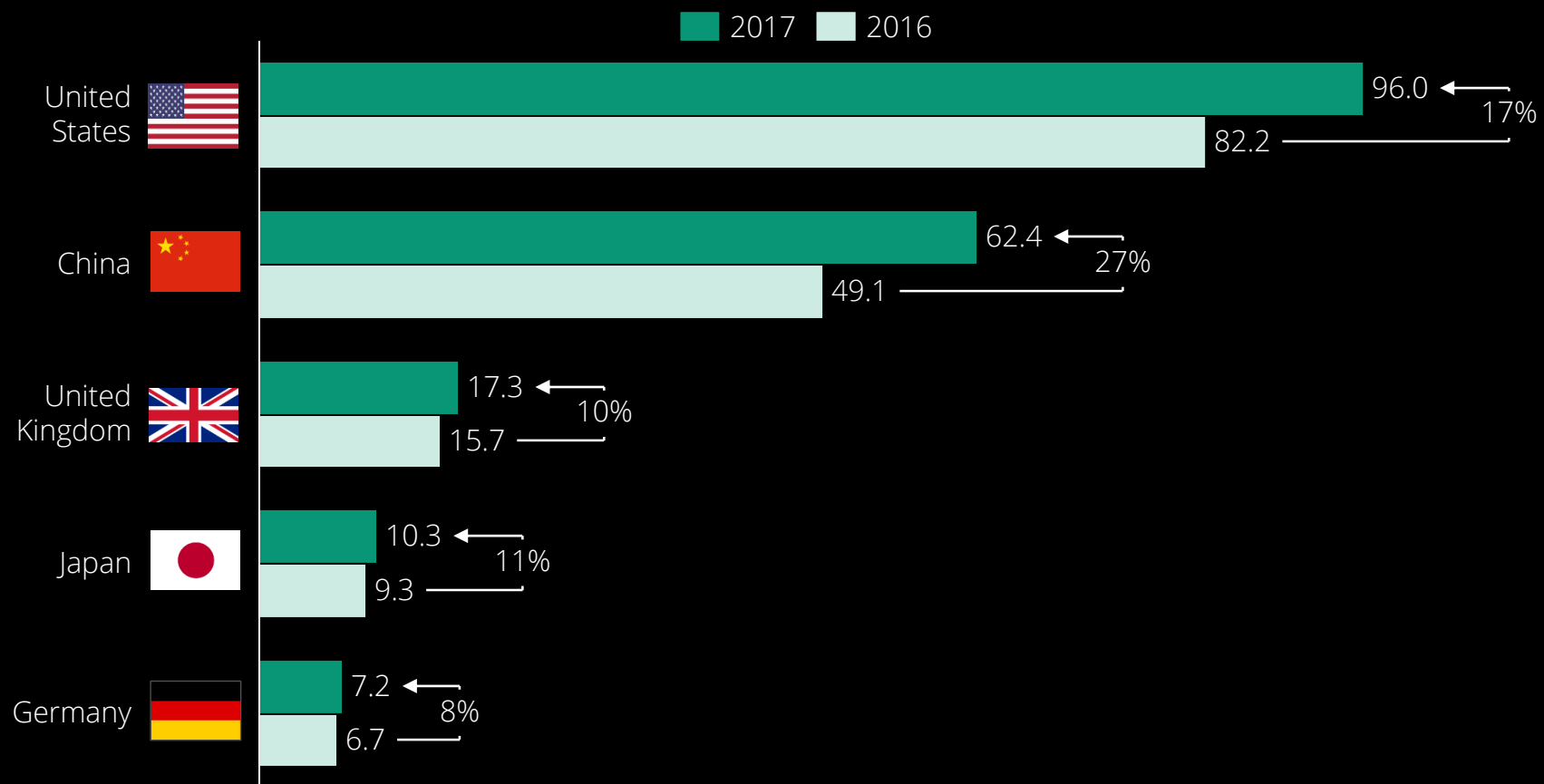
Global<sup>1</sup> Digital Advertising revenue in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns  
 Source: Statista Digital Market Outlook 2017

# Chinese Digital Advertising revenues increased by 27% from 2016 to 2017

Top 5 Digital Advertising countries by market revenue in billion US\$



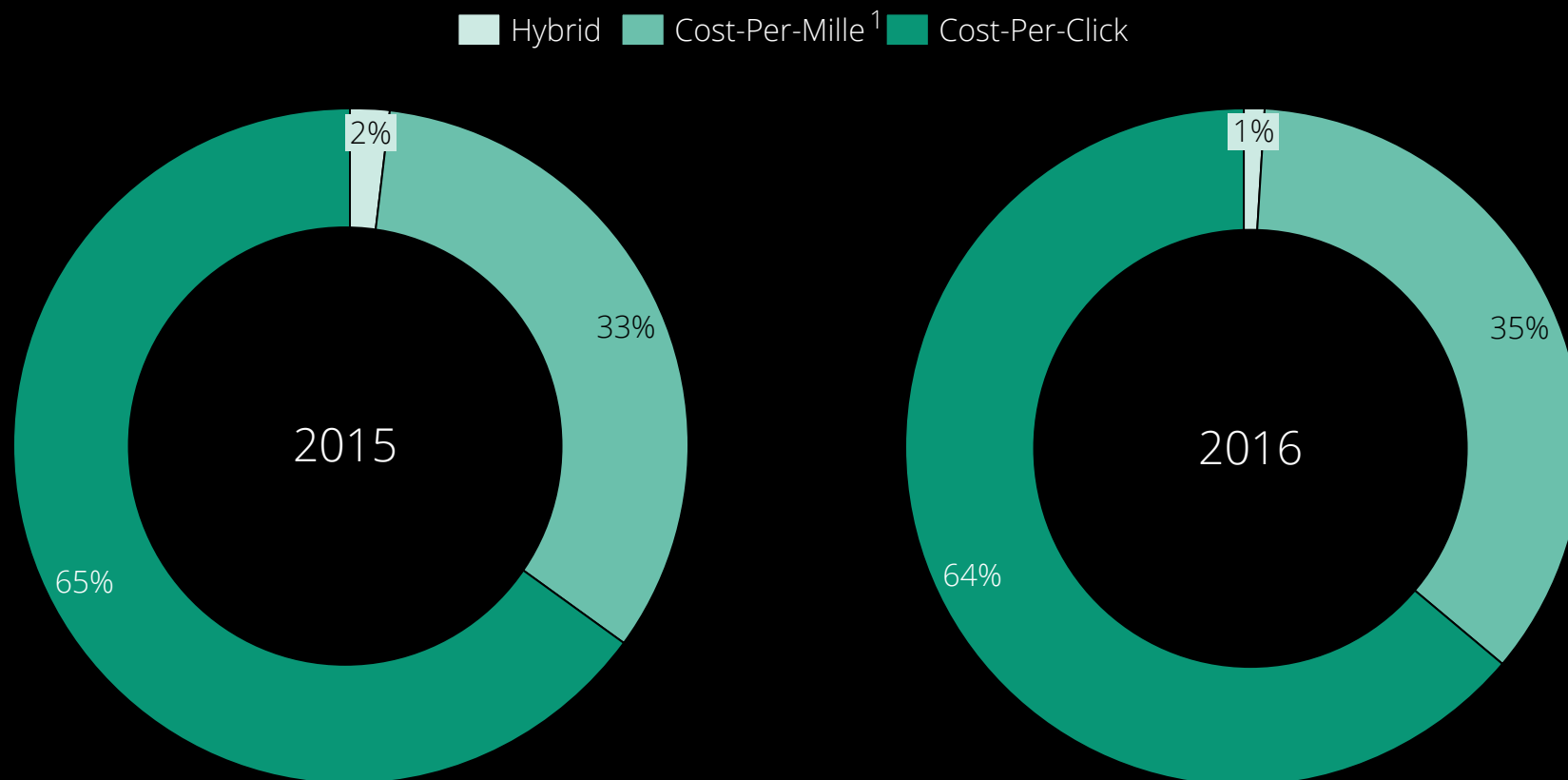
# Digital Advertising is still a complex business with many players

Selected players in the digital advertising sector

Marketer / Advertisers	Agencies and Trading Desks	Demand Side Platforms	Ad Networks / Ad Exchanges	Supply Side Platforms	Publishers
					<p>Search Engines:  </p> <p>Social Networks:  </p> <p>Video Platforms:  </p> <p>Etc.  </p>

# Pricing model distribution stays constant

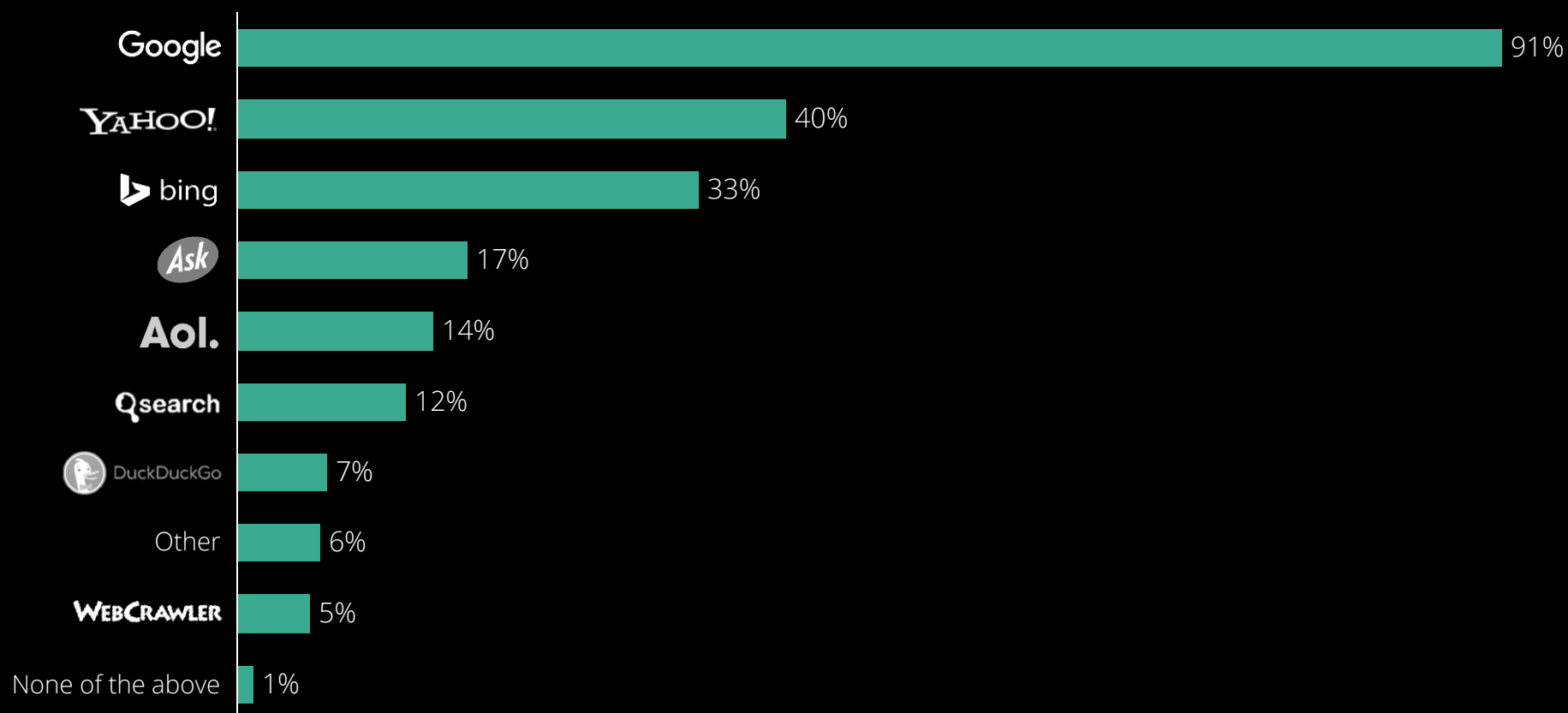
Share of total digital advertising revenue by pricing models in 2015 and 2016



1: Cost-Per-Mille means the cost per 1,000 views / impressions

# Google's search engine is used by 91% of Americans

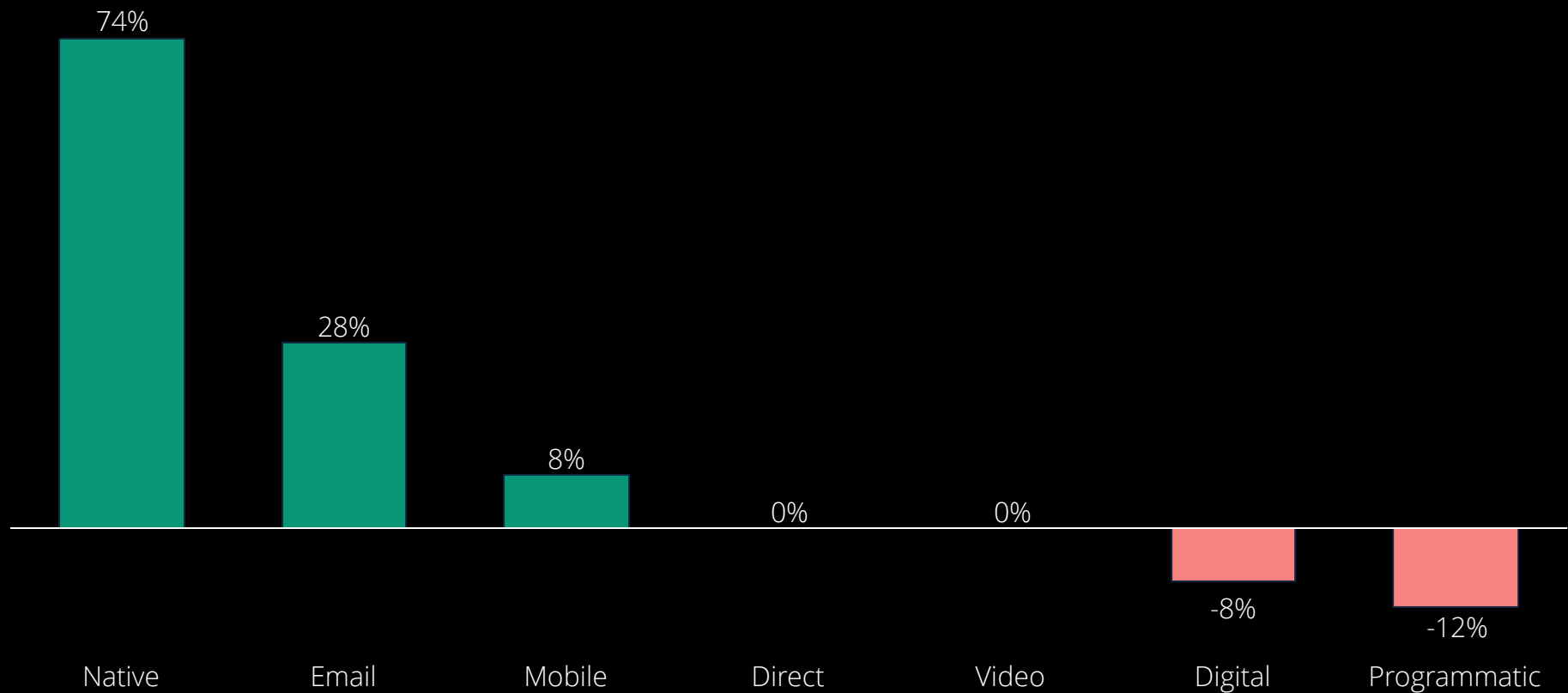
Usage of search engines by brands in the U.S.





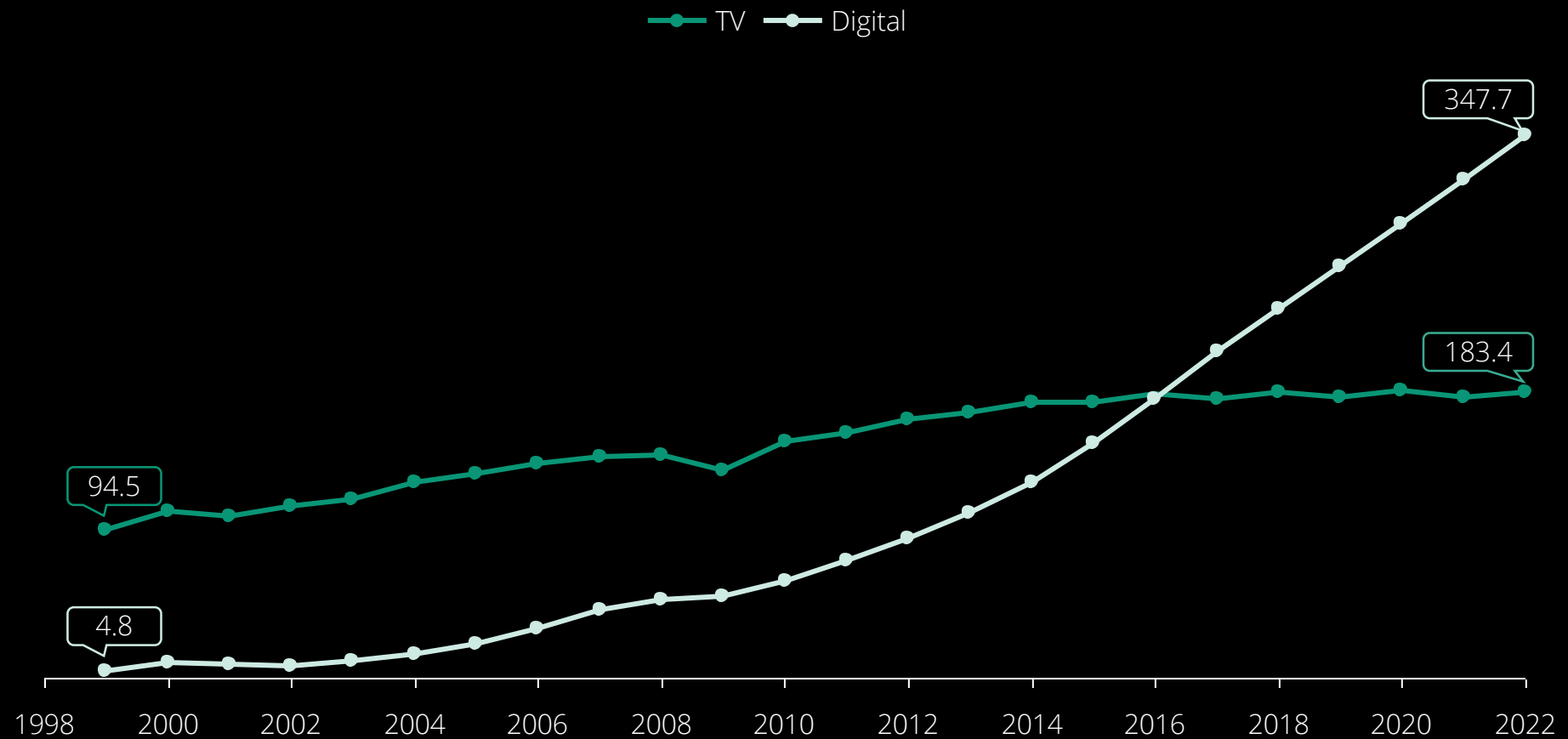
# Number of native ads increased by >70%

Percentage change in number of ad formats year-over-year



# Spending on digital advertising has already outpaced TV-ad spending

Worldwide digital and TV-ad spending in billion US\$



# Smart Home

Smart Home and the Internet of Things (IoT) are irrevocably entwined and the IoT is one of the most disruptive trends at the moment, affecting a large number of traditional industries. The rising number of connected devices and sensors can be controlled via smart algorithms such as machine learning tools and together form the IoT. The use of the IoT in the context of private households defines a Smart Home. The possibilities to automate processes in the domestic context are almost unlimited.

In Statista's Digital Market Outlook we divide the Smart Home market into the segments Control and Connectivity, Comfort and Lighting, Security, Home Entertainment, Energy Management, and Smart Appliances. The biggest Smart Home market in 2017 was the U.S. with revenues of US\$15 billion. Although the prospects are positive, U.S. growth

rates of an expected 16% annually are significantly lower than the Chinese CAGR<sup>1</sup> of 45%. But currently, the Chinese market is still small with revenues of US\$4 billion.

Devices in a Smart Home are seldom used separately. Customers don't want to switch devices and technologies when controlling their home entertainment or security systems, for example. At the same time, they like to have access to certain services like music streaming in all life situations, be it in their home, in the car, or on their phone. Thus, it is necessary for companies in the Smart Home field to work on compatibility between services across industries.

Accordingly, the Smart Home field offers revenue opportunities for countless industries, such as insurance or eCommerce.

## Statista's Digital Market Outlook

The predominant use case for insurers in the context of Smart Home are usage-based insurances. The idea is simple: People who live responsibly should pay less to their provider than people who are more likely to be in the need for an insurance service. A few years ago, such usage-based approaches were not possible, but with the introduction of a variety of sensors, they are today. The IoT allows insurers to identify risky and dangerous behavior and measure how often people behave that way.

Thereby, insurance coverage becomes more accurate. Obviously both sides benefit: Customers may benefit from lower fees and insurance providers receive fewer claims. The only problematic aspect that remains is data security. This leads to slower adoption rates in countries where privacy concerns are taken seriously, for example in Germany.

The second big field which Smart Home technology adds an interesting twist to is eCommerce. The recent trend towards dash buttons and smart speakers shows how convenient it

can be for customers to re-order everyday household goods like toilet paper or laundry care with a single click on a button or a command to their smart speaker. Yet, this is not the end of the line. As eCommerce players gather more and more data on consumer purchasing behavior, it is only a matter of time until they are able to automatically deliver products to people's doorsteps without them actually having to order.

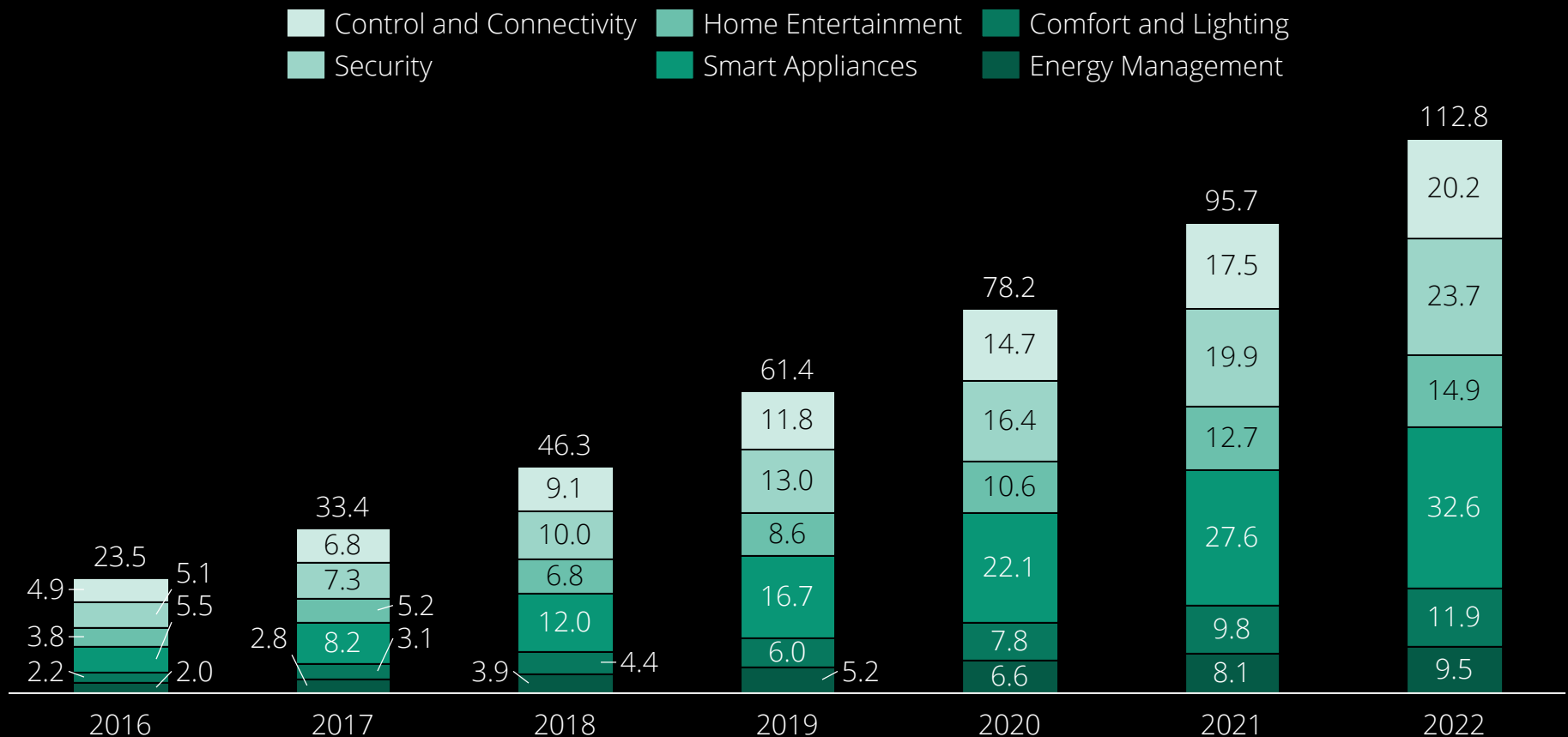
These are only a few examples of possible ways in which Smart Home technology will possibly be integrated into a broader context in the future.



[p.huhn@statista.com](mailto:p.huhn@statista.com)

# The global<sup>1</sup> Smart Home market will more than triple, reaching US\$113 billion by 2022

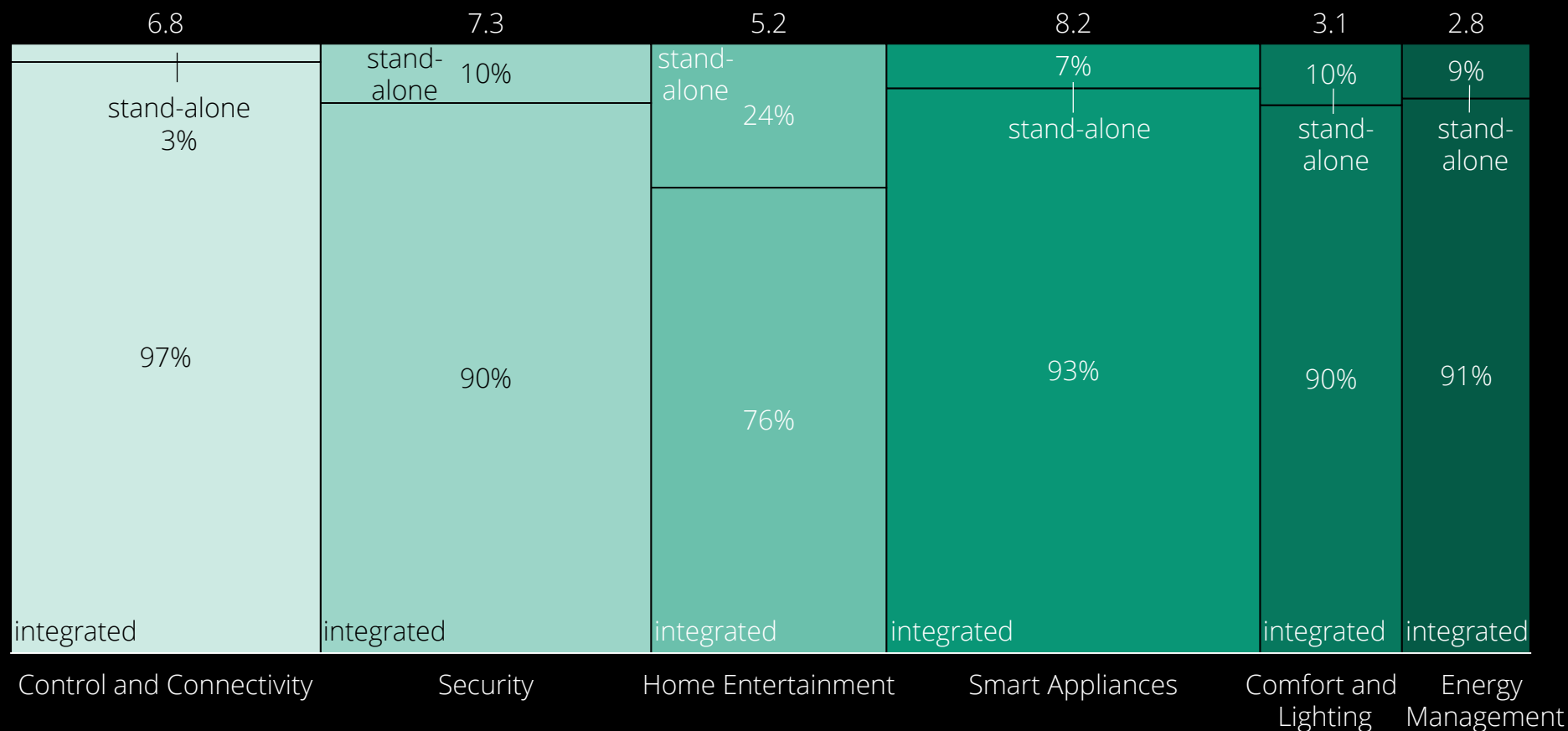
Global<sup>1</sup> Smart Home revenue from 2016 to 2022 in billion US\$



1: Only includes countries listed in Statista's Digital Market Outlook  
 201 Source: Statista Digital Market Outlook 2017

# Integrated Appliances are the biggest category across all Smart Home segments in terms of global<sup>1</sup> sales

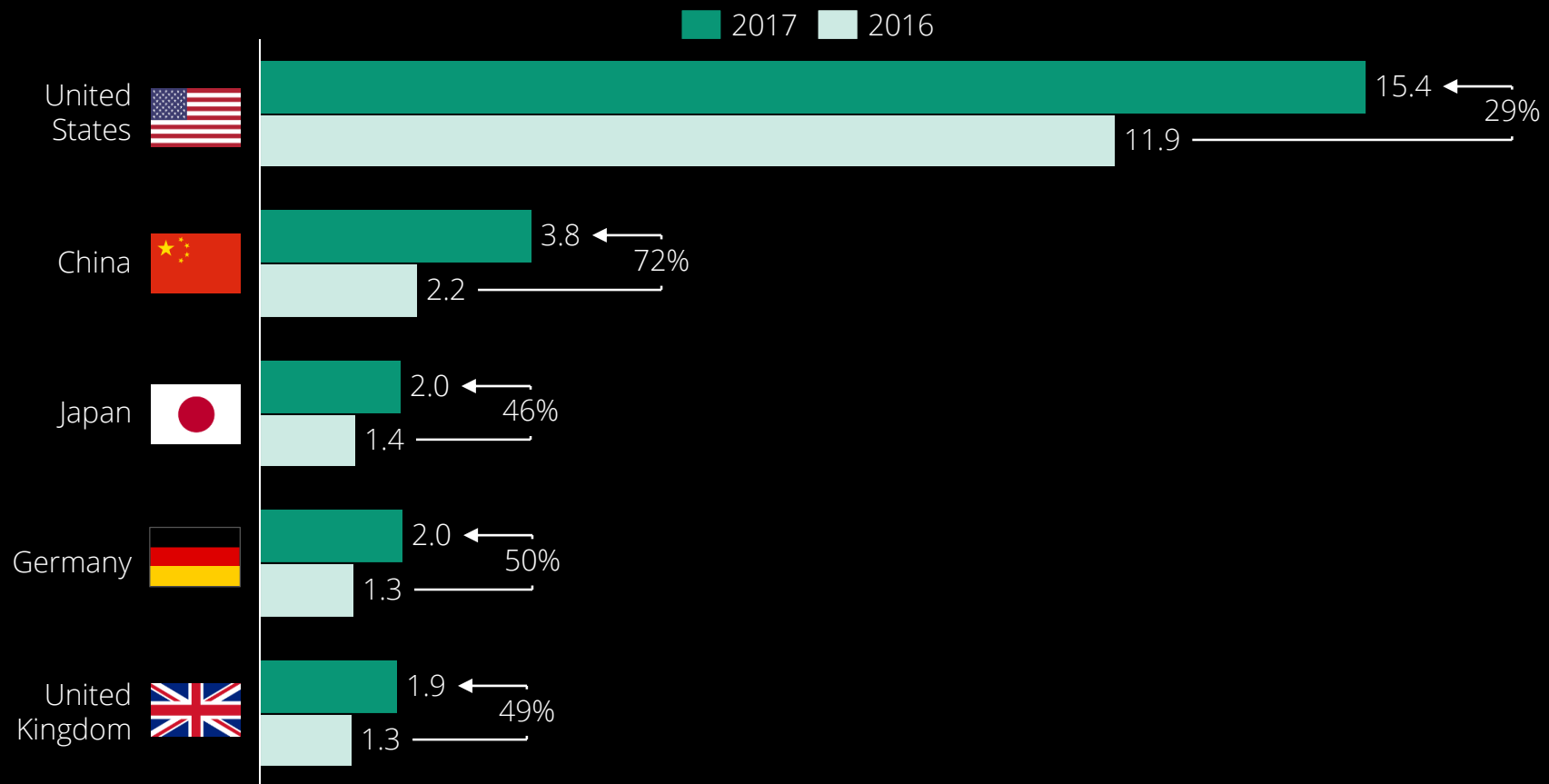
Global<sup>1</sup> Smart Home revenue in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook Note: Note: Percentages refer to the individual segment columns  
 Integrated Smart Home: A households that is equipped with a central gateway and devices from at least two Smart Home segments  
 Stand-alone Smart Home: An isolated application, where a central control unit is not necessary. Only devices from one Smart Home segment.

# The Smart Home market is surging in all top 5 countries, with China showing the highest rate of 72%

Top 5 Smart Home countries by market revenue in billion US\$





# More and more players with different backgrounds are entering the Smart Home market

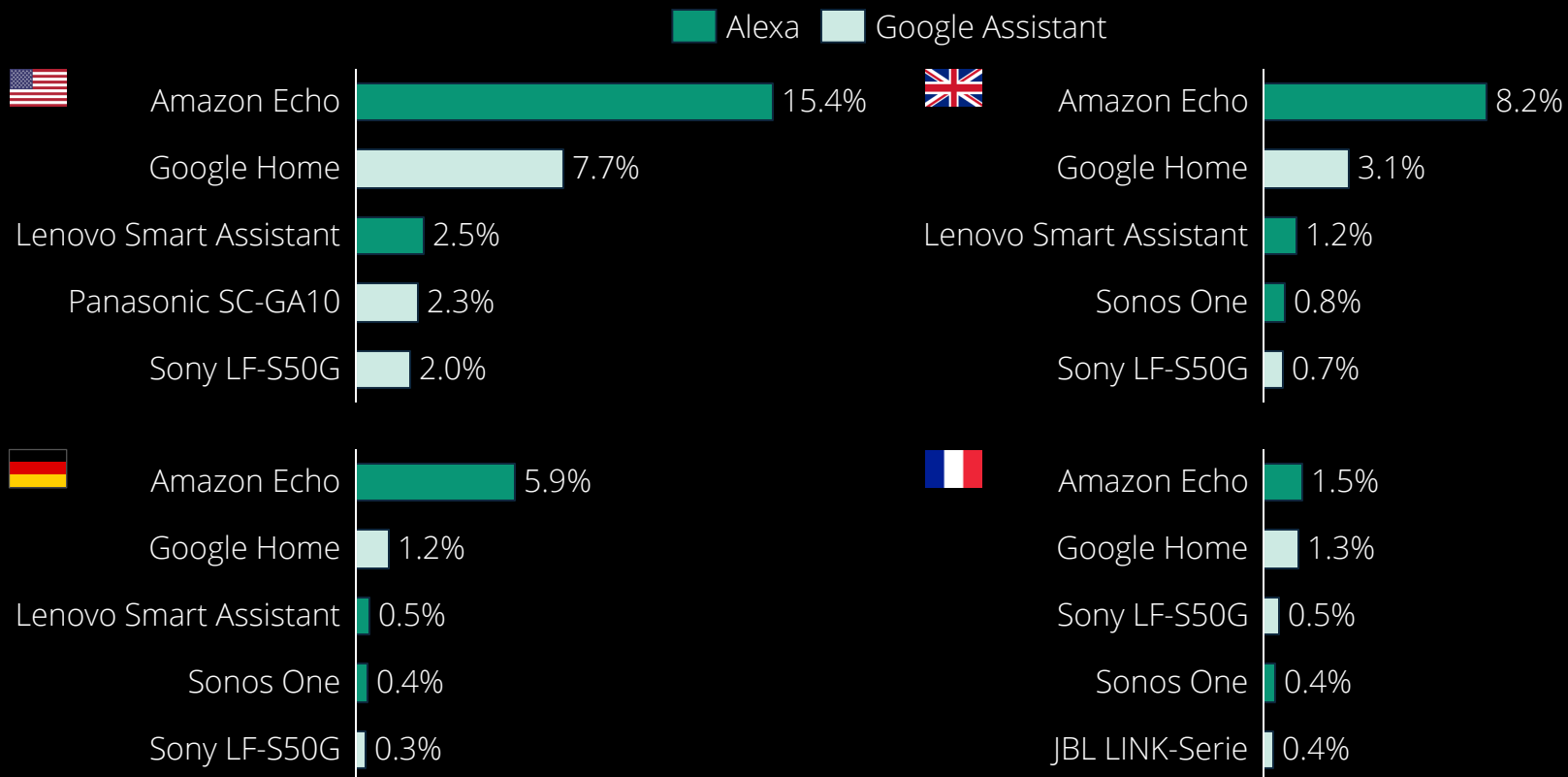
Selected players from the Smart Home sector

	Control and Connectivity	Comfort and Lighting	Security	Home Entertainment	Energy Management	Smart Appliances
Dedicated Smart Home companies	Better. Together. <sup>™</sup> 智能音箱 INSTEON <sup>®</sup> FIBARO <sup>®</sup> Home Intelligence LOXONE GIRA eQ3	LEDVANCE LIFX BeONhome COMFYLIGHT	ALARM.COM <sup>™</sup> CHUANGO canary ADT Security Eugust LUPUS ELECTRONICS vivint.SmartHome	PURE SONOS BLUESOUND D. DEFINITIVE TECHNOLOGY <sup>™</sup>	tado <sup>°</sup> ecobee climote <sup>™</sup> nest. netatmo	ECOVACS ROBOTICS Robot <sup>™</sup> neato robotics <sup>®</sup>
Players entering the market from other industries	HomeKit amazon echo MAGENTA SmartHome NETGEAR <sup>®</sup> belkin.	link hue PHILIPS LEEDARSON SAMSUNG SmartThings <sup>™</sup>	AT&T ASSA ABLOY SCHLAGE	B&O BANG & OLUFSEN logitech BOSE DENON	Honeywell Danfoss HIVE BOSCH	B/S/H/ Haier LG Whirlpool CORPORATION



# Alexa devices dominate the smart speaker landscape – Google is on the rise

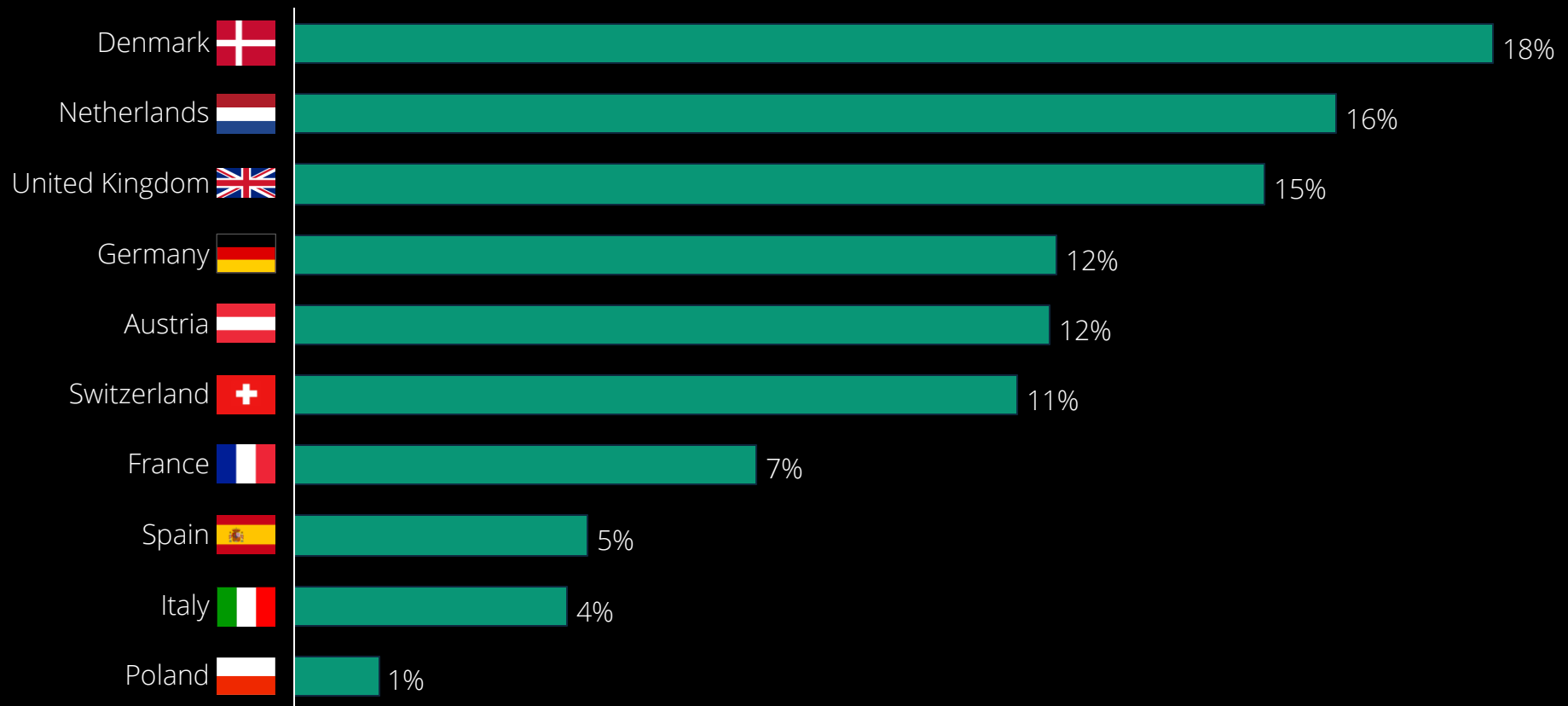
Top five smart speaker brands by country



"Which connected speaker with an integrated virtual assistant do you own?"; Multiple response; US: n=1,611, UK: n=1,818, DE: n=1,916, FR: n=1,963

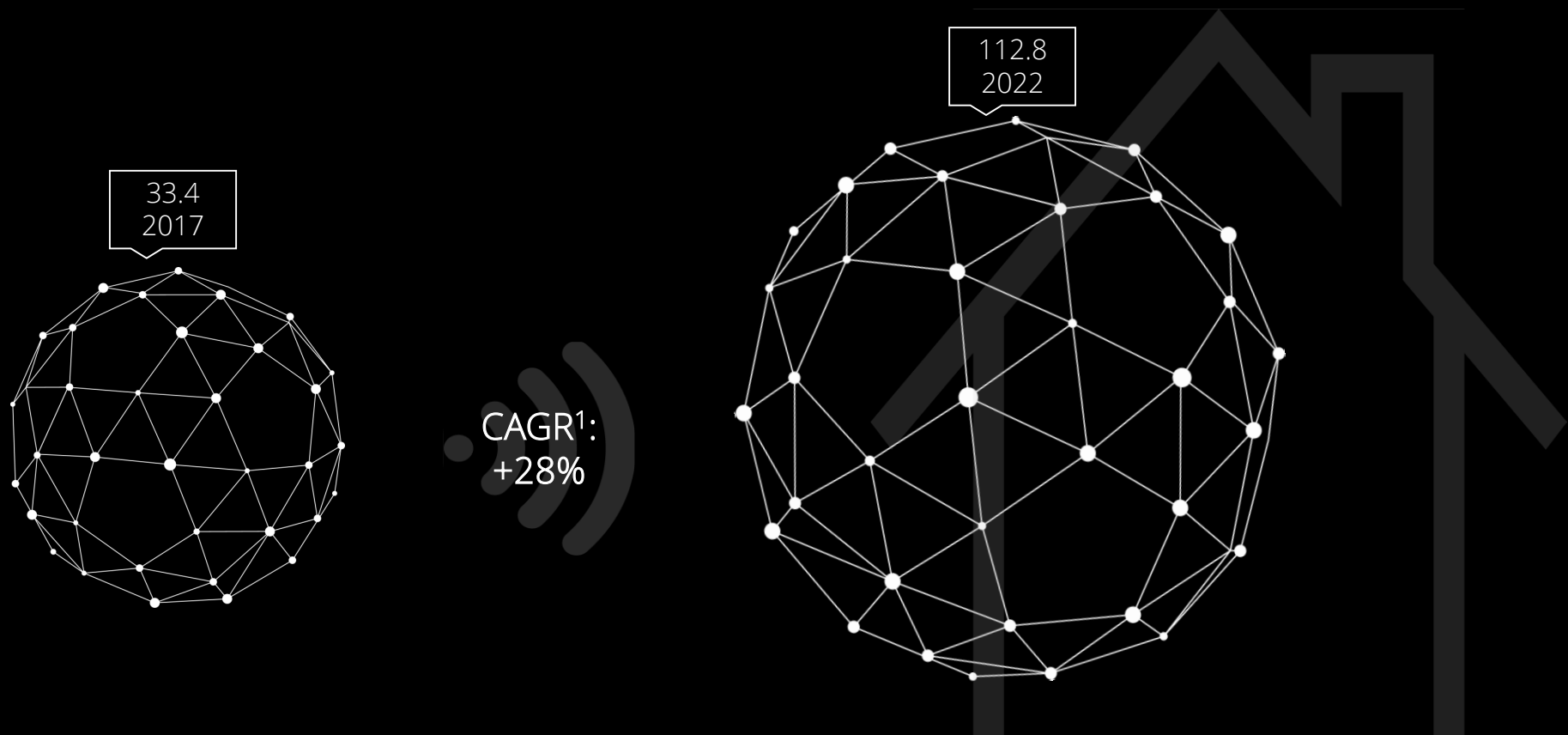
# Denmark is Europe's Smart Home leader with almost 20% of overall households being smart in 2017

Forecast of the Smart Home share in all households in 2017



# The market for Smart Home products is expected to grow by 28% annually between 2017 and 2022

Estimated revenue for Smart Home products worldwide in billion US\$



# Connected Car

Increasing internet penetration inevitably leads to a rise in digital services. This development has also reached the automotive industry. OEMs equip their cars with digital components that are meant to increase safety and convenience. By applying fees and collecting data, OEMs aim at getting their slice of the revenue cake, too.

We define connected cars as vehicles that have a permanent internet connection via an embedded SIM card<sup>1</sup>. We divide the Connected Car market into a single-fee hardware segment (Connected Hardware) and subscription-based service segments (Safety & Security, Maintenance & Diagnostics, and Infotainment).

In 2017, more than 16 million connected cars were newly registered, which added to a total of 43 million vehicles on

the roads worldwide. Together they generated an overall revenue of US\$25 billion.

Comparing the three major car markets in the world, the U.S., Europe and China, the U.S. showed highest revenues and the largest stock of connected cars on national roads. Europe was the second biggest region, but driven by recent changes to EU legislation requiring every newly registered car to be connected, the number of connected cars is going to rise dramatically in the future. China lags behind Europe and the U.S., but growth rates are the highest. This growth is partly initiated by strong alliances between OEMs and Chinese internet giants. BMW and Alibaba, for example, have announced to integrate smart home technology with every BMW sold in China from 2018 on.



## Statista's Digital Market Outlook

Virtual assistants are a valuable tool to connect cars and homes, but also to provide information and intelligently assist while driving. Therefore, OEMs are currently eager to include artificial intelligence in their cars. Ford, for example, has already started to integrate Amazon's Alexa into their vehicles.

The development of self-driving car technology is another promising way of using vehicle connectivity. Some OEMs, like Tesla or Audi, have already achieved substantial progress in this field. Self-driving cars will be the next level of driver-assistance technology. Thanks to intelligent hardware and software and extensive vehicle interconnection, there will be no more need for drivers to have the steering control. Technology is less prone to errors, which is expected to increase road safety. Nonetheless: As long as it remains unclear who will be responsible in the event of an autonomous car causing a crash due to errors or malfunctioning, driverless vehicles will not enter the automotive mass market. This is one issue that governments worldwide will have to deal with in the upcoming years.

In the future, technologically advanced cars are expected to carry close to 200 connected sensors. Inter-connection of components will not only take place inside cars but also between cars and their environment – as part of the so-called vehicle-to-everything communication. Connected cars will share data with each other, making it possible to optimize urban traffic management and making it a lot safer to drive a car.

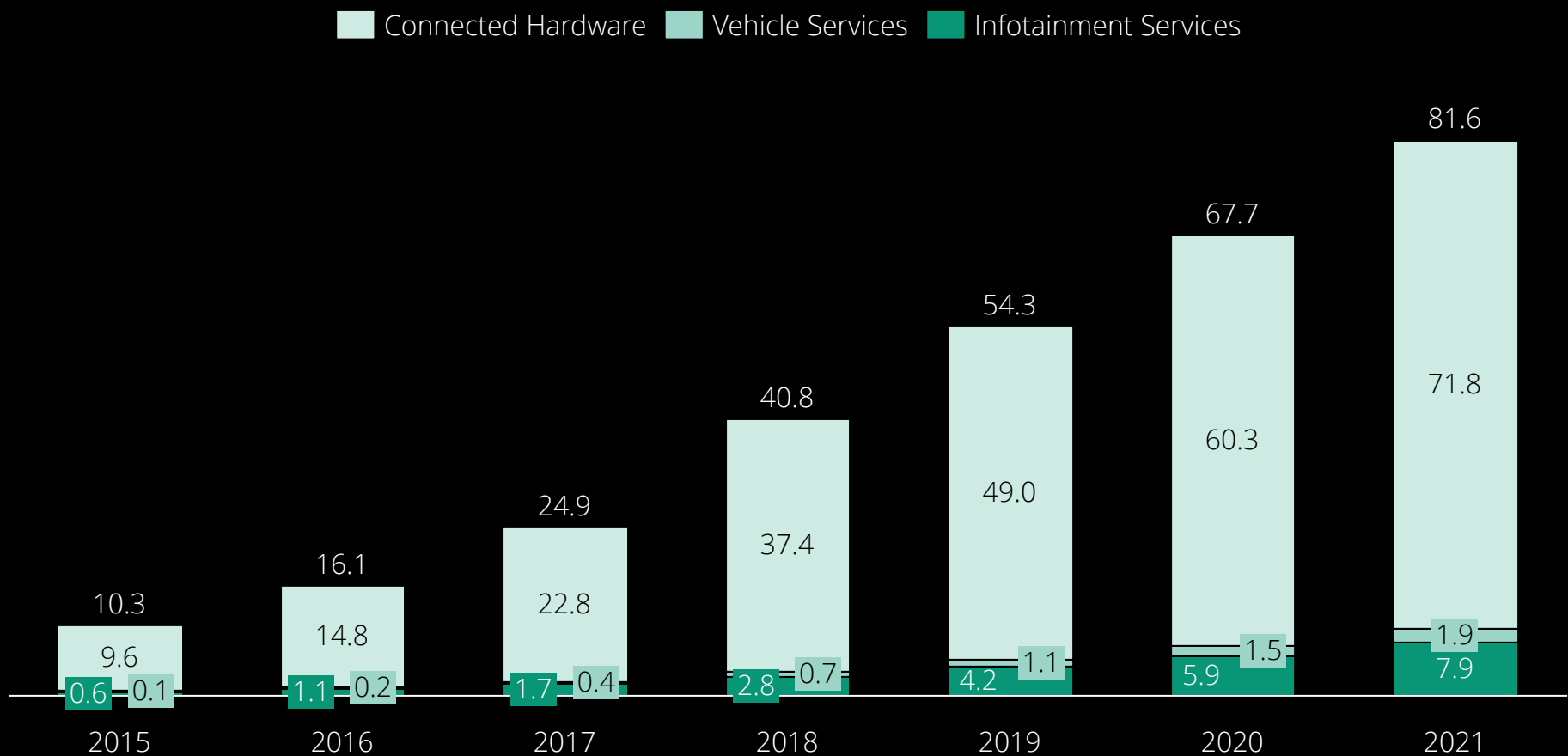
For now however, technology can only advise and assist in the form of alerts or initiated actions. The final action still has to be carried out by the driver, who reacts to the received information.

*Denin Becker*

[d.becker@statista.com](mailto:d.becker@statista.com)

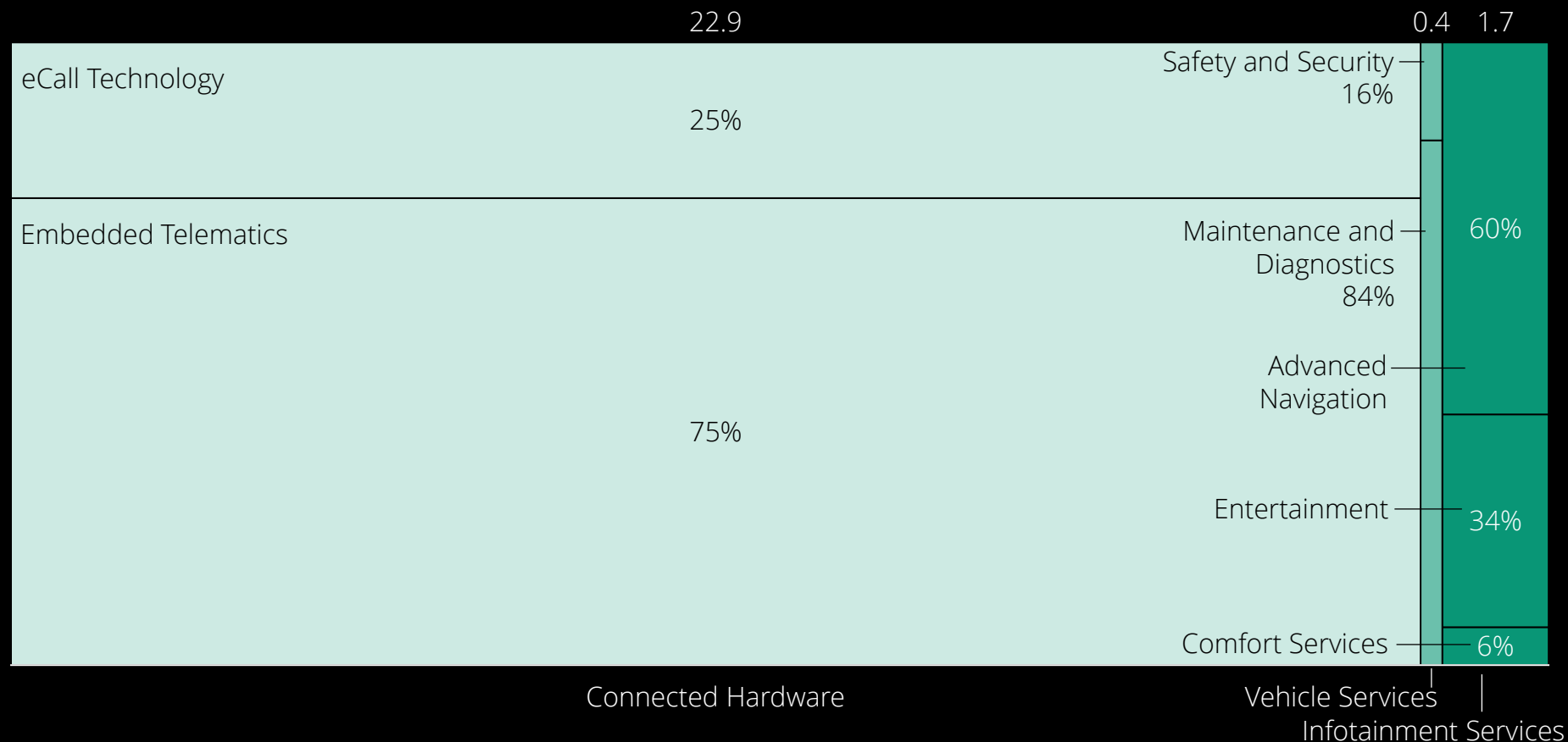
# The global<sup>1</sup> Connected Car market is expected to increase five-fold by 2021

Estimated global<sup>1</sup> Connected Car revenue in billion US\$



# Embedded Telematics is by far the dominating segment in the global<sup>1</sup> Connected Car market

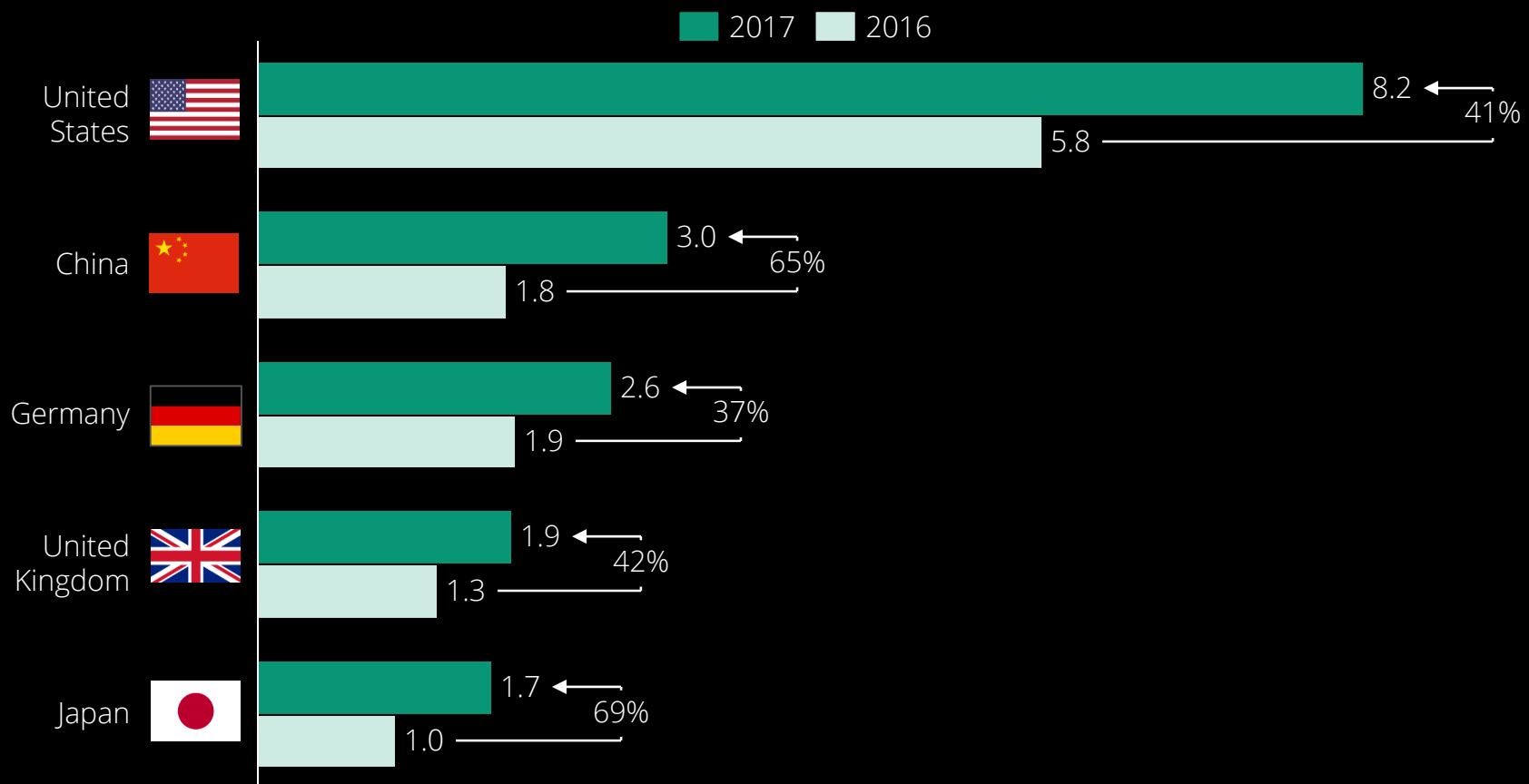
Global<sup>1</sup> Connected Car revenue in billion US\$ and segment revenue shares in 2017



1: Only includes countries listed in Statista's Digital Market Outlook  
 Note: Percentages refer to the individual segment columns  
 Source: Statista Digital Market Outlook 2017

# China and Japan grew by more than 60% between 2016 and 2017

Top 5 Connected Car countries by market revenue in billion US\$





# Several OEMs plan on integrating virtual assistants into their cars

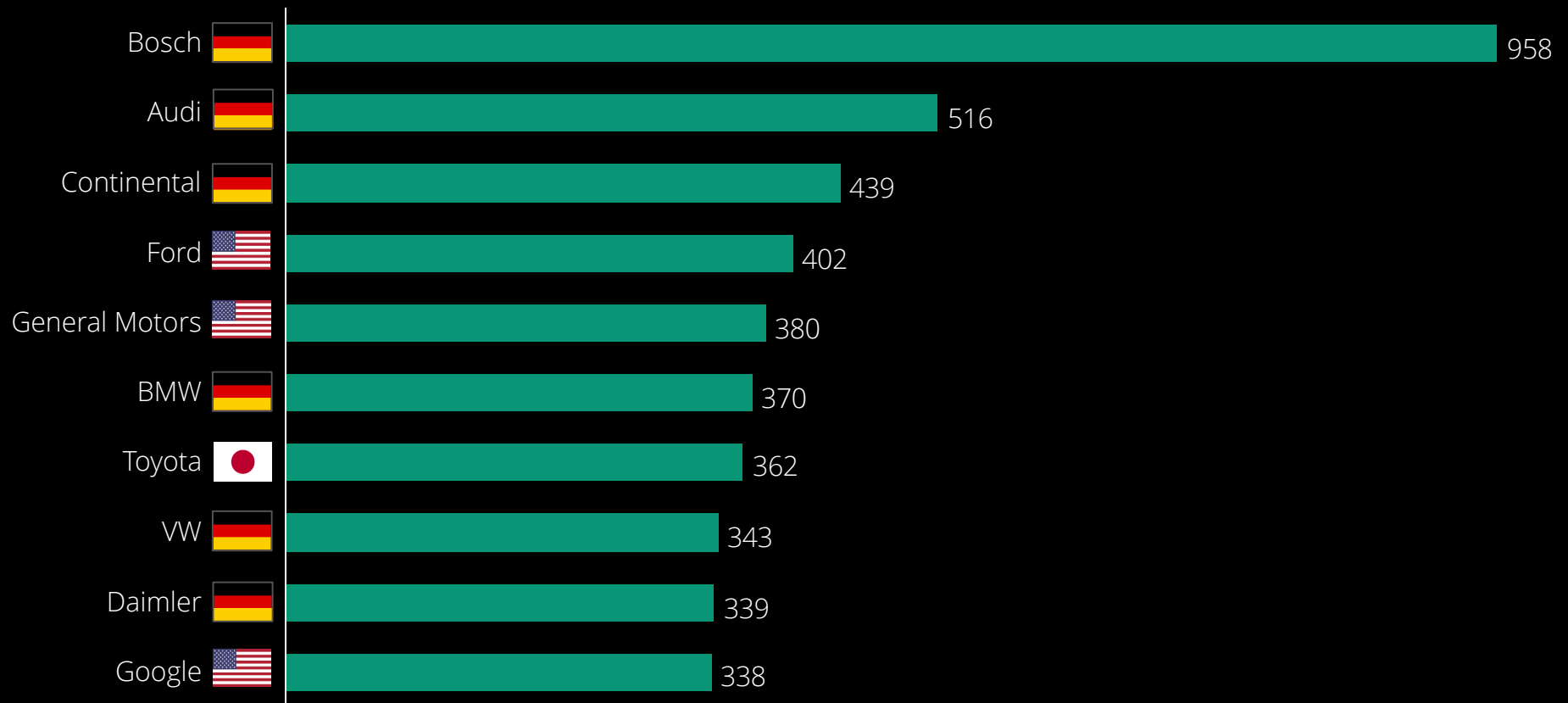
Offered sources for digital services and virtual assistants by selected automotive manufacturers

OEMs	Proprietary services	Foreign app integration	Virtual assistants			Smartphone mirroring		
			amazon alexa	Cortana	Google	android auto™	Apple CarPlay	MirrorLink
	●	●	●	○	○	○	●	●
	●	○	●	○	○	●	●	●
	●	●	○	○	●	●	●	●
	●	●	○	○	○	●	●	●
	●	●	●	●	○	●	●	○
	●	●	○	○	○	●	●	●
	●	●	○	○	○	●	●	○
	●	○	○	○	○	●	●	○
	●	○	●	○	●	●	●	●
	●	○	●	●	○	○	●	○
	●	○	○	○	○	●	●	●
	●	●	○	○	○	●	●	○

- Available
- Announced
- Not available

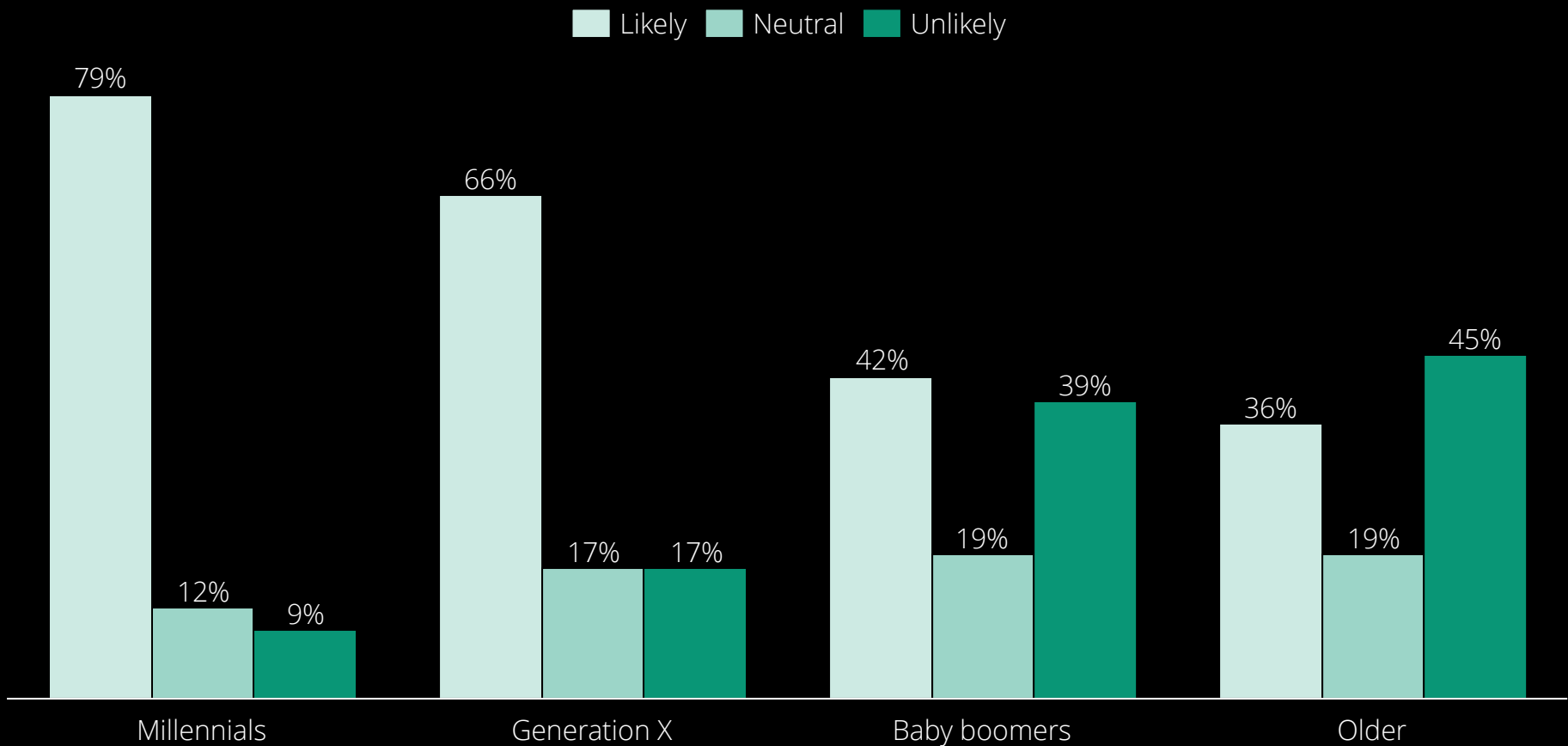
# The German company Bosch submitted more than 950 patents for the autonomous driving segment

Number of autonomous driving patent filings worldwide between 2010 and July 2017



# Almost 80% of millennials are likely to buy a car with new technology

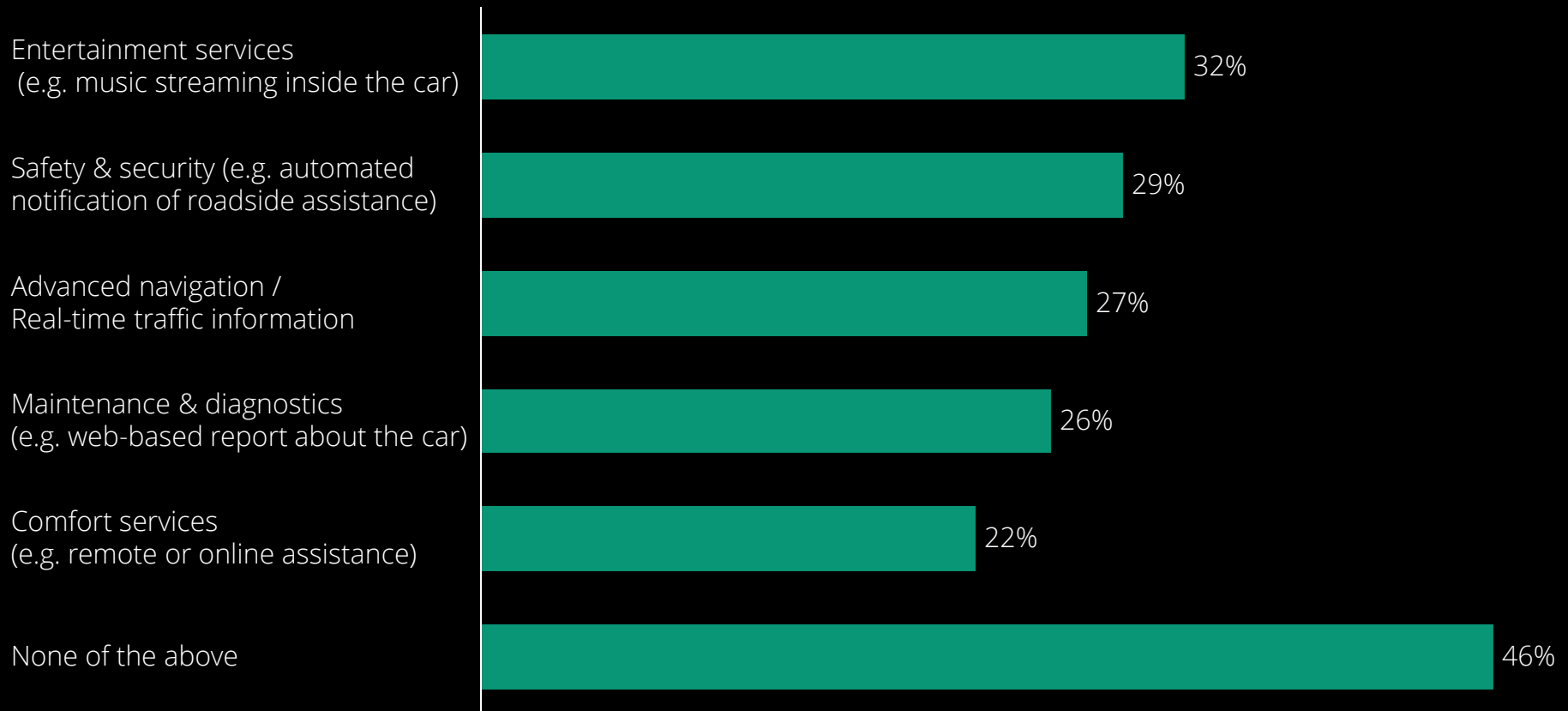
Consumers who are likely to buy a car with new technology<sup>1</sup> in the next 24 months in the U.S. in 2017



1: Wi-Fi, vehicle-maintenance alert system, vehicle-theft tracking, built-in entertainment system, automated emergency roadside assistance, driver coaching tools such as speed alerts, Apple / Android compatibility, assisted-driving features or self-driving capabilities.

# Entertainment is the most popular connected service among U.S.-American drivers

Usage of connected services by U.S.-American drivers



"Which of these online-based services by your car manufacturer do you use?" ; Multiple response; n=1,909 respondents who have a car available in their household

# About Statista's Digital Market Outlook

8 markets, 33 segments & 85 sub-segments



## eCommerce

Fashion, Electronics & Media, Food & Personal Care, Furniture & Appliances, Toys, Hobby & DIY



## eServices

Event Tickets, Fitness, Dating Services, Food Delivery



## eTravel

Online Travel Booking, Mobility Services



## Digital Media

Video-on-Demand, Digital Music, Video Games, ePublishing



## FinTech

Digital Payments, Alternative Financing, Alternative Lending, Personal Finance



## Connected Car

Connected Hardware, Vehicle Services, Infotainment Services



## Smart Home

Control and Connectivity, Comfort and Lighting, Security, Home Entertainment, Energy Management, Smart Appliances



## Digital Advertising

Banner Ads, Video Ads, Search Ads, Social Media Ads, Classifieds

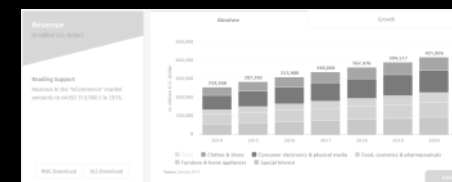
Exclusive part of the Statista Corporate Account

Access to more than 1,000,000 statistics and all digital markets

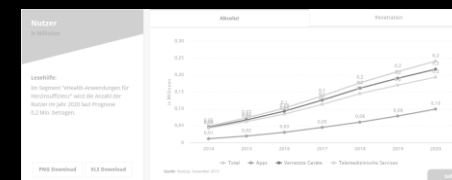
[more information](#)

## Details

- › 50 countries and regions
- › Direct access & downloads
- › 7-year coverage: 2016 – 2022
- › Revenue forecasts



- › User count & penetration



- › Comparable data




# Statista Global Consumer Survey

Expert tool: DIY analysis, cross-tabulation, customized target groups, export to CSV


 **50+ Topics & Industries**

- Retail & eCommerce
- Digital media & marketing
- Cars & mobility
- Personal finance & FinTech
- Age, gender, occupation
- Devices used
- Frequency of internet usage
- Premium / luxury relevance

 **64,000+ Consumers**

 **27 Countries**

USA | Germany | France | UK | China | India | Spain | Brazil  
Nigeria | Russia | Argentina | etc.

 **700+ Brands**

**Browse the Global Consumer Survey on**  
[www.statista.com](https://www.statista.com)

# Statista Research & Analysis

Market research – Market Analyses – Data Modeling

Statista Research & Analysis is a provider of comprehensive services in the fields of market research and market analysis. Building upon our experience as one of the world's leading statistics portals, our analyst team will support you in the collection and evaluation of market, client and competitive information – tailored to your individual request. Our team consists of former top management consultants, accomplished market researchers and business analysts.



Quantitative & qualitative market research



In-depth analysis and company profiles



Data modeling for market sizing and forecasts

## CONTACT US



**Niels Terfehr**

*Director Research & Analysis*

**TEL**

**+49 40 282441 852**

**E-MAIL**

**niels.terfehr@statista.com**

Find out more on [www.statista-research.com](http://www.statista-research.com)

**statista**   
Research & Analysis

# Statista Content & Information Design

Infographics - Videos - PowerPoint - Corporate Publishing - Microsites

We are an information design agency who will support and assist you along the entire path from the brainstorming stage via the research phase to the graphic conversion and distribution of your project. Thanks to our access to over 18,000 sources, our team of editors and design experts will visualize any topic for you.



Editorial storytelling and processing



Professional infographics and presentations



Microsites, videos and corporate publishing



Increase  
your reach in  
**CONTENT  
MARKETING!**

REQUEST YOUR INTRODUCTORY OFFER NOW ON: [www.statista-content-design.com](http://www.statista-content-design.com)

**statista**   
Content & Information Design



# Imprint

## Contacts and authors

Sebastian Buss

Felix Wegener

Geeske Nöldeke

Philipp Huhn

Kathrin Schreiber

Theresa Berthelmann

Ksenia Striapunina

Dennis Becker

Felix Richter

Mathias Brandt

Martin Armstrong

Niall McCarthy

### **E-MAIL**

*[DMO@statista.com](mailto:DMO@statista.com)*

### **WEB**

*[statista.com/outlook](http://statista.com/outlook)*

**Released:** March 2018

### **Imprint**

Statista ▪ Johannes-Brahms-Platz 1 ▪ 20355 Hamburg ▪ +49 40 413 49 89 0 ▪ [www.statista.com](http://www.statista.com)

### **Disclaimer**

This study is based on survey and research data of the previously mentioned sources. The forecasts and market analyses presented were researched and prepared by Statista with great care.

For the presented survey data, estimations and forecasts, Statista cannot assume warranty of any kind. Surveys and forecasts contain information not naturally representing a reliable basis for decisions in individual cases and may be in need of further interpretation. Therefore, Statista is not liable for any damage arising from the use of statistics and data provided in this report.