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Understanding the Digital Consumer WHY KNOWING YOUR AUDIENCE IS MORE IMPORTANT THAN EVER

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TOM SMITH | CEO

WELCOME TO THE AUDIENCE ERA

Today we live in what I call the 'Audience Era' - an age where everyone and everything has an audience.

The origins of this are not news for anyone in marketing; mass-market social media combined with 24/7 mobile access has radically reshaped our communications environment. Publishing to an audience today has been simplified to a single button press, so it is no surprise that our data quantifies that an incredible 81% of internet users now publish a video, photo or review online at least once a month. In a little over a decade, we have gone from thousands of outlets to billions.

CONSUMER PUBLISHERS

% of internet users who have uploaded/shared a photo, uploaded/shared a video or posted a review online in the last month

Global	81%		
16 to 24	85%	Asia Pacific	84%
25 to 34	87%	Europe	75%
35 to 44	82%	Latin America	88%
45 to 54	74%	Middle East and Africa	87%
55 to 64	66%	North America	76%

There are six core trends that define this era which are driving substantial demand in audience profiling and expanding the market for our product:

RADICAL GLOBALIZATION

By 2020, it is predicted that 4bn people will be online, the substantial majority of whom will be outside the US and Western Europe. This is a vast and connected market place where content, communities and communication can travel freely, unconcerned by local borders or geographies. Today, the majority of our internet time is spent on global platforms like Facebook, Amazon, Twitter or Snapchat. The possibilities for businesses are immense, with direct access to networked audiences 10, 20 or even 100 times the size that mass-media could ever deliver. This opportunity is not without its challenges; larger cross-border audiences need a better level of audience understanding, while marketing communications are increasingly developed centrally with a singular brand, positioning and executional plan that can work anywhere in the world - conceptually, a much harder feat. To achieve this with success means understanding through data that we can no longer rely on walking out the front door to know our audience.

CONSUMER POWER

Consumer opinions, comments and sharing now make or break mass-market opinion. This means that it is more pressing for businesses to understand what makes their audiences tick (their needs, wants, motivations and behaviors) in order to design products, experiences and communications that drive business growth.

DEMOCRATIZATION OF CONTENT

Today, every business can develop content that tells their story anywhere in the world through news stories, blog posts, photo journalism, videos and conversation. This presents a huge opportunity, but one that places very different demands on how a business operates. Advertising could be switched on and off; content and communication is permanent and always on. This requires a more developed strategy, with upfront investment that has to be built on audience understanding.

LONG-TAIL ADVERTISERS

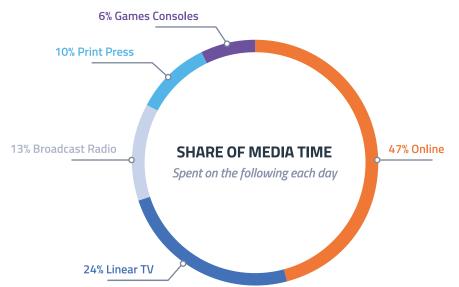
To advertise, you used to need a big budget, an army of agencies and an organizational structure that could manage this in each market in which you operate. Now anyone can buy an advertising campaign and reach an audience globally. Google was the pioneer in self-service advertising with paid search and, today, it has over 40 million advertisers. Now Facebook, Twitter and LinkedIn all have self-service solutions that enable you to reach audiences anywhere in the world. This has created tens of millions of advertisers, all of whom need to understand increasingly niche audiences.

AUDIENCE FRAGMENTATION

In the mass-media era, there were limited channels to engage an audience, meaning content and its distribution were dictated by the media owner. Today there is infinite choice, from the on-demand platforms of Netflix and YouTube to content aggregators like Apple News, Facebook and Flipboard. We live in a search-centered world where we dictate what we consume. The result of this is that audiences have splintered and fragmented, but are more centered around passions and interests. The mass audiences of male, female or 16-24s have absolutely no relevance in a highly fragmented media landscape. For this reason, businesses need to have a much deeper knowledge of who the right audiences are to drive growth, and also a deeper level of knowledge about how to engage them.

REAL-TIME INFORMATION FLOW

Today, over 50% of internet users spend more than 3 hours a day connected, while over 90% own a smartphone. Connection to information, news and events from across the globe is instantaneous. This impacts businesses as they need to constantly interact with audiences, respond fast and maintain an alwayson status. To do this requires a more up-to-date understanding of audiences – one which is constantly refreshed and evolving.



This presents an unprecedented opportunity for business. Global household names such as Uber, Dollar Shave Club and Tesla have been built with minimal advertising investment, leveraging content, their userbase of publishers and the network effect of the social internet to drive rapid awareness and scale. On the smaller end, individuals can build highly niche microbusinesses with a global customer base, leveraging platforms like Etsy, eBay or Amazon to sell and Twitter, Instagram and Facebook to get the message out.

To succeed in this world is, however, more demanding; strategy is king and you need better product, more inventive communications, better customer experience and the ability to evolve and react in real-time. This is a challenge and one which cannot be met without an understanding of your audiences. For these reasons, we are seeing an exponential demand for audience profiling, not just in the traditional buyers of audience data (agencies and media owners), but SMEs, investors, sports brands, in-house at large corporate and government organizations. This is no surprise to us: in today's landscape, we believe audience profiling is needed by every organization in the world.

So here's to an audience-focused 2017.







JASON MANDER | CHIEF RESEARCH OFFICER

UNDERSTANDING THE MOBILE-ONLY INTERNET USER

When online research first came to prominence, the vast majority of internet users were connecting via PCs and laptops – many of them exclusively so. Since then, the landscape has changed considerably; PCs and laptops are still hugely important, especially in mature regions and among older age groups, but they're no longer the same dominant force or default choice that they once were. With each quarter that passes, more people have a smartphone, they spend longer on them each day and they use them to undertake a greater number of their online activities.

All sorts of interesting new audiences have emerged as a result: there are Mobile-First consumers (discussed later in this report), who see their handsets as their most important access points; there are Mobile-Heavy consumers, those individuals who report spending four hours or more per day on their phones;

and then there are Mobile-Only consumers, people who are solely dependent on mobiles as a gateway to getting online.

As these groups have come to the fore and grown in size, so too has the need to understand their behaviors, attitudes and profiles. After all, to represent the views and actions of every connected consumer on the planet – something which sits at the heart of GWI's mission – then things like the location or access point of an internet user should not be a barrier.

In today's digital landscape, the reality is that most internet users are Multi-Device users. In fact, the typical online 16-64 year-old owns over three devices – a metric which remains remarkably consistent by age, even if the exact devices themselves change across the generations.

That means the vast majority of Mobile-First or Mobile-Heavy consumers can be reached via devices other than their phones. In fact, when we interviewed 34,000 online adults via mobile in 2016, just 2.7% of the Multi-Device owners within this group said they went online via their mobile only. In none of the 34 countries we surveyed did that figure exceed 5%, and it dropped

as low as 1% in the UK and US. Put another way, if you

own a mobile + other devices, you're overwhelmingly likely to use those other devices to get online too.

It's the Mobile-Only audience which has long presented researchers with more of a challenge as, by their nature, you can only capture their views and behaviors via mobile. However, most online surveying techniques (whether active or passive) were developed with PCs and laptops in mind, devices which offer large screen sizes and facilitate extended surveys. Capturing significant datasets via mobiles is hugely complex, not least because screen sizes are smaller, functionality is reduced and attention spans are considerably shorter.

AVERAGE NUMBER OF CONNECTED DEVICES OWNED

All	3.3
16 to 24	3.1
25 to 34	3.6
35 to 44	3.5
45 to 54	3.2
55 to 64	3.0

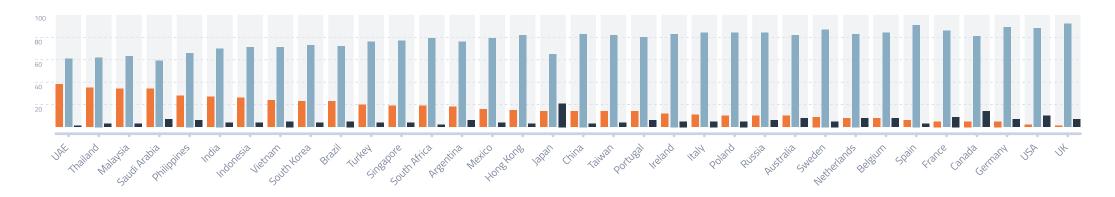
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NOTE: List of devices comprised e-reader, games console, feature phone, PC/laptop, smart TV, smart wristband, smartphone, smartwach, tablet and media streaming device/stick GlobalWebIndex will be launching mobile surveying from Q1 2017. We'll be doing this in 40 countries – including Kenya, Nigeria, Morocco and Ghana – and interviewing over 70,000 mobile users per year to give fresh data every single quarter.

It's for these reasons that GlobalWebIndex is pleased to announce that it will be utilizing an innovative new approach to mobile research across 40 countries from Q1 2017. In addition to all current markets, we'll be entering Kenya, Nigeria, Morocco and Ghana too — interviewing over 70,000 mobile users per year and publishing fresh mobile data every single quarter.

SIZING THE MOBILE-ONLY AUDIENCE

% of internet users who access via a mobile only, via multiple devices, and via devices other than a mobile



So, based on the results of our 2016 pilot, what characteristics can we expect from this new Mobile-Only internet audience? Particularly striking is their concentration in fast-growth / emerging markets, with almost all of the top 10 spots taken by countries in the Middle East or APAC. In places like the UAE, Thailand, Saudi Arabia and Malaysia, as many as 1 in 3 internet users are now Mobile-Only. Look at the other end of the table — where you find every single one of the mature markets — and the same audience accounts for under 5% of online adults in places like Canada, Germany, the USA and UK. That's not a surprise when you consider how the internet landscape developed differently across regions, but does give context for why our existing data has so consistently shown that consumers in fast-growth markets spend the longest amount of time on mobile and are typically the trend-setters when it comes to adopting new mobile services or behaviors.

IN PLACES LIKE THE UAE, THAILAND, SAUDI ARABIA AND MALAYSIA, AS MANY AS 1 IN 3 INTERNET USERS ARE NOW MOBILE-ONLY.

- MOBILE-ONLY INTERNET USER
- MULTI-DEVICE INTERNET USER
- NON-MOBILE INTERNET USER

PROFILING MOBILE-ONLY vs MULTI-DEVICE INTERNET USERS

Demographically, this audience also stands itself apart: Mobile-Only internet users are (much) younger, less urban and less likely to have obtained higher education qualifications than their Multi-Device counterparts. They are also less likely to be in employment, and less likely to be in high-earning households. Of course, some of these characteristics are closely correlated; the much younger age-profile of this audience has a direct impact on their earning power and also helps to explain why they are 30% more likely to be living with their parents. However, these trends also reflect the reality that mobiles have opened up the internet to audiences who might otherwise lack the infrastructure or resources to access via more expensive or traditional devices like PCs/laptops. Many are Mobile-Only not out of choice, but necessity.

MOBILE-ONLY	INTERNET USER
MODILE-OIVLI	INTERIVET OSEK

MULTI-DEVICE INTERNET USER

BY LIVING ENVIRONMENT

Urban	53%	68%
Suburban	19%	23%
Rural	28%	9%

16 to 24	44%	24%
25 to 34	28%	28%
35 to 44	17%	23%
45 to 54	8%	16%
55 to 64	3%	10%

BY EDUCATION

Schooling until age 16	24%	5%
Schooling until age 18	34%	22%
Trade/technical school/college	16%	20%
University degree	20%	41%
Postgraduate degree	6%	12%

In China, 1 in 2 Multi-Device users have tertiary education, compared to just 14% of Mobile-Only ones.



In South Africa, Multi-Device users are twice as likely as Mobile-Only users to be in Western Cape (containing Cape Town) and Gauteng (containing Johannesburg). Conversely, Mobile-Only users are twice as likely to be in Eastern Cape, Free State and Limpopo.

In India, over 40% of Multi-Device users are in the top household income bracket, whereas 36% of Mobile-Only users are in the lowest one. Just 1% of Mobile-Only users in India are in the top bracket.





Online behaviors can be different too. Look at social media engagement and Mobile-Only users are 20% *more* likely to be on Facebook, despite having about half as many social networking/ messaging service accounts as their Multi-Device counterparts. Interestingly, Mobile-Only users have a lead over other mobile users only for Facebook and WhatsApp, and then trail behind for all other major services. This might suggest that their social behaviors are concentrated around a smaller number of services – something which makes sense given that they are restricted to one access point, and might have a desire to preserve their data allowances.

Of course, we shouldn't assume the Mobile-Only audience is homogenous across markets. Most obviously, there can be important nuances differentiating mature countries from fast-growth ones; if we take living environment as the example, it's suburban which sees the biggest decline among the Mobile-Only audience in mature markets such as Australia and the US, whereas it's urban which sees the biggest dips in most fast-growth countries. Equally, Mobile-Only audiences vary even between emerging markets. Age is the most obvious example of this; broadly speaking, the lower a country's overall internet penetration rate, the higher the proportion of 16-24s we find in its Mobile-Only audience. In

% OF MOBILE-ONLY USERS WHO ARE 16-24

Indonesia	60%
Philippines	59%
India	53%
Mexico	51%
Vietnam	46%

Indonesia, where the World Bank estimates internet penetration at sub-25%, 6 in 10 Mobile-Only users are from the youngest age group; in Saudi Arabia (World Bank estimate at 70% internet penetration), only 3 in 10 Mobile-Only users are from the 16-24 group.

Much more consistent across countries is that, to date, Mobile-Only users have typically been under-valued and under-represented, something we hope to help counter as we introduce large-scale, regular mobile surveying in 2017. After all, if the Mobile-Only audience is already sizable, it is set to swell still further in the years ahead as hundreds of millions of new internet users come online for the first time via mobile. Some of them will then evolve into Multi-Device users, but whether through choice or not, the number of internet users who remain Mobile-Only in the coming decade will be substantial.

ALASTAIR LITTLE | CHIEF OPERATING OFFICER

THE FUTURE OF ANALYTICS IS PEOPLE

In the cross-platform world, identifying the consumer has never been more of a challenge. The most common reaction from the measurement community has been to weigh in with modeling techniques and probabilistic identification. But this is at odds with the transactional advertising landscape, which is rightly making a move away from probabilistic IDs towards people-based targeting. Facebook was one of the first companies to embrace this. Google soon followed suit.

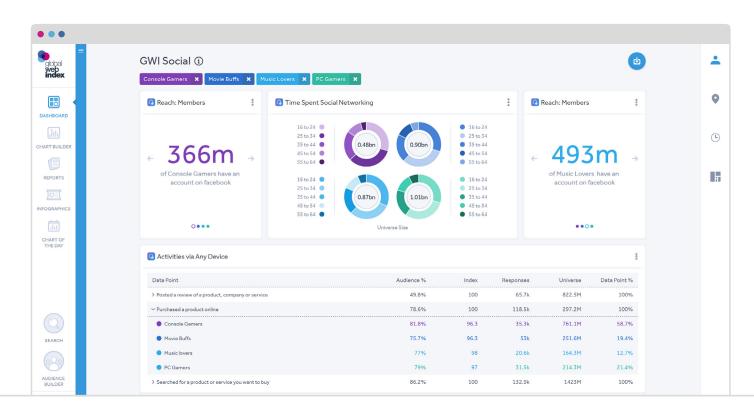
The data industry, on the other hand, has failed to follow this shift towards deterministic identification. How, for example, can we reconcile claims from one provider that they have 120 million consumer profiles in the UK, when that's almost twice the size of the country's total population? There has to come a point where we stop pushing the old adage that 'more is more'.

In desktop scenarios, cookies have been shown to lack the accuracy they once promised, with attrition

and cross-device shortfalls coming to the fore. Email addresses remain the most accurate cross-platform ID, and media vendors are looking to stock up on PII to drive confidence in sequential targeting across devices, deduplicating reach and activating the myriad touchpoints that exist for the modern marketer.

At GlobalWebIndex, we maintain deterministic IDs on all panelists. Via our GWIQ™ analytics offering, we can de-duplicate across devices and provide more accurate reach estimates and audience profiling information than previously available. At this point, we have built a technology stack that processes 10 billion tag fires a month, which is seamlessly integrated with the descriptive power of the 4,500 data points in our taxonomy. Powered by a panel of over 18 million connected consumers, we have delivered people-based analytics on websites, apps and connected devices for brands as diverse as Time Inc., Bauer Media, Fitbit, Reuters, Absolut Vodka and Coca-Cola.





GLOBALWEBINDEX'S
NEW DASHBOARDS

Being able to view the performance of communications using known-truth data, rather than modeled or inferred attributes, has provided new insight on value-based segmentations and the impact of communications on brand metrics. Knowing exactly how advertising campaigns and experiences are driving consumers down the funnel is key to evaluating success, and as we connect our data to more client DMPs for activation, we have been able to bridge the gap between robust communications planning, media buying and selling, as well as measurement that matters.

We believe this represents a major step forward in analytics, which was previously limited to basic demographics, enriched with modeled data based on very opaque actions hidden in hard-to-reach log files. Consider the example of the automotive intender. Individual A has applied for a car loan, individual B has read a car review online and individual C has never been observed taking any behavior related to the automotive category. Yet while we might reasonably infer that individuals A and B could be automotive intenders (albeit to very different degrees of confidence), individual C may also be classified in that

"Not all data is born equal, and we encourage the industry to demand more information on the methodologies being used to infer consumer attributes".

segment as a lookalike who has similar browsing behaviors and other modeled attributes. This is despite the fact that individual C may not have been engaging with any automotive content at all. It's not hard to see how the logic of 'more is more' can lead to data and information that is unreliable.

In these scenarios, there is typically no disclosure of confidence levels, no access to the underlying log files, and no transparency on modeling techniques. This is more permissible in media buying (arguably), where the data is designed to give advertisers an edge in the marketplace. For marketers seeking robust consumer profiling, this type of data is not fit for purpose. Not all data is born equal, and we encourage the industry to demand more information on the methodologies being used to infer consumer attributes.

Breaking new ground in audience analytics has spurred us on to develop new presentations of the data in our proprietary analytics software. The latest addition to the platform is Dashboards. Clients are now equipped with the ability to group sets of data in a range of visualizations, creating easily accessible dashboards to which their organizations are able to apply filters and audiences.

Dashboards can be organized around particular areas of the data such as social media or mobile behaviors, or can be custom collections such as key data points that power agency planning processes or editable versions of the data found in reports from our Trends team.

We look forward to rolling Dashboards out to more of our clients in 2017, as well as observing the increasingly sophisticated applications

of our data, be that via API integrations, syncing with DMPs, or creating hyper-segmented audiences. And, as ever, we welcome your input to our roadmap as we seek to play our role in raising the bar for audience-centric marketing.

New in 2017



MINIMUM OF 350,000 CORE INTERVIEWS



40 CORE COUNTRIES
Including launch of Egypt,
Nigeria, Kenya, Morocco,
Ghana and New Zealand



MOBILE SURVEYS IN ALL COUNTRIES, INCLUDING MOBILE-ONLY INTERNET USERS



BRAND DATA



60,000 SAMPLE SIZE IN THE US



DASHBOARDS

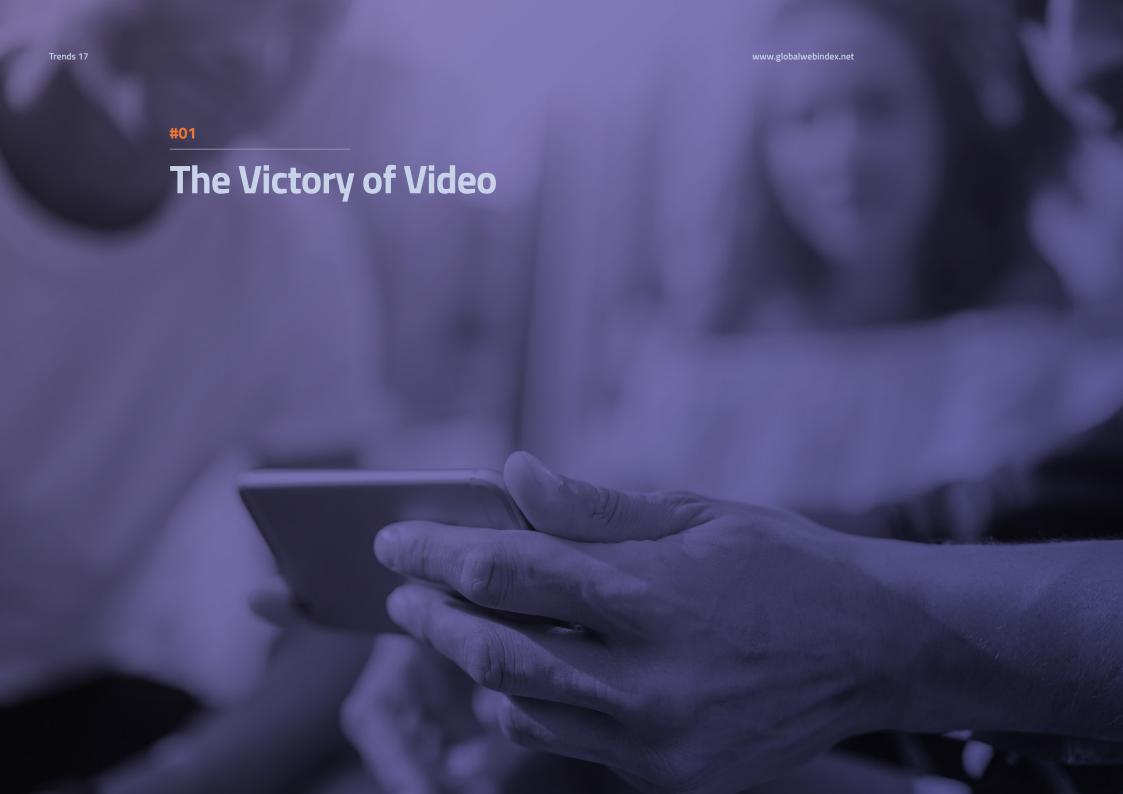


18 MILLION PANELISTS



TV/NEWS MEASUREMENT





FELIM MCGRATH

Is video the future of everything?

When Nicola Mendelsohn, VP for Facebook in EMEA, proclaimed last June that in five years' time Facebook 'will definitely be mobile and probably all be video', some heads were turned. Subsequent articles proclaiming the death of text on social media were a bit hyperbolic but Facebook's relentless drive towards prioritizing video content is something to take seriously. So is it certain that video will be the future of social? And after that, could it be that video is the future of everything?

GWI's data shows that Facebook's big bet on video is a smart move on the part of the world's largest

social network. Over half of Facebookers watch videos on the platform, indicating the broad level of engagement that Zuckerberg & Co.'s video initiatives have already gained. While the network might not (vet) be able to claim the sort

of viewing figures that YouTube can boast, the only way is up from here. As mobile connections continue to improve and the mobile internet grabs an increasing share of daily online time, consumers will have more

opportunities to watch videos on-the-go via Facebook. And it's clear that video sharing is a metric to watch. Right now, only 20% of Facebookers upload videos to the site, but on Snapchat a third are sharing videos and, on WhatsApp, the figure reaches nearly 50%. It's only a matter of time before this trend impacts Facebook, especially with Facebook Live being given a prominent push.

Of course, it's not only Facebook that is looking to jump on the video bandwagon. In the last year, we've seen Instagram launch video functionality, Tumblr begin

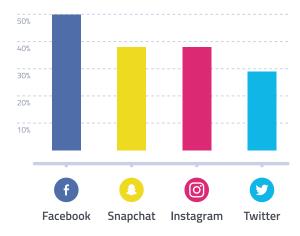
> hosting live-video streaming and Twitter double-down on its commitment to becoming a sports viewing hub by broadcasting major games. And towards the end of 2016, Snapchat threw its hat into the wearable tech arena

by announcing sunglasses which record videos to be uploaded to its Memories section. Having a strong video offering, and hosting live-streaming, is quickly becoming a requisite development for all social networks.

But is this a trend that needs to be confined to the world of social? It's now 93% of internet users who are watching videos online each month. And as more powerful smartphones and increasing 4G coverage expand consumers' ability to watch video whenever and wherever they want, consumption of video content will increase further. So far, YouTube, and latterly other social

SOCIAL VIDEO ENGAGEMENT

% of visitors/users who watched a video on the network in the last month



"In five years' time Facebook

NICOLA MENDELSOHN, FACEBOOK VP IN EMEA

will definitely be mobile

and probably all be video"

networks, have been the major beneficiary of this online video boom (about 90% are visiting YouTube each month) but there is a massive demand for platforms that can easily host user-generated or professional video and, as such, ample room for competition in this field. Any platform that is ingrained into the daily digital behaviors of its users could benefit from hosting video.

THE REACH OF ONLINE VIDEO

% who watched a video clip or visited a video-sharing site in the last month

TOTAL	93%
16 to 24	95%
25 to 34	97%
35 to 44	93%
45 to 54	88%
55 to 64	83%

Asia Pacific	93%
Europe	89%
Latin America	99%
Middle East & Africa	98%
North America	91%

In this vein, we've seen Spotify, nominally a music streaming service, begin hosting videos and even investing in original video content, while retail giant Amazon, already a major player in the online TV world, launched Amazon Video Direct to further expand

ANY PLATFORM THAT IS
INGRAINED INTO THE DAILY
DIGITAL BEHAVIORS OF ITS
USERS COULD BENEFIT FROM
HOSTING VIDEO

its content library by allowing semi-professional video-makers to upload content onto the Amazon platform. Of course, so many platforms boasting video offerings begs the question of how a service can stand out from the crowd.

But the evolution of VR, 360 video and live-streaming all present ample opportunities for platforms to differentiate themselves from their competitors.

For brands, this explosion of video presents an obvious opportunity. It's already a quarter of digital consumers who say they are watching branded videos, and this is a medium that could offer one potential solution to the growing threat of ad-blocking (whether through branded content or product placement). And

with video sharing becoming commonplace, the organic reach and opportunity for virility is something that is sure to attract major investment.

Video might not be the panacea to all the challenges facing the digital marketing industry, or the solution to every platform's growth issues, but it's clear that we're moving headlong into the video-first landscape.

FOR BRANDS, THIS EXPLOSION
OF VIDEO PRESENTS AN
OBVIOUS OPPORTUNITY



JASON MANDER

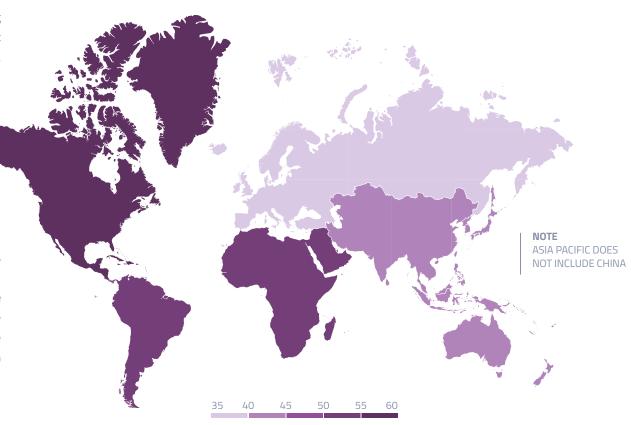
Can Snap be more than just an app?

Despite some high-profile releases, nothing so far has convinced mainstream consumers to embrace the benefits of wearable tech. And after the relatively lackluster performance of Google Glass - which faced criticisms about everything from its price-tag to its aesthetics to its privacy credentials - we've become a lot more cautious about predicting the imminent arrival of the wearable revolution. And yet Snap, owner of the coolest social app on-the-block, has become the next company to bet big on smart glasses with their Spectacles. So, with 2015 and 2016 having both been incorrectly touted as the year of the "Wearable Revolution" by some commentators, is it now safe to place your bets on 2017 being the one when Snap will finally manage to stimulate widespread acceptance and usage for this tech?

Certainly, Snap learned some key lessons from the fate of Google Glass. Firstly, there's the price. All but the wealthiest tech-lovers were prevented from engaging with Google Glass because it cost so much (though in Google's defense, it always pitched Glass as a prototype designed for a limited release). As a result, it always suffered from a slightly elitist image problem. **Google Glass became a case of us versus them,** and such divisions never benefit the reputation of the product in question. Snap's low pricing puts its Spectacles in the same price-bracket as other fashionable sunglasses (and actually makes them cheaper than some of the leading brands). If Spectacles don't succeed, therefore, we can't blame the price-tag.

SNAPCHAT MEMBERSHIP AMONG MILLENNIALS

% of Millennials who have a Snapchat account



Spectacles should also be able to side-step the privacy concerns that so battered the image of Google Glass. The prominent light illuminated by Spectacles every time the camera is filming is a stark contrast to the reputation that Glass gained for secretive filming. Once again, then, if Spectacles fail to capture our imagination then we can't attribute too much blame to this issue.

But arguably the biggest trump card for Spectacles is that they have a much better reason for being than Google Glass ever did. Spectacles entered the scene with just one purpose – to record videos for posting to your Snapchat's Memories section. Spectacles is specifically pitched as a fun, affordable and stylish way to capture some cool video content.

It's here where Snap is absolutely on-trend. Although its user-base is beginning to get older as non-Millennials embrace it for the first time, its key demographic is still very young. They're the smartphone generation who have embraced video with considerable enthusiasm. Indeed, according to our research, almost 6 in 10 internet users are now uploading videos each month, and that rises to over two thirds among Millennials. And from Facebook Live to Twitter's Periscope, it's clear that networkers love watching and consuming video content,

as well as making it. The majority of Facebook users are already watching videos on the network, for example, making it one of the top actions that we track on the site. Essentially, Snap's Spectacles are responding to current trends and behaviors, whereas Google Glass was trying to create new ones.

Snap is probably better positioned to kick-start the wearable revolution than any name before it, boasting the right demographic, the right user-case and the right price-point. And even if it doesn't achieve widespread success straight away, future versions could well tap into the popularity of augmented reality and, at the very least, this is a clear sign of the direction in which Snapchat wants to head. With so many other networks having imitated its best features in recent quarters, there's very little left in the social space that any one network can claim as being uniquely theirs. By pushing itself more into the camera and video area, Snap has territory which it could make its own and which is very much in line with how consumer behaviors are evolving. Soon, Snap could be for cameras what Google is for search and Facebook is for communication. And that's a pretty good re-invention for a company which first gained fame as a self-destructing picture app for American teens.

VIDEO UPLOADING AND SHARING

% who uploaded or shared a video online in the last month





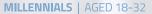


Generations

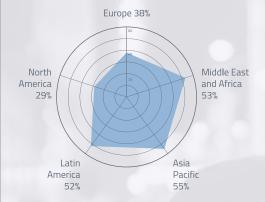
As we've seen, one of Snapchat's great strengths has been its appeal to younger demographics. In the following infographic, we highlight GWI's most important data on the different generations of internet users.



Unless otherwise stated, all figures are taken from GlobalWebIndex's Q3 2016 online research among internet users aged 18-64.



% OF INTERNET USERS AGED 18-64 WHO ARE MILLENNIALS



MOST POPULAR DEVICE | SMARTPHONE
MOST IMPORTANT DEVICE | SMARTPHONE



AVERAGE NO. OF SOCIAL NETWORKS USED | 7.7 SHOP ONLINE | 80%

TOP OVER-INDEX
FOR BRAND DISCOVERY | VLOGS
FOR PURCHASE INFLUENCE | SOCIAL COMMERCE

GEN X | AGED 33-51

% OF INTERNET USERS AGED 18-64 WHO ARE GEN X



MOST POPULAR DEVICE | SMARTPHONE
MOST IMPORTANT DEVICE | SMARTPHONE



AVERAGE NO. OF SOCIAL NETWORKS USED | 6.4 SHOP ONLINE | 79%

TOP OVER-INDEX

FOR BRAND DISCOVERY | COMPARISONS WEBSITES

FOR PURCHASE INFLUENCE | FINANCIAL REWARDS

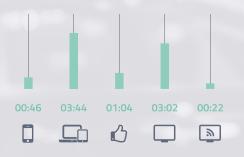
BABY BOOMERS | AGED 52-64

% OF INTERNET USERS AGED 18-64 WHO ARE BABY BOOMERS



MOST POPULAR DEVICE | PC/LAPTOP

MOST IMPORTANT DEVICE | DESKTOP PC



AVERAGE NO. OF SOCIAL NETWORKS USED | 3.9 SHOP ONLINE | 69%

TOP OVER-INDEX

FOR BRAND DISCOVERY | ARTICLE IN PRINT MEDIA FOR PURCHASE INFLUENCE | EASY RETURN POLICY



CHASE BUCKLE

How can free content remain sustainable?

As the internet celebrated its 25th birthday in 2016, more pressure than ever before was being exerted on the free ad-supported models which fund so much of its content and so many of its services.

AD-BLOCKING SEGMENTATION

% of Mobile/Desktop Ad-Blockers who are...

Frustrated Ad-Blockers	57%
Selective Ad-Blockers	39%
Privacy Ad-Blockers	35%
Practical Ad-Blockers	30%

CROSSOVER	Frustrated	Practical	Privacy	Selective
Frustrated	-	40%	42%	43%
Practical	77%	-	49%	46%
Privacy	69%	42%	-	41%
Selective	63%	35%	37%	-

For large swathes of consumers, the right to access free online content is seen as sacrosanct — and has been hugely influential over their expectations of what the internet is and what it should provide. But with ad-blocking on the rise, there's little recognition or willingness on the part of the consumer to accept that ads are at the core of this.

It's frustration which is the principal driver of ad-blocking at the moment. Almost 6 in 10 ad-blockers fall into GWI's Frustrated segment (saying that ads are intrusive, annoying or that there are simply too many of them). Interestingly, though, 4 in 10 find themselves in the Selective segment – those who might be using ad-blockers, but who also say they engage with some ads or have found brands/products via online advertising.

Privacy concerns are also a major issue for publishers to consider here, but what's particularly striking is the substantial crossover between the Selective and Frustrated ad-blocker segments (63% of the Frustrated group also fall within the Selective segment). Large numbers of ad-blocker users are still willing to engage with ads, then; the key is that ads need to be relevant and non-intrusive. A feat which is possible, if far easier said than done.

LARGE NUMBERS OF AD-BLOCKER
USERS ARE STILL WILLING TO
ENGAGE WITH ADS; THE KEY IS
THAT ADS NEED TO BE RELEVANT
AND NON-INTRUSIVE



While some publishers have simply denied access to ad-blocker users (a tactic which is risky when so many competitors keep their doors open), others have tried to increase engagement with subscription-based models. The obvious problem here is that so many digital consumers remain reluctant to pay for online content which is currently available via ad-supported models. The substantial discrepancies between the numbers using versus the numbers paying

for music and movie streaming services are stark reminders of this: far more people will subscribe to free ad-based versions of a service than pay for access to the premium tier.

STANDALONE SUBSCRIPTION
MODELS REMAIN IMPRACTICAL
FOR MUCH ONLINE CONTENT

Certainly, that 16-34s are the most likely to be paying for content is a dose of good news, suggesting that this mind-set is likely to become more widespread in the future (particularly in light of Apple Music's decision not to offer a free tier and Spotify's recent moves away from ad-supported models). In reality, however, willingness to pay is linked very strongly to the type of content on offer. Consumers are a lot more likely to be paying for content streaming services like Spotify or Netflix than they are for news websites or

PAYING VS ACCESSING

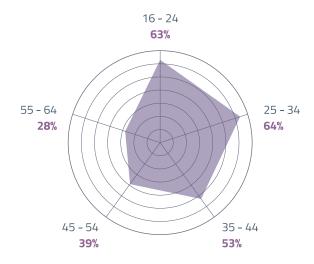
% of internet users who have used/paid for the following content last month



premium web services. And this is where Amazon's Prime service makes sense: bundling an expanding host of services (music, movies, video, commerce perks, food delivery, etc.) under one monthly subscription plan could well be a glimpse of the future. More services could choose to combine things people will pay for with those they won't, ensuring that both get revenue.

PAYING FOR ONLINE CONTENT BY AGE

% who paid for some form of online content last month



Even so, standalone subscription models remain impractical for much online content. And here it's social channels which offer considerable promise. The almost universal reach of social media and the migration of many online activities onto social platforms has essentially positioned the likes of Facebook, Snapchat and YouTube as middle-men between content creators and consumers.



The ability of most of these social platforms to deliver (comparatively) user-friendly cross-device ads using logged-in data is already a clear strength, but the development of social chat bots and their future marketing potential is where the real value of social shines through. With the consent of the consumer, chat bots could re-engage users on a 1:1 basis in a nonintrusive and relevant manner, in an environment largely out-of-reach of ad-blockers and at the cost of the brand or advertiser.

Such an evolution is in line with how consumer behaviors. are changing. Look at the channels people say they use when they want more information about a product, brand or service and, while search engines still top the table in all demographics, the age-based splits are revealing. Older groups remain the most wedded to "traditional" sources such as consumer reviews, price comparison sites and brand websites, but younger groups are leading the charge towards "newer" options such as vlogs, social networks and mobile apps. In fact, social networks are not far from toppling search engines as the top destination for 16-24s. No less important is that 16-24s are about twice as likely as 55-64s to be using voice search/control tools on their mobiles - almost 1 in 4 are.

ONLINE RESEARCH CHANNELS

% in each age group who turn to the following for online product research

	16 - 24s	55-64s
Search engines	49%	63%
Social networks	43%	21%
Consumer reviews	36%	43%
Product / brand sites	30%	39%
Mobile apps	27%	9%
Video sites	23%	7%
Price comparison websites	22%	35%
Question & Answer sites	20%	13%
Micro-blog	19%	4%
Blogs on products/brands	18%	8%
Discount voucher/coupon sites	17%	15%
Forums/message boards	17%	10%
Specialist/independent review sites	16%	16%
Messaging/live chat services	14%	7%
Vlog	12%	2%
Online pinboards	9%	4%

It's certainly not a coincidence that Google's new chat app, Allo, has Alpowered search tools as a central proposition (or that, more generally, it announced a move away from cookiebased tracking towards using crossdevice, logged-in data). And while there might have been many reasons for Facebook to make Messenger a standalone service in its own right, its ability to act as a brand-centric search and messaging tool surely factors prominently among them. As we've seen elsewhere in this report, enthusiasm for watching videos inside social environments is also pronounced.

IF FREE IS TO PREVAIL. THINGS ARE THEREFORE LIKELY TO GET STILL MORE SOCIAL IN THE YEARS AHEAD.

Of course, pragmatism is essential here. Some consumers will always resist brand interactions in any form. Al and chatbots are still in their nascent stages and it will take time for them to become sophisticated enough to handle nonbasic interactions without any human intervention. And some brands are going to find a much warmer reception in social contexts than others (dictated largely by the services and content they have to offer). Nevertheless, consumers are spending more time each year on social networks and on mobiles, they are (relatively) happy to engage with brands in social contexts when the value exchange is clear, video consumption and search are both set to expand inside the social arena, and Al/bots will only become more and more sophisticated - facilitating personalized and relevant conversations in a resource-lite way. If free is to prevail, things are therefore likely to get still more social in the years ahead.

28



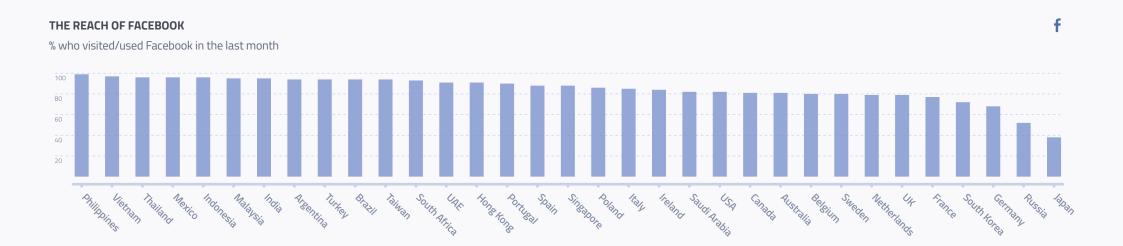
FELIM MCGRATH

The world's largest social network has video and commerce in its sights

There is a lot of (digital) ink spilt discussing the fortunes of Mark Zuckerberg's ubiquitous social network. Many commenters are quick to proclaim the 'death of Facebook' at the first sight of a new social media trend or a buzzworthy new network (remember Ello?). But the reality is that Facebook is, and will remain for some time, the king of the social media industry. And having won the social media wars to date, it's clear that Facebook is on the hunt for still more territory to claim as its own.

Much of this desire surely comes from the unique situation in which Facebook finds itself. Outside of China, the vast majority of internet users are engaging with Facebook in some way each month, and this has remained remarkably consistent over time. In only a handful of markets do we see monthly visitation rates for Facebook fall below 80% and in many fast-growth markets the figures are 95%+. Zuckerberg's platform may not be growing its influence in terms of percentages but, with millions of new

FACEBOOK IS ON THE HUNT FOR STILL MORE TERRITORY TO CLAIM AS ITS OWN







internet users coming online each year, it's now a case that, as the internet population grows, so does Facebook. India and Indonesia are key markets here; with massive populations and rapidly expanding internet penetration rates, these countries could provide the platform with tens, if not hundreds of millions, of new Facebookers in the future. As a default gateway to the world of social media, Facebook can be confident that it will post increases in user numbers every quarter.

Although the multi-networking trend means that Facebookers have an increasingly large number of social media platforms from which to choose, GWI's data shows that this doesn't mean users are abandoning Facebook in any way. Certainly, the so-called 'context collapse' which we discuss elsewhere in this report is a trend to watch, but if users are still visiting Facebook in their droves, then ads can be served and profits generated even if people are contributing less content. What's more, two newer developments on the site are likely to help it maintain engagement while simultaneously boosting its bottom line: video and commerce.

As we discuss in our Victory of Video article, Facebook has been a major winner in the social video boom. Half of users on the

VIDEO ON FACEBOOK

% of Facebookers who say they did the following on Facebook last month







FACEBOOK HAS BEEN A MAJOR WINNER IN THE **SOCIAL VIDEO BOOM**

Watched a video

Watched something on Facebook Live

Uploaded & shared my own videos

platform are watching videos, and a fifth are engaging with one of network's biggest new developments, Facebook Live. And as Facebookers become more and more acclimatized to consuming video on the network, clear opportunities will arise for Facebook to move aggressively into the world of online TV. Having already tested the waters by hosting Amazon Prime pilots, the network must surely be taking notice of the vast revenues that Netflix (and Amazon) generate from their online TV content. The leap into this competitive market will be difficult but, for a company with such deep pockets, the benefits are obvious.

There's even more potential for Facebook in the world of online commerce. For some time now, the big social networks have known that social commerce could be a major revenue generator, as well as an important way to diversify their revenue streams outside of the traditional world of digital advertising. In Asia, networks like WeChat and Line have made huge gains from facilitating commerce on their platforms. But many social media users, particularly in Europe and North America, remain either unaware or ambivalent about the potential benefits of social commerce, which has hampered attempts to roll out true social commerce options on many networks, Facebook included.



The launch (or re-launch, depending on your point of view) of Facebook Marketplace heralded another effort by the world's biggest social network to expand into some of the biggest e-commerce markets. And it's not hard to see why Facebook is committed to making social commerce work. If we take the US as an example, GlobalWebIndex's research shows that over 30% of adult Facebookers in this country turn to social media when they are researching products online. With 8 in 10 US Facebookers purchasing products online each month, there's clearly a huge opportunity to bring some of these purchases inside social networks.

Currently, only 6% of adult Facebookers say being able to purchase directly via social media would encourage them to buy online. These figures amply illustrate the challenge that faces Facebook in its mission to popularize true social commerce options among digital consumers; while many people are comfortable integrating social media into their purchase journey, when it comes to final shopping, for now most will turn to traditional online retail sites. Within this context, Facebook

Marketplace could bridge the gap between research and purchase on social media. It could be an important step in educating Facebookers about the benefits of social commerce. It might take some time before we see the flourishing social commerce platforms of Asia replicated in Europe and North America, but we could look back at Marketplace as a big step in this evolution.

There was a time when social media was all about being social. But this is Facebook 2.0, where the old rules of what makes a social media platform don't apply.

FACEBOOK MARKETPLACE
COULD BRIDGE THE GAP
BETWEEN RESEARCH AND
PURCHASE ON SOCIAL MEDIA

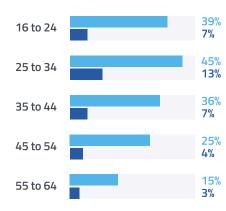
THE APPEAL OF SOCIAL COMMERCE TO US FACEBOOKERS



% who use social networks to research products



% who say the chance to buy something on a social network would motivate them to purchase

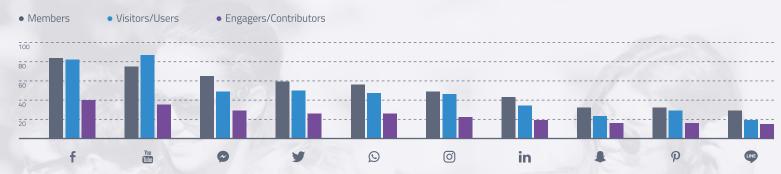


Social Media Landscape

Facebook's ever-expanding functionalities are a testament to the diversity of the social media landscape. The following infographic looks at the most important metrics in the world of social media.

TOP 10 SOCIAL SERVICES

% OUTSIDE OF CHINA WHO ARE.



AGE PROFILES OF THE TOP SOCIAL PLATFORMS

% OF ENGAGERS/CONTRIBUTORS WHO ARE AGED 16 TO 24

, O. L.		.021
*	SNAPCHAT	38%
0	INSTAGRAM	35%
y	TWITTER	30%
0	FACEBOOK MESSENGER	30%
You Tube	YOUTUBE	29%
in	LINKEDIN	29%
<u>Q</u>	WHATSAPP	29%
f	FACEBOOK	25%

TOPLINE TRENDS

94% of internet users have at least one social media account

98% have visited/used a social network in the last month

76% are **contributing** to at least one social media platform

NETWORKING BY DEVICE

% OF INTERNET USERS WHO VISITED/USED A SOCIAL NETWORK LAST MONTH ON THE FOLLOWING DEVICES



USAGE FREQUENCY

% OF USERS WHO ACCESS MORE THAN ONCE A DAY



MULTI-NETWORKING

AVERAGE NUMBER OF SOCIAL MEDIA ACCOUNTS



TOP BEHAVIORS BY PLATFORM

MOST POPULAR ACTIVITY AMONG ENGAGERS



Unless otherwise stated, all figures are taken from our Q3 2016 wave of online research among 51,125 internet users aged 16–64. Note that China is excluded from percentages relating to specific/named social networks and apps.

Membership/Visitation/Contribution/App Usage are based on the following questions: Members: On which of the following services do you have an account? Visitors/Users: Which of the following sites/applications have you visited in the past month via your PC/Laptop, Mobile or Tablet?

Engagers/Contributors: Which of the following services have you actively engaged with or contributed to in the past month using any type of device?

#05

Are VR & AR Here to Stay?



KATIE YOUNG

The true potential of VR and AR will be on mobile

It's not hard to see why new VR and AR technologies could shake up everything from marketing and gaming to commerce and education. But while one offers a closed and fully immersive experience and the other is open and only partly immersive, does either have a chance of moving beyond the hype to enter the mainstream?

The buzz surrounding VR has been intensifying for some time, but received a particular boost from Facebook entering the fray viaits acquisition of Oculus for a hefty \$2bn in mid-2014. Names like Sony and HTC have also given it a substantial backing through recent offerings. But given that VR to date has only really been available to a select few, much of what the industry has to go on is expressed consumer interest. Here, GWI's data confirms a decent level of potential. Across our 34 markets, it's around 4 in 10 internet users who report an interest in using VR headsets in the future. As we might expect, demographics

have a big impact: the youngest consumers are the most enthused, men (on 44%) have a 12-point lead over women, and the top income group is notably ahead of the lowest one.

Despite this, it's difficult to ignore the significant hurdles that stand in the way of VR achieving mainstream adoption. First and foremost is cost; with starting prices for Facebook's Oculus Rift and HTC's Vive hovering in the region of \$600-800, many consumers could quickly find themselves priced out of the market. On top of this is the state-of-theart hardware required to support VR - either in the form of an up-to-date games console (in the case of PlayStation's VR), or highspec PC hardware. Given that the top income group are 3x as likely at the lower 25% to own a smartwatch, it's not hard to see how VR headsets could be consigned to a similar fate - remaining premium, niche devices reserved purely for the most tech-savvy and wealthy.

INTEREST IN VIRTUAL REALITY HEADSETS

% who say they are interested in using VR in the future

TOTAL		39%
AGE	16 to 24	46%
	25 to 34	44%
	35 to 44	37%
	45 to 54	26%
	55 to 64	19%
GENDER	Male	44%
	Female	32%
INCOME	Bottom 25%	37%
	Middle 50%	40%
	Top 25%	45%

IT'S AROUND 4 IN 10 INTERNET USERS WHO REPORT AN INTEREST IN USING VR HEADSETS IN THE FUTURE

Augmented reality has an obvious advantage here. Other than Microsoft's Hololens (which relies on smartglasses), AR's addressable market is much bigger given that it can already be used via any connected device and doesn't require a headset to function. Another strength stems from the ability to experience AR on-thego through just a phone screen. While high-end VR is an at-home experience, AR offers a more social experience that can be used whenever and wherever you please.

35

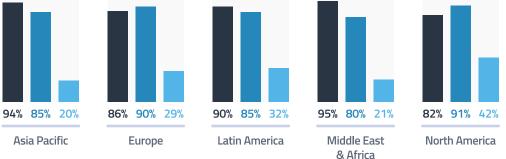
This focus on mobile is a lesson for VR, especially as these devices are likely to be the first port-of-call for the majority of first-time VR users. Last year's Google Cardboard offered an affordable alternative which relied on nothing more than a smartphone, but many were unimpressed by the cardboard-box-strapped-to-your-face approach. This is something that Google's new DayDream is hoping to rectify, representing a major step in bridging the gap between mobile and tethered high-end VR.

2016 was the year that many consumers first experienced AR. Before the launch of Pokemon Go, the AR market was nascent and small but Niantic's app quickly became a global phenomenon and a shining example of the potential of AR to make a considerable impact among smartphone owners. In a one-off addition to our Q3 data this year, it emerged that 9% of internet users globally had used the Pokemon Go app — though this peaked notably at 17% among Latin Americans. The difficulty now is in sustaining levels of interest in AR; Pokemon Go might have taken AR to the masses, but it was building on a much-loved concept that may not be easy to replicate.

Overall, VR and AR's biggest obstacle of all is a lack of quality, compelling content. Investment has poured into the hardware

DEVICE OWNERSHIP BY REGION

% who own the following devices



GAMES CONSOLE

82% 91% 42%

North America

supporting this tech but, as yet, the same cannot be said for the content across different genres which might help to justify the hefty price tag. With a poor selection of games or interesting content, consumers aren't going to be buying, and brands and companies aren't going to be investing.

All this acknowledged, the success of Niantic's game does provide a glimpse into the possibilities of the technology as well as the

public's willingness to embrace new types of interactive content. And secretive startup Magic Leap is certainly a name to watch in the AR space, while high-end VR and AR propositions such as the Oculus Rift and Microsoft's HoloLens will continue to push the boundaries of this tech. But for as long as high price-points combine with a dearth of killer content, don't expect these technologies to get any more mainstream than the smartwatch.

2016 WAS THE YEAR THAT MANY CONSUMERS FIRST EXPERIENCED AR

SMARTPHONE

PC/LAPTOP

CHASE BUCKLE

Emerging markets hold the key to renewed smartphone sales

The role of the smartphone as a driver for internet uptake in fast-growth markets has been one of the key digital stories of the decade so far. But compared to 6 years ago, global demand in the smartphone market has changed. Growth opportunities have shifted, homegrown mobile brands in the east have muscled their way in alongside Apple and Samsung and the resulting proliferation of available handsets has led to downward pressure on price.

So, what's next for the smartphone market? Of course, China still represents the world's largest smartphone marketplace and, with around 1 in 3 global internet users being Chinese, any fluctuations in that market's smartphone consumption patterns will inevitably have profound implications on the global outlook. But now that China no longer appears to be the primary furnace fueling growth in the smartphone market, companies like Huawei and Xiaomi have been looking towards India. Thanks largely to mobile, India has the fastest growing online population across all of GWI's markets, seeing an increase of over 100% since 2011. And that India still retains a low overall internet penetration rate means there's plenty of further growth to come here. In contrast, China's comparatively more mature landscape and its resulting lower growth rate excludes it from the top 10 countries for this metric, ranking in 14th place.

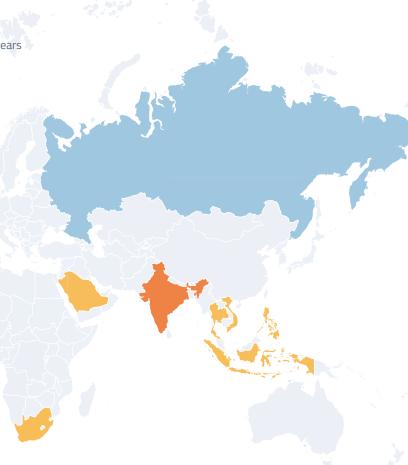
GROWTH IN ONLINE POPULATION SIZE, 2011-2016

Increase in number of adult internet users during the last five years

	40.		
India	103%	Philippines	52%
Vietnam		Saudi Arabia	
South Africa	58%	Russia	47%
Thailand		UAE	45%
Indonesia	53%	Mexico	44%



INDIA HAS THE FASTEST GROWING ONLINE POPULATION ACROSS ALL OF GWI'S MARKETS



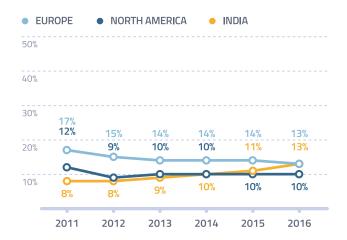
MOBILE PHONE PURCHASERS

% of internet users who purchased a mobile phone in the last 6 months

GLOBAL



% share of global mobile purchasers



At a topline global level, GWI's year-on-year data for purchasing of mobiles confirms a recent slowdown in demand among existing internet users, with rates having peaked in 2013. But this overarching global trend distorts some vital nuances. As a share of year-on-year global mobile purchases, the mature market regions of **Europe and North America have stagnated or contracted**. There's good reason for this — with internet penetration rates upwards of 90% in these regions, and high smartphone ownership figures among these internet users, mobile adoption has reached

saturation point. Consumers here are typically upgrading their existing phones at a leisurely pace, with very few of them left still to purchase a phone for the first time. Now that smartphones are so high in quality, people need much better reasons to upgrade rather than stick with their existing handsets. But that could be seen as a catalyst for innovation as much as a threat. Arguably, it also means that additional features, services and accessories which can be monetized will become just as important as the initial outlay of cash for the handset itself.

Within APAC, markets outside of India and China continue to account for a stable share of mobile purchasers (sitting around the 10% mark). That's a very different situation to China and India, which have seen their shares undergo small but consistent year-on-year increases. And while India's individual share of global smartphone purchasers may still be overshadowed by China's, its striking rate of growth in the online population already — as well its forecastable numbers for future years — make it a key country to watch.

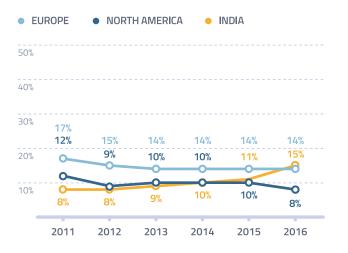
A look at purchase intent for mobiles adds another layer here. Globally, we see a bumper year in 2012 (something which contextualizes the peak in mobile purchasing in 2013). But the most interesting trends here are the gentle overall declines in Europe and North America, as well as the drop in China in 2016. It's certainly not the case that consumers in any region are falling out of love with mobiles; on the contrary, our data shows that all regions have experienced strong increases in average time spent online on mobile since 2011. Rather, we're seeing the impact of mature regions containing far more (slow) upgraders than first-time purchasers, as well as confidence and demand in China undergoing a cooling.

Seen alongside these trends, India's rate of growth for the same metric becomes all the more striking, especially as we can expect further increases in years to come. There's also a 2016 increase in the rest of APAC, indicating that burgeoning internet markets like the **Philippines and Indonesia are set to become crucial contributors to the smartphone marketplace in the coming years** as their appetite for mobiles ramps up still further.

Globally, the smartphone market is thus at an inflection point; demand in mature markets and in China might be under pressure, but that could be offset by the potential of markets like India, Philippines and Indonesia. The challenges that come with this new landscape are clear. In markets with high internet and smartphone adoption rates, efforts need to focus on giving upgraders good enough reasons to trade in their existing handsets as well as purchase add-on services. The fact that Apple's services division (e.g. iTunes, iCloud) has become such a valuable income source for the company is key to this — as more names compete in the smartphone space, average revenue per user will stand alongside user numbers as a vital performance metric.

MOBILE INTENDERS

% share of global internet users who say they plan to purchase a mobile phone in the next 6 months



For overall growth in the number of smartphone owners, it's to emerging markets where we need to turn. But while the vast majority of this decade's new internet users will be coming online for the first time via a mobile, they will be entering a mobile landscape which is much more competitive and fragmented than ever before. Samsung and Apple might still command serious brand recognition and interest, but Google's Pixel could be a major disruptor to this and the growing list of emerging market

competitors will complicate this still further. Just as Xiaomi and Huawei have made major inroads in China, so that same is likely to take place in other emerging markets, with further home-grown brands entering the fray too.

It's not so much that we're seeing smartphones slowing, then. Rather, it's that the producers and users of smartphones are both being squeezed like never before.

THE VAST MAJORITY OF THIS DECADE'S NEW INTERNET USERS WILL BE COMING ONLINE FOR THE FIRST TIME VIA A MOBILE.



TRENDS 17 INFOGRAPHIC

Device

Smartphone sales may be going through a period of transition but as the following infographic shows, mobiles are now the primary device for internet users.

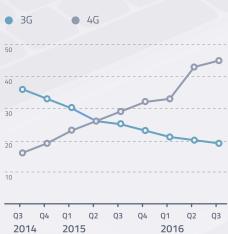
DEVICE IMPORTANCE

% OF INTERNET USERS WHO SAY THE FOLLOWING IS THEIR MOST IMPORTANT INTERNET DEVICE



THE RISE OF 4G

% WHO USE THE FOLLOWING CONNECTIONS ON THEIR MOBILE



DEVICE OWNERSHIP

% WHO PERSONALLY OWN THE FOLLOWING DEVICES

91%
87%
42%
32%
24%
16%
13%
11%

SMARTPHONE OWNERSHIP BY REGION & DEMOGRAPHICS

% IN EACH GROUP WHO OWN A SMARTPHONE

16 to 24	94%
25 to 34	95%
35 to 44	92%
45 to 54	84%
55 to 64	73%
Female	90%
Male	91%

93%
86%
93%
95%

North America

2012 2013 2014 2015 2016

TABLET USAGE OVER TIME

% WHO USE A TABLET TO ACCESS THE INTERNET

MOBILE HANDSET BRANDS

% WHO OWN THE FOLLOWING HANDSET BRAND

Samsung	32%
iPhone	25%
Huawei	9%
Xiaomi	8%
LG	6%
Nokia	6%
Sony	6%
Microsoft	5%
Lenovo	5%
Motorola	4%

ANDROID vs iOS TOP 5 MARKETS

ANDROIDiOS

Indonesia	85%	16%
India	83%	14%
Malaysia	82%	21%
Spain	82%	13%
Argentina	79%	6%
UAE	41%	66%
Singapore	37%	62%
USA	37%	49%
Australia	37%	48%
Canada	36%	45%

ANDROID vs iOS OVER TIME

% WHO USE THE FOLLOWING OS ON THEIR MOBILE

iOS

84%

ANDROID

40

2012 2013 2014 2015 2016

Unless otherwise stated, all figures are taken from GWI's Q3 2016 online research among 51,125 internet users aged 16-64.

#07

Mobile Ad-Blocking Moves West



KATIE YOUNG

Is there a new wave of ad-blocking on the horizon?

Online behaviors might be migrating to smartphones but – having become accustomed to using private browsers, deleting cookies and using ad-blockers on their PCs and laptops – it's getting ever easier for consumers to disrupt the revenue models that have

traditionally funded many online activities and services, even on their mobiles.

IT'S ONLY A MATTER OF TIME
BEFORE MOBILE AD-BLOCKING
SPREADS WESTWARDS

The arrival of ad-blocking capabilities on mobile platforms was a worrying and unwelcome development for the advertising industry. At present, mobile ad-blocking in concentrated in Asia Pacific and, as a result, some in the West have underestimated the prevalence of this trend. But GWI's research points to one story: if current patterns continue, it's only a matter of time before mobile ad-blocking spreads westwards.

MOBILE AD-BLOCKING ACROSS THE WORLD

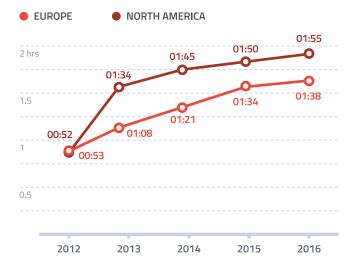
% of internet users who are blocking ads on their mobile



Device Ownership and Access > Mobile Ad Blocking

DAILY TIME SPENT ONLINE ON MOBILES

Average hours and minutes spent online on mobiles each day



In some fast-growth APAC markets, mobile ad-blockers have become a vital tool for reducing load-times and data spend, especially where internet users are coming online for the first time via relatively expensive and slow mobile connections. Indeed, take a look at the top 10 countries for usage of mobile ad-blockers and, at the moment, almost all of them are Asian markets. China tops the table, with almost half of the country's internet users doing this, but India, Indonesia and Thailand all post strong figures around the 3 in 10 mark. Compare that to the likes of the UK and the US – on 15% and 16% respectively – and it's clear why many in the West might not have recognized the power of this trend.

Currently, capabilities and tools in APAC tend to be ahead of what's available elsewhere. Mobile browsers that block ads by default, like UC Browser, have gained prominence in the likes of China and India and have pushed these markets ahead of the curve. Early 2016 in fact saw UC Browser stake a claim as the number one mobile browser in China and India. The popularity in the West of 'traditional' mobile browsers like Chrome and Safari, which have been slow to offer ad-blocking functionality, mean there's considerably less consumer understanding about, or uptake of, mobile ad-blocking in these regions.

Ad-blocking has also been elevated in APAC by the relative importance that smartphones assume in this region. Ownership is virtually universal, with Chinese internet users spending as long as 2 hrs 45 mins on these devices each day. Crucially, though, this is a story that is beginning to hold true across Western markets too. Take North America as an example and GWI's data shows that the amount of time being spent online on mobiles has more than doubled since 2012 to approach the 2-hour mark.

The arrival of in-app ad-blocking would be a game-changer here. On the whole, apps are currently immune from this trend but there's a good chance that other wireless carriers will follow Digicel's network-wide ad-blocking initiative to remain competitive

and reduce costs for their subscribers. The implications of this for the vast array of ad-supported apps available in the mobile app market, as well as the advertising industry as a whole, are obvious and concerning.

So, what can be done to tackle this trend? Mobile advertising in China and other parts of APAC has often been pretty overwhelming, making it little wonder that

THE ARRIVAL OF IN-APP
AD-BLOCKING WOULD BE
A GAME-CHANGER HERE.

many are turning to blockers — especially given the sometimesintrusive nature of the region's location-based mobile
advertising. This has to be an important lesson for the West:
the quality and quantity of ads need to be addressed if the
mobile ad-blocking tide is to be pushed back. Crucially, GWI's
research shows that most ad-blockers aren't averse to ads in
principle; rather, it's that they're resisting overload, irrelevance
and those that get in the way. Take a look at the top motivations
among mobile ad-blockers and they're most likely to say that
ads are annoying, take up too much screen space, or that there
are simply too many on the internet. Above all, advertising needs
to become smarter — with the aim to engage consumers rather
than interrupt smartphone browsing.



Although there's little chance that we will be writing an obituary for mobile advertising in the West, one thing is pretty certain: Western markets are unlikely to remain immune from mobile adblocking. As online behaviors continue to migrate to mobiles, especially among the youngest users, it's only a matter of time before mobile users fight back, whether that's to protect their privacy, cut back on their data usage, or to simply prevent ads interfering with their online life. And isn't it better to understand these reasons and address them, rather than attempt to restrict access for those who choose to deploy blockers? As elsewhere, better to cure the source of the problem rather than cover it with multiple bandages.

MOTIVATIONS FOR AD-BLOCKING

% of mobile ad-blocker users who say these are their main reasons for blocking ads

50 %	Too many ads are	34%	I want to stop the data
	annoying or irrelevant		allowance on my phone
			from being used up by ads

29% I don't like seeing video ads before I'm allowed to watch video content/clips

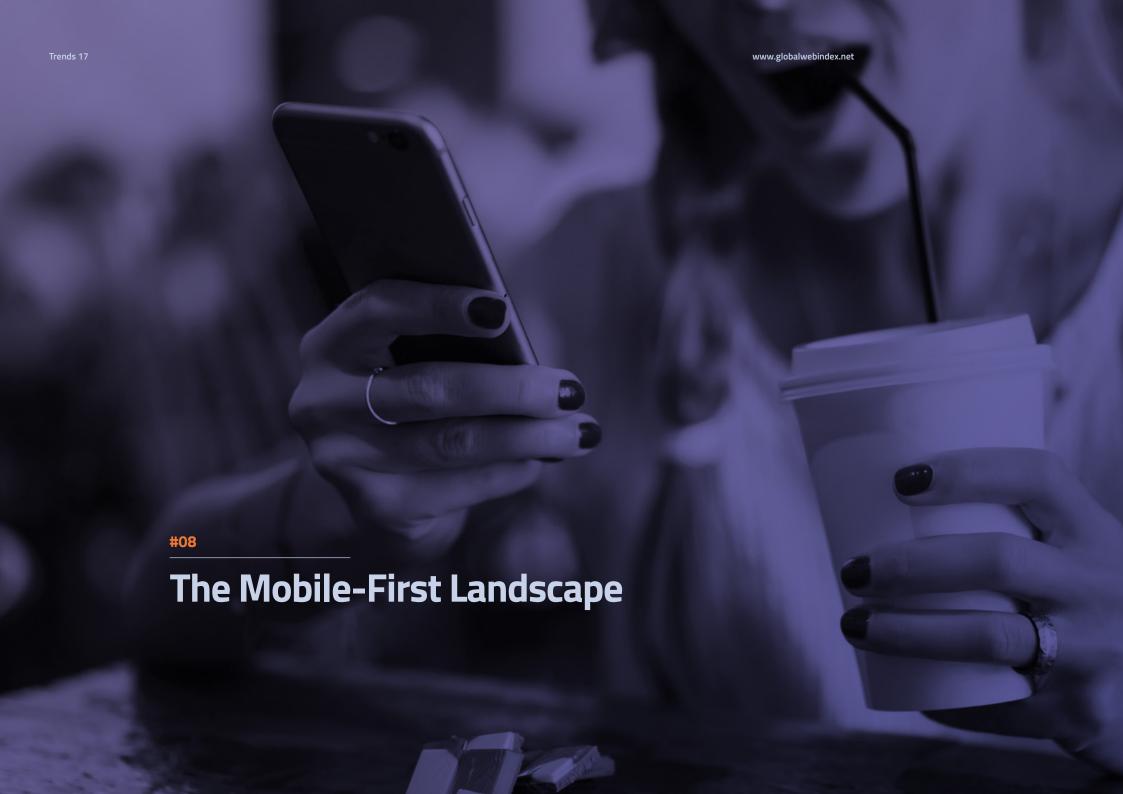
46% I think there are too many ads on the internet

- **32%** I want to speed up the time it takes for things to load on my device
- 26% I want to stop the battery life on my device from being drained by ads

- **46%** Ads take up too much screen space and get in the way
- **30%** I'm concerned about ads compromising my online privacy
- 21% I don't like ads which are personalized based on my browsing history

42% I find online ads intrusive

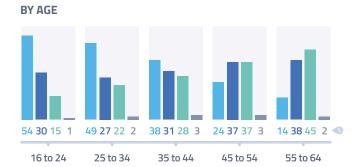
- 29% I try to avoid ads wherever possible, whether on TV or online
- **1%** Other

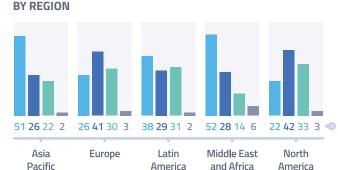


DEVICE IMPORTANCE

% who list the following as their most important device







From a long-term perspective, the development of these figures would indicate that over 50% of multi-device consumers will soon choose a mobile as their top device. But it's here where demographics become key, because there are *already* certain audiences where this is the case. Let's start with age.

Although it's not the most surprising correlation, the link between age and device importance is still striking. It's among

16-24 multi-device users where mobiles have already pushed past the 50% mark, with 25-34s about to cross the same threshold too. Numbers then fall in line with age, dropping off the proverbial cliff among 55-64s to stand at just 14%. Put another way, 16-24s are about 4x as likely to choose a mobile as 55-64s. Conversely, the older you are, the greater the likelihood that you will select a desktop PC as your most important device.

There's a similar story by region. In Europe and North America – both regions where "traditional" devices were integral to the development of the internet – mobiles struggle to get past the 25% mark when it comes to device importance. In contrast, it's over 50% of multi-device users in Asia Pacific and the Middle East/Africa who will select a mobile as their top device, reflecting the more prominent role that these devices have played in terms of bringing people online in these regions as well as the less-developed infrastructure found in various countries throughout both these parts of the world.

Despite being something of a generalization, it's broadly true to say that other age groups and regions eventually tend to follow where 16-24s and emerging markets have led for mobile. So if it's these trend-setting audiences which already see mobiles as their most integral devices, we can expect to see the same attitudes gaining strength elsewhere.



All this gets particularly interesting when you look at the numbers who say they do various online activities via different devices. Across the 40 or so cross-device behaviors tracked by GWI, there are already some which have migrated towards mobile. As our chart makes clear, social actions are at the very forefront here, with things such as sharing photos or videos as well as using chat or VOIP services having a lead on mobile of 10 points or more. Understandably, location-specific or other out-andabout activities such as maps and weather-checking are also stronger on mobile than PCs/laptops, as are music-related behaviors.

ACTIVITIES WHERE MOBILES ARE MOST IMPORTANT

Used a chat or instant messaging service / app
Uploaded / shared a photo
Used a VOIP or other service to make phone calls over the internet
Uploaded / shared a video
Used a map or directions service / app
Visited / used a social network
Checked the weather online
Used an online dating service / app
Listened to an online radio station / service
Used a music-streaming service

ACTIVITIES WHERE PCS/LAPTOPS ARE MOST IMPORTANT

Visited an online retail site or store such as Amazon / Taobao

Used an online encyclopedia such as Wikipedia

Watched sports coverage or highlights online

Searched for a product or service you want to buy

Used a price comparison service

Purchased a product online

Visited a news website / app / service

Used a streaming service to watch live television

Used a webmail service to access, read or send emails

Used a question and answer service

ACROSS THE 40 OR SO
CROSS-DEVICE BEHAVIORS
TRACKED BY GWI, THERE
ARE ALREADY SOME WHICH
HAVE MIGRATED TOWARDS
MOBILE



At the other end of the spectrum, PCs/laptops maintain a lead of 10 points or more for several commerce-related actions. They also still edge ahead for many content or viewing-related behaviors. So, when it comes to purchasing or viewing, consumers still perceive larger screens and more "traditional" devices as the best go-to points, with security and functionality issues being hugely influential within this. But as more people become Mobile-First, can we expect this status quo to change? Our data suggests we can.

While Mobile-First consumers are understandably much more likely than average internet users to do all of the online activities we track via a phone, the places where they are furthest ahead are pretty revealing. Look at the top 10 activities where Mobile-First consumers have the greatest lead over their non-Mobile-First counterparts and it's purchasing and searching for products to buy which top the table. That suggests that even the behaviors which are most rooted to PCs/laptops at the moment will start to migrate more towards mobile as more and more consumers develop the Mobile-First mind-set.

After all, we saw above that mobiles are already ahead of PCs/laptops for social, location-based and music-related activities even though just one of our five age groups and only two of our five regions currently identify as Mobile-First. As this attitude percolates through to other generations and regions, we can be relatively confident that mobiles will take a lead across the board, even for the commerce- and content-based activities where PCs/laptops are still the stronghold for now.

All this carries implications for mobile optimization. Although there's scarcely a campaign or site left where mobile optimization isn't taken seriously, all too often it's still seen as something of an afterthought — something that's put in place after the desktop version is created. Our data suggests that there are several places where mobile should already take priority in terms of planning, and that the number of contexts where this is true will continue to grow. Fail to prioritize mobile and you're already potentially jeopardizing your relationship with younger consumers and those in APAC, the Middle East or Africa. But before too long, this could be the case for pretty much all audiences.

FAIL TO PRIORITIZE MOBILE AND YOU'RE ALREADY POTENTIALLY JEOPARDIZING YOUR RELATIONSHIP WITH YOUNGER CONSUMERS



Media Consumption

As we've seen, the ways in which digital consumers are engaging with mobile is changing. And as the following infographic shows, consumers habits are shifting across a range of media.

DAILY MEDIA CONSUMPTION

TIME SPENT PER DAY...

Online via PC/laptop/tablet	04:01
Online via Mobile	02:11

SPECIFIC ACTIVITIES

TV	02:23	Games	00:51
Social Netw.	01:59	Online Press	00:46
Radio	01:05	Online Radio	00:39
Online TV	00:51	Press	00:36

MOBILES VS. OTHER DEVICES

TIME SPENT PER DAY...



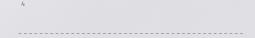




LINEAR VS. ONLINE TV

TIME SPENT PER DAY...





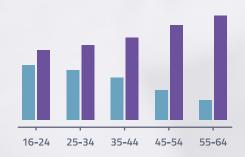




MOBILE VS. OTHER DEVICES BY AGE

% SHARE OF ONLINE TIME SPENT PER DAY..

- Online via Mobile
- Online via PC/Laptop/Tablet



LINEAR VS. BROADCAST TV BY AGE

55-64

% OF TV WATCHING THAT IS ONLINE

16-24





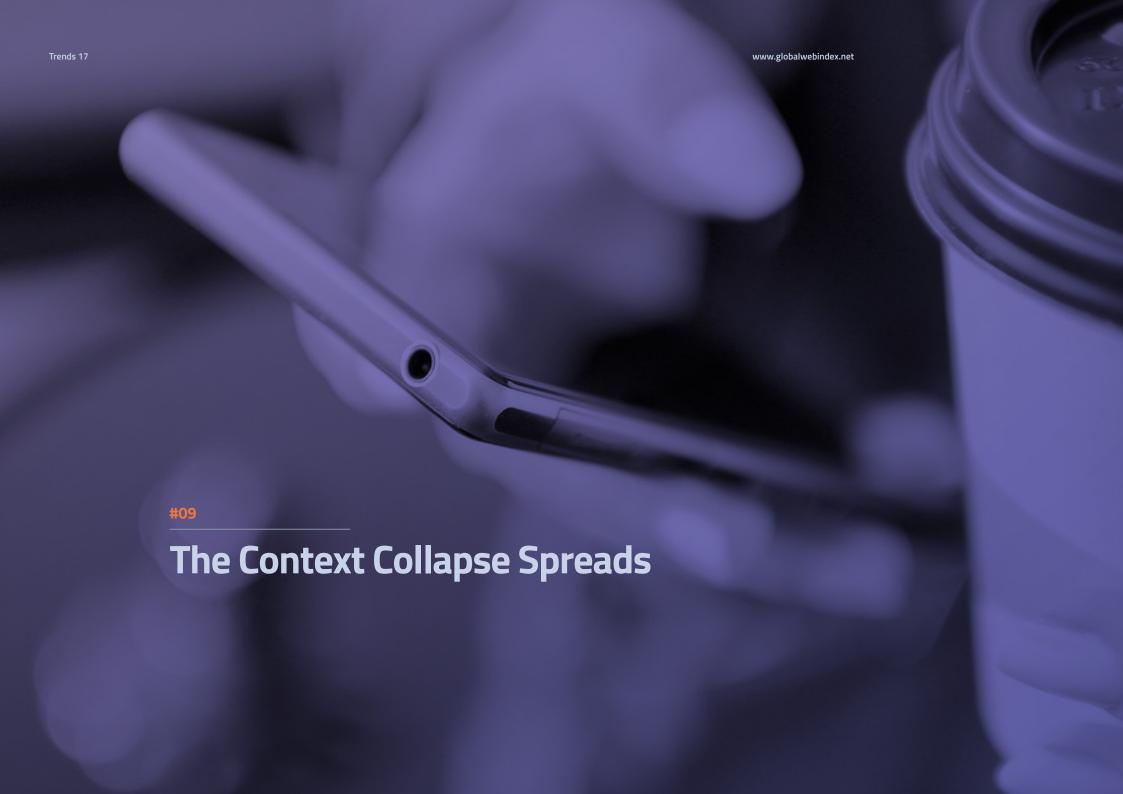
MOBILE VS. OTHER DEVICES BY REGION

TIME SPENT PER DAY...

Online via PC/Laptop/Tablet Mobile

Asia Pacific	03:52	02:41
Europe	03:52	01:38
Latin America	04:52	03:47
Middle East & Africa	04:17	03:33
North America	04:21	01:55

Unless otherwise stated, all figures are taken from GlobalWebIndex's Q1, Q2 & Q3 2016 online research among 153,501 internet users aged 16-64.



Trends 17

www.globalwebindex.net

KATIE YOUNG

Passive networking could impact the big messaging apps

Back in 2012, the average internet user had about 3 social media/messaging accounts. Now that figure is closer to 7.

The arrival of varied and specialized services has impacted how networkers are interacting with social media and, whereas they might once have been doing all of their sharing on the big names like Facebook, networkers can now choose from a variety of services to

carry out their desired social activities - from posting photos via Instagram to blogging via Tumblr or Reddit to engaging in more closed-door forms of chat on a messaging platform.

THE ARRIVAL OF VARIED AND **SPECIALIZED SERVICES HAS IMPACTED HOW NETWORKERS ARE INTERACTING WITH SOCIAL MEDIA**

One result of this has been a so-called "context collapse", whereby users are becoming less and less likely to share personal updates on some of the bigger networks. This is a concept that has garnered a lot of attention in the media and one that GlobalWebIndex has discussed in detail in the **Passive Networking Report**. In short, while names like Facebook might not have seen any decrease in the numbers who are

TOP 10 REASONS FOR USING SOCIAL MEDIA

% who say the following are their main reasons for using social networking services

To stay in touch with what my friends are doing	42%
To stay up-to-date with news and current events	39%
To fill up spare time	39%
Because a lot of my friends are on them	34%
General networking with other people	33%
To share photos or videos with others	33%
To find funny or entertaining content	32%
To share my opinion	31%
To meet new people	28%
To research / find products to buy	25%

visiting and using their sites, there does appear to have been a drop in proportion of members who are actively contributing content and posts. Simultaneously, the smaller, fast-growing or more specialized services like Instagram have seen increases.

Of course, this isn't to say that Facebookers have stopped interacting altogether. Facebook continues to boast some of the best levels of

engagement for behaviors like sharing or reading articles, watching videos and clicking the "like" button. Indeed, it's some 8 in 10. Facebookers who are clicking the "like" button or reacting to content each month, and 58%

FACEBOOK CONTINUES TO BOAST SOME OF THE BEST LEVELS OF ENGAGEMENT

who report watching videos - notably higher levels of engagement than we see for corresponding behaviors on some other platforms. A decline in personal sharing might be a clear concern for Facebook, but these behaviors will continue to provide it with all the data it needs for effective ad-targeting. But, crucially, how do messaging apps fare here? Could they be vulnerable to this trend too?

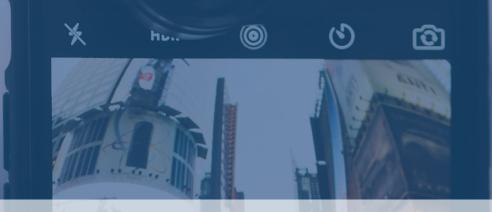


PHOTO SHARING: SOCIAL NETWORKS VS MESSAGING APPS

% of users sharing or sending photos on the following platforms each month















WhatsApp

Instagram

Facebook Messenger

WeChat

Facebook

Snapchat

Twitter

When it comes to sharing on social media, it seems that broadcasting to smaller and more controlled audiences has become the preference for many social networkers. On the big platforms like Facebook, networkers have built up around a decade of acquaintances – some of whom they might no longer wish to include in the groups of people who see any content they broadcast. Messaging apps have been a big beneficiary of this, with users taking advantage of the smaller and more regulated audiences they offer.

It must be telling that WhatsAppers are over 60% more likely to be sharing photos on the messaging app as Facebookers are on Facebook. Meanwhile, Facebook Messenger and WeChat also have notable leads over Facebook and Twitter when it comes to sending photos. It's only Instagram that bucks the trend here to take a strong second place (64%) – but its pure focus on photosharing and the ability to easily control followers is an obvious reason for this.





PHOTO SQUARE



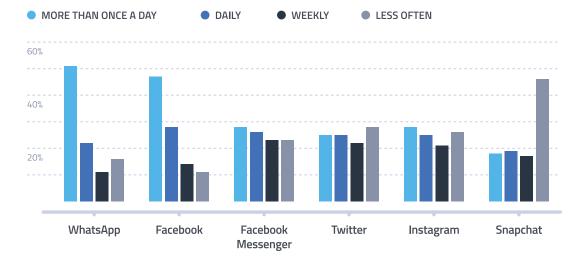






PLATFORM USAGE FREQUENCY

% of users on each platform who access...



WHATSAPP'S SIMPLE AND STRAIGHTFORWARD NATURE IS GIVING IT AN EDGE

On the whole, messaging services can also boast a more engaged user base when it comes to frequency of visits. WhatsApp in particular stands out strongly here: around 3 in 4 users are engaging with the chat app at least daily, with over half checking in multiple times during the day. Crucially, this gives it a narrow lead over Facebook, and pushes it ahead of all other services tracked in the chart. Facebook Messenger then takes the third spot, placing it ahead of social networks Twitter and Instagram.

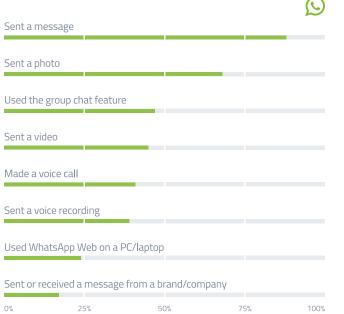
Interestingly, Snapchat lags behind WhatsApp and Facebook Messenger for usage frequency, with close to half of Snapchatters engaging less often than once a week. If WhatsApp's high usage frequency stems from its role as a stripped-back service offering basic communication functions, then Snapchat's focus on content-sharing functionality (and it mirroring social platforms more closely) means that, as is the case with Facebook or Twitter, for purposes of sending a message or basic picture, many of its users might be going elsewhere.

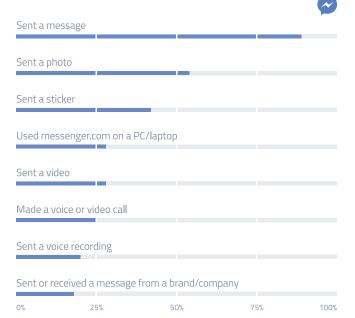
Evidence for this can be found in the chat app activities tracked by GWI. Once again, WhatsApp has the highest engagement rates for all of them. While around 7 in 10 WhatsAppers are sending photos each month, this figure stands at just over the 50% mark for Messenger, and 40% for Snapchat. WhatsApp also maintains a firm lead for sending messages and video sharing. Undoubtedly, WhatsApp's simple and straightforward nature is giving it an edge over competing platforms that have more extensive features and functionalities.

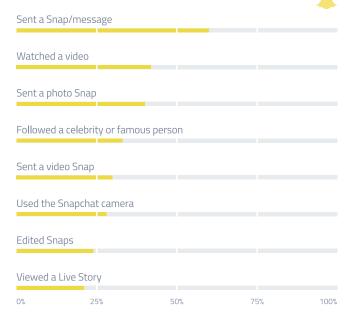


PLATFORM-SPECIFIC ACTIONS

% of users who did the following last month







But how does this trend sit with the reality that most messaging services are expanding their offerings and functionality? Messenger and WhatsApp have both borrowed from Snapchat, with the latter introducing drawing and editing tools for photos that closely resemble those seen on Snapchat, and — among other things — Messenger testing "Messenger Day" in Poland (featuring the 'Stories' feature that Snapchat popularized). 2016 also saw WhatsApp allowing businesses to message its extensive user-base.

Although the path to monetization requires a platform to open up more functionalities, it's clear that moving more and more towards a feature-heavy service like that adopted by Snapchat runs the risk of encouraging more passive behaviors among users. And that's crucial to keep in mind as so many of the apps in question look to evolve more and more into fully-fledged social platforms in their own right. The "context collapse" might have started on major social networks, but its next stop could well be messaging services.

MOVING MORE AND MORE
TOWARDS A FEATURE-HEAVY
SERVICE LIKE THAT ADOPTED BY
SNAPCHAT RUNS THE RISK OF
ENCOURAGING MORE PASSIVE
BEHAVIORS AMONG USERS



CHASE BUCKLE

Brands should be taking eSports seriously

Long gone are the "plug-and-play" days when gaming was almost exclusively an offline activity. With the migration of gaming activities online, and the subsequent expansion of the gaming community, a whole host of behaviors now fall within the remit of gaming even when they don't actually involve picking up a controller and playing a game.

"Gaming" entertainment has been evolving to encompass everything from mobile gaming (which has helped to expand this category across a range of demographics), to the act of sitting and spectating while others play your favorite games. And as our data shows, the rise spectator gaming has been quick to make an impact in this space; 1 in 4 say they have watched a live gaming stream in the past month, and 17% report having watched an eSports tournament.

GAMING ACTIVITIES

% who have done the following gaming activities in the last month

Played a game that you have streamed over the internet

Watched a live gaming stream

Watched an e-sports tournament

Connected a games console to the internet in order to play games

Purchased a game add-on or DLC (Downloadable Content)

Used a subscription service*

Used a games console to watch/stream a TV show or film

Broadcast a live stream of your gameplay

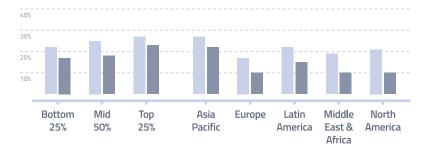
*such as XBOX LIVE, PlayStation Plus or Steam

THE DEMOGRAPHICS OF SPECTATOR GAMERS

% who have done the following online in the last month

- Watched a live gaming stream
- Watched an e-sports tournament





Device Ownership and Access > Gaming Activities

Given the size of the potential market, it's not hard to understand the \$1bn price-tag Amazon paid for videogame-streaming site Twitch back in 2014. In the west at least, Twitch has largely held the reigns when it comes to spectator gaming, but the continued popularity of this genre of entertainment has led to competitors sprouting up in quick succession. Most notably, Google's YouTube entered the fray in 2015 with YouTube Gaming (12% of YouTubers used this game-streaming service last month). But things are also heating up in China, with established name Douyu TV (recently valued at \$100m) facing competition from newcomer Panda TV.

The appeal for brands here is obvious — as our data demonstrates, spectator gaming has a fairly narrow but very desirable demographic. Neither the predominantly male composition of this audience nor the skew towards younger internet users is likely to surprise. But that over a fifth of 35-44s are live-streaming videogame footage each month and around 1 in 7 are tuning into eSports tournaments indicates that this enthusiasm is by no means restricted to Millennials.

But it's the income breakdown for these activities which is particularly striking: for both of these online behaviors, we see figures rise directly in line with this metric. Good news for brands then, as this is clearly an audience

DEVICE OWNERSHIP

% of eSports Fans who own the following devices

Smartphone	97%
PC/Laptop	88%
Tablet	56%
Smart TV	48%
Games console	36%

ESPORTS IN PARTICULAR
IS STILL VERY MUCH
EVOLVING AS A PLATFORM
FOR BRANDS AND
ADVERTISERS

with disposable income. From a regional perspective, the pivotal role of South Korea in the development of spectator gaming as well as Tencent's success in driving uptake in China pushes APAC above all other regions for both activities. Nevertheless, look just at 16-24s in regions like Europe and North America and figures for these metrics rise sharply.

eSports in particular is still very much evolving as a platform for brands and advertisers, but the genre's initial migration from online TV to broadcast media via the likes of Turner and ESPN should increase the appeal for brands still sitting on the fence. After all, like all conventional sports events, each unique eSports tournament broadcast has scarcity value, bringing together this growing number of viewers in one place at one time where there's real opportunity for brands to have a powerful message and be associated with this trending movement.

Perhaps most reassuringly of all, eSports Fans are extremely brandengaged, over-indexing for the brand interaction channels tracked by GWI. Here, the digitally-engaged nature of these users shines

ESPORTS FANS
ARE EXTREMELY
BRAND-ENGAGED

through most strongly, as it's primarily the non-traditional brand interaction points – such as playing branded games or interacting via social media – that we see over-index scores reach their highest. Put in the context of device ownership (where we see near universal ownership of smartphones among this group), and the rise of mobile video (eSports Fans are 43% more likely to have watched a video made by a brand) together with the migration of social activities to mobile, there is a serious opportunity to tap into this community in the coming year.





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