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Quantitative data was collected from 24 countries, however for the purposes of this report the results cover 22 markets. Throughout the report we refer to global results; where global data is not relevant we refer only to the US, due to it being a well-known market.

Qualitative: There were 24 in-depth interviews in Cape Town, San Francisco and Stockholm. These respondents all have multiple devices and an internet connection at home, and they watch both broadcast TV and on-demand video content.

On-device measurements: 13,548 Android smartphone users in South Korea and the US were measured (data collected by Nielsen).

Quantitative: More than 30,000 online interviews were held with people aged 16-69 across 24 markets: Australia, Brazil, Canada, China, Colombia, Dominican Republic, Germany, Greece, India, Italy, Mexico, the Netherlands, Poland, Portugal, Romania, Russia, South Africa, South Korea, Spain, Sweden, Taiwan, Turkey, the UK and the US. All respondents have a broadband internet connection at home and watch TV/video at least once a week. Almost all use the internet on a daily basis. This study is representative of approximately 1.1 billion people.

THE VOICE OF THE CONSUMER

Ericsson ConsumerLab has more than 20 years' experience of studying people's behaviors and values, including the way they act and think about ICT products and services. Ericsson ConsumerLab provides unique insights on market and consumer trends.

Ericsson ConsumerLab gains its knowledge through a global consumer research program based on interviews with 100,000 individuals each year, in more than 40 countries – statistically representing the views of 1.1 billion people.

Both quantitative and qualitative methods are used, and hundreds of hours are spent with consumers from different cultures. Ericsson ConsumerLab has representatives throughout Ericsson's global presence, developing an international understanding of the ICT market and business models.

All reports can be found at: www.ericsson.com/consumerlab

KEY FINDINGS

- Total TV and video viewing time increases through massive growth in mobile viewing
 - > Since 2012, the average consumer globally has increased their viewing on mobile devices by 4 hours a week, while their fixed screen viewing has declined by 2.5 hours a week. This means that today they spend an extra 1.5 hours watching TV and video than they did 4 years ago
 - > In the US, 20 percent of the increased mobile viewing is paid-for premium content





- 2. Consumers' mobile viewing habits thrive with the perception of unlimited video streaming
 - > 40 percent of consumers globally are very interested in a mobile data plan that includes unlimited video streaming capabilities. At 46 percent, millennials are the group most interested, as they typically use multiple on-demand services and appreciate mobility



- 3. Scheduled linear TV viewing suffers when millennials go all-in with streamed user generated content (UGC)
 - > Consumers aged 16-34 spend almost 2.5 hours more each week watching streamed on-demand UGC, compared to 35-69 year olds. At the same time, they spend almost four hours less than the older population when it comes to watching live and linear broadcast content



- > Over a period of 4 years, consumers say they have increased their VOD spending from an average of USD 13 to USD 20 per month
- > Paid scheduled linear TV services continue to account for about half of the average household media spending in the US. While the average household uses 1.3 scheduled linear TV services, it also uses 3.8 VOD services



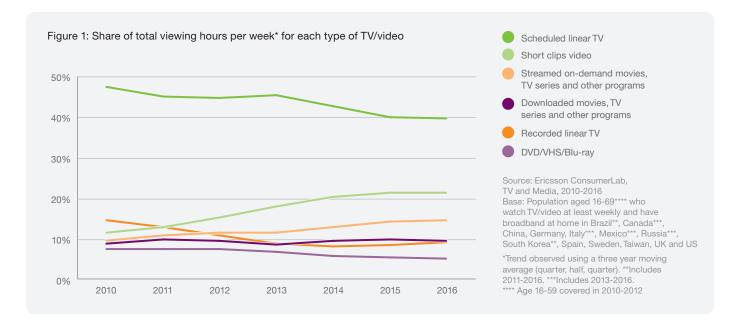
- 4. Consumers in the
 US spend 45 percent
 more time choosing
 what to watch on video
 on demand (VOD) services
 than scheduled linear
 TV services, yet they
 rate VOD services higher
 - In fact, 63 percent of consumers are very satisfied with content discovery in their VOD service, while only 51 percent say the same for their scheduled linear TV provider
 - > The time-consuming discovery process can be frustrating, yet it is acceptable because VOD enables consumers to find content they want to watch, when they want to watch it

CHANGING MEDIA LANDSCAPE

Since 2010, internet-based video content and social media have proliferated and are today competing with scheduled linear TV content for the consumer's attention. But Ericsson ConsumerLab research shows that scheduled TV also has an important role in tomorrow's increasingly

complex media environment. The multifaceted nature of TV today is, to a large extent, a result of the rapid evolution of technology. This enables consumers' media habits to evolve and in turn influence business models and offerings.

Scheduled linear TV services continue to attract consumers through a shared social experience, relaxing lean-back viewing and instant access to live content. But consumers also appreciate and expect the option of media à la carte – the ability to create their own world of entertainment.



This shift in consumer expectations and habits is clearly visible in Figure 1. The portion of total viewing hours for scheduled linear TV content has decreased slightly by 16 percent since 2010. At the same time, on-demand viewing - such as streamed TV series. movies and other TV programs – and short video clips have grabbed a growing portion of the total viewing time, increasing by 50 percent and 86 percent respectively. In total, all types of on-demand viewing now make up 43 percent of all active viewing, out of which movies, TV series and other TV programs account for 74 percent.

With these shifts, it is clear that the definition of TV is changing and growing – both technically and in the eyes of consumers.



DEVELOPMENT OF USER GENERATED CONTENT

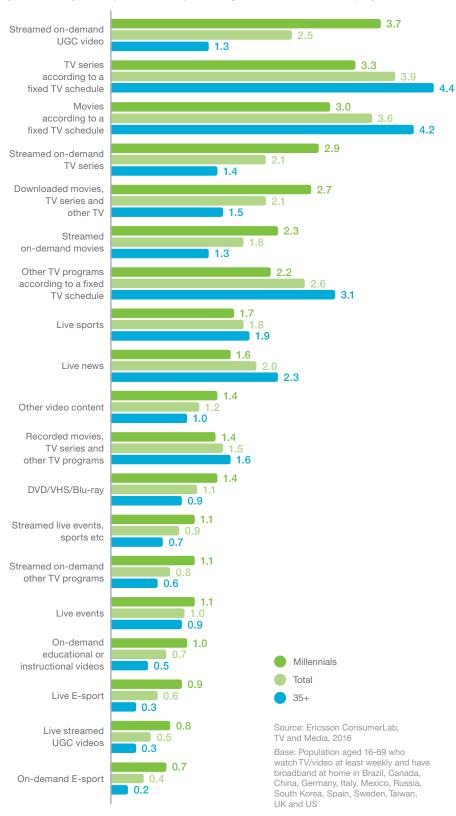
UGC that is either on-demand or live introduces new, exciting possibilities for consumers and producers of such content. Consumers themselves are able to engage others in real time by being consistently relevant to viewers and creating their own brands, as well as ensuring audiences are aware of their content through services like Periscope and Facebook Live. Challenges with live UGC, such as creating engaging content that is easily discoverable, are not unique to UGC creators. In fact, established content owners have experienced the same for a long time.



"My friends just put some stuff on YouTube and Facebook. I think they got 50,000 views on Facebook, but on YouTube maybe 6,000. But that's still 6,000 people that you touched."

Yet UGC is increasingly appealing to many, and younger consumers in particular. Today 16-34 year olds spend almost 2.5 hours more each week watching streamed on-demand UGC than 35-69 year olds. At the same time, 16-34 year olds spend almost four hours less than 35-69 year olds when it comes to watching live and linear broadcasted content. To a large extent, millennials today watch UGC whereas those aged 35-69 spend their time on live and linear TV.

Figure 2: Average weekly hours actively watching TV and video content, by age



NEW MEDIA HABITS FOR TV USER GROUPS

While the media landscape has changed over time, so have the viewing habits and traditions of consumers. When observing their behaviors over a long period of time, we are able to discern user groups with distinct profiles based on their habits and level of involvement with Information and Communication Technologies (ICT).

Common traits can be seen within these TV user groups; for example, married women over 34 years old who live in a suburb or small town, have children at home, do not have a university degree and work part time tend to be somewhat overrepresented in the TV Couch Traditionalist group. In contrast, married millennial men with children and a university degree

who work full time and live in a metropolitan city center are somewhat overrepresented among Screen Shifters.

Figure 3 illustrates the evolution of the TV user groups. Since 2010, the TV Couch Traditionalists group has shrunk significantly – more than 30 percent – while Screen Shifters have grown by 33 percent over the same time period. Moreover, Mobility Centrics have increased by more than 300 percent, making them the largest group alongside Screen Shifters.

TV Couch Traditionalist

Heavy viewers of broadcasted TV via the traditional TV screen, but not much other TV and video consumption



Screen Shifter

Use any screen, anywhere for all kind of TV and video content





Average TV Joe

Average TV viewing time and light viewing of other video content



Mobility Centric

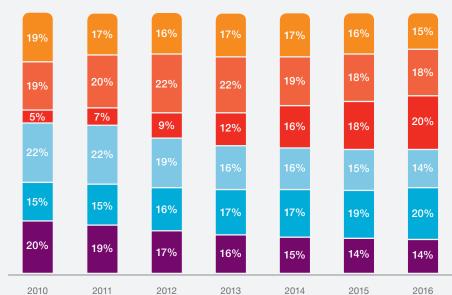
Firstly and mostly use the mobile screen for all TV/video consumption (except broadcasted)



Computer Centric

Mainly consume streamed/downloade TV and video via the computer screen

Figure 3: Evolution of TV user groups by year*



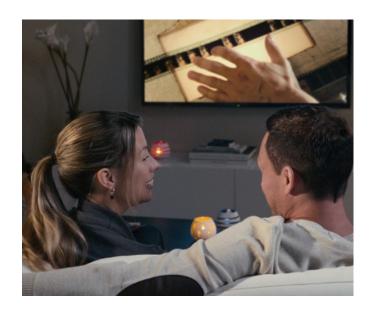
- TV Zero
- Average TV Joe
- Mobility Centric
- Computer Centric
- Screen Shifter
- TV Couch Traditionalist

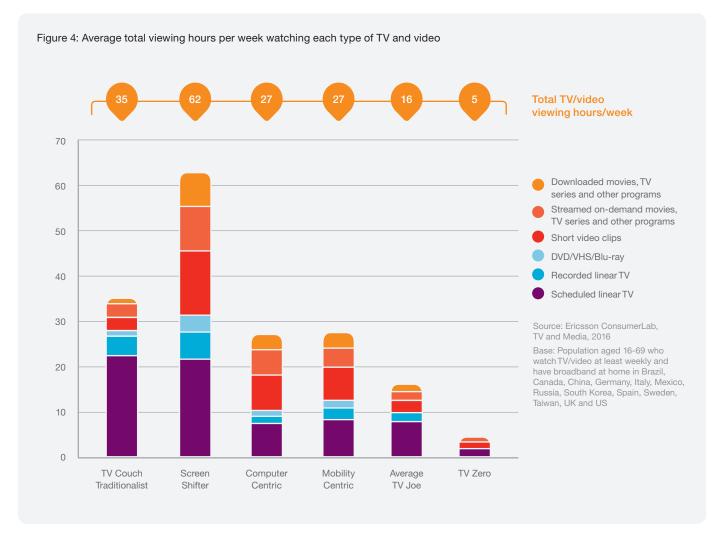
Source: Ericsson ConsumerLab, TV and Media, 2010-2016

Base: Population aged 16-69**** who watch TV/video at least weekly and have broadband at home in Brazil**, Canada***, China, Germany, Italy***, Mexico***, Russia***, South Korea**, Spain, Sweden, Taiwan, UK and US

*Trend observed using a three year moving average (quarter, half, quarter). **Includes 2011-2016. ***Includes 2013-2016. ****Age 16-59 covered in 2010-2012 The evolution of the TV user groups is important, particularly in combination with how viewing hours for different TV content types have changed since 2010. Figure 4 illustrates that TV Couch Traditionalists spend 35 hours per week watching any type of TV and video content, but Screen Shifters spend significantly more – 62 hours per week. While that may seem a lot, this group tends to view content on multiple screens in parallel. In fact, TV Couch Traditionalists and Screen Shifters spend roughly the same amount of time watching traditional broadcast TV, but the latter complements this viewing with other types of TV and video content.

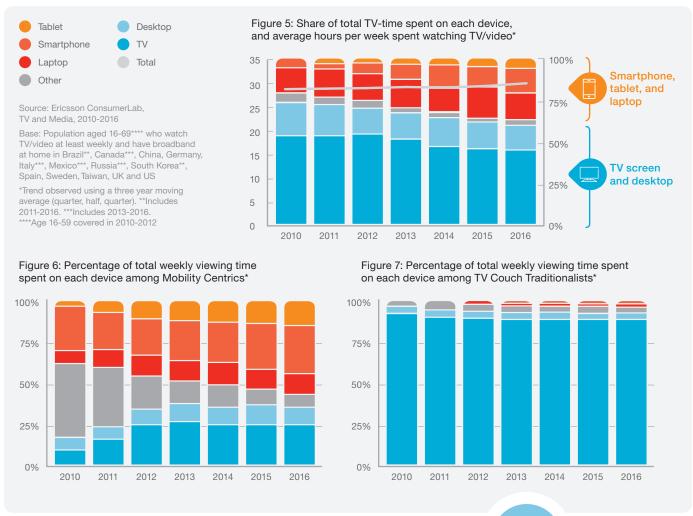
The viewing traditions of TV and media consumers are clearly changing, with the media industry introducing new types of content and formats. Just as the preferences for how to watch TV and video content are changing, so is when and through which screen the content is viewed.





MOBILE VIDEO STREAMING

Since 2010, total viewing hours and time spent viewing content on mobile screens such as smartphones, tablets and laptops, have grown significantly, as seen in Figure 5.



This change is not uniform across all TV user groups, however. For TV Couch Traditionalists, the TV screen makes up almost 90 percent of all TV and video viewing, while the smartphone, tablet and laptop account for less than 10 percent. Overall, there have been minimal changes to this group since 2010 (Figure 7).

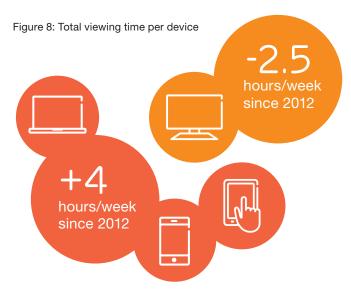
The Mobility Centrics (Figure 6), on the other hand, display a very different usage pattern. Since neither smartphones nor tablets were in great supply in 2010, almost half of the viewing for this group was on other screens such as handheld devices or extended screens. This initially rather small and obscure group has then evolved into one of the largest TV user groups, and they display a media consumption pattern that today can only be described as mainstream. For this group, tablet viewing has increased five-fold since 2010 and smartphone viewing now makes up almost one third of their total viewing.



"We've been preparing for the growth in video across our mobile network for some time and we don't talk about percent of growth, but in terms of the number of times bigger it's going to be."

Gary Traver
Director of Media, Telstra

The staggering growth of viewing on mobile devices has led to an increase in consumers' total viewing time. Since mobile devices are easily available, viewing occurs across the day and devices, complementing the viewing on big screens and adding to the total viewing time.



Source: Ericsson ConsumerLab, TV and Media 2012-2016
Base: Online population aged 16-69**** who watch TV/video at least weekly and have broadband at home in Brazil**, Canada***, China, Germany, Italy***, Mexico***, Russia***, South Korea**, Spain, Sweden, Taiwan, UK and US

*Trend observed using a three year moving average (quarter, half, quarter). **Includes 2012-2016. ***Includes 2013-2016. ****Age 16-59 covered in 2012

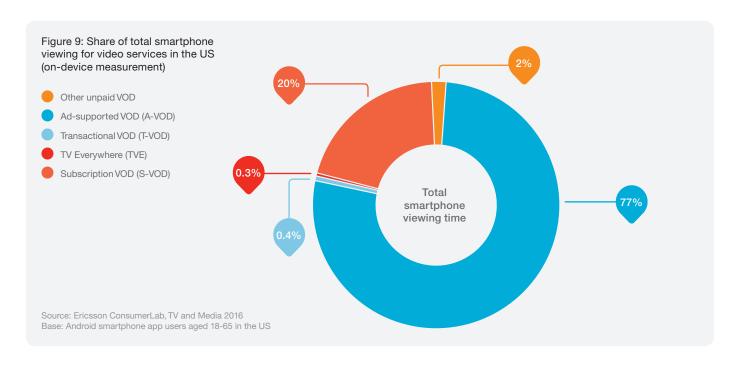


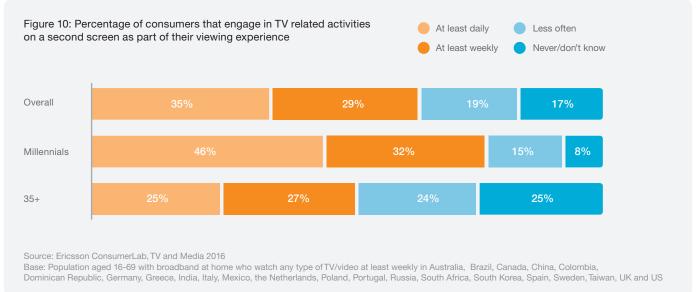
"What I usually do is, I'll call [my boyfriend] and tell him I'm going to stay in the car in the parking lot, I'm a little tired, just gonna watch a show [on my smartphone]."

Chandra, 24 years old, USA

While the average TV and video viewing time on fixed screens has dropped some 2.5 hours per week in the past 4 years, the average viewing time on mobile devices is up by 4 hours a week, equaling a total net increase of 1.5 hours per week.

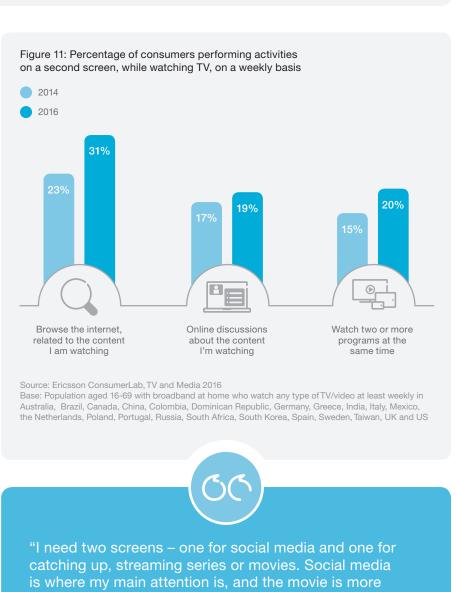
Since mobile screen viewing is still dominated by free or ad-funded video consumption, some viewing time has indeed shifted from paid broadcast media to unpaid mobile viewing. This is hardly surprising – with minimal entry barriers, ad-funded services appeal to a larger portion of the consumer base. Nevertheless, measurements for the US market show that around 20 percent of smartphone video consumption is done through paid services, albeit much of that spending is now going to new market entrants.





Mobile devices are ever present when watching video content on a TV screen, easily allowing consumers to perform other activities simultaneously. The second screen, such as a smartphone or tablet, is used by 64 percent of consumers every week to complement the content on the big TV screen, such as looking up an actor, checking ratings, posting comments on social media, and watching video content on multiple screens.

TV and video content has always had a significant social component, for example, discussing TV programs while watching together at home. Today, those habits have migrated online, both for traditional TV content and for UGC. Millennials in particular have a more pronounced second screen behavior, and these habits continue to evolve. Since 2014, the habit of browsing the internet for content related to what is being watched on the big TV screen has increased by 35 percent, and watching 2 or more programs at the same time has increased just as much. This growth can partly be attributed to the basic human need for instant gratification, as well as never wanting to have a dull moment.



for background noise."

Lethabo, 26 years old, South Africa

THE EVOLUTION OF CONTENT DISCOVERY

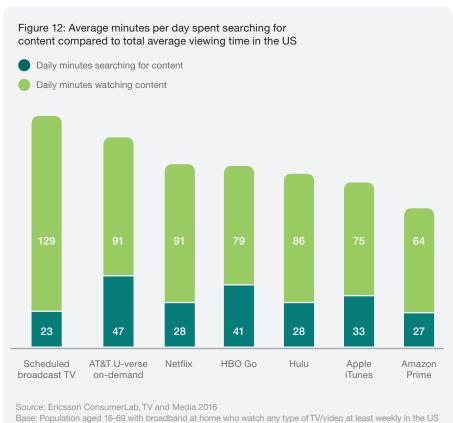
Some 44 percent of broadcast TV viewers in the US say that they cannot find anything to watch on TV at least once every day. This is a negative change from the findings in last year's report, which demonstrates that content discovery continues to be an un-resolved issue for consumers. In fact, the average person in the US spends 23 minutes every day trying to find something to watch on broadcast TV. In total, that person will spend 1.3 years of their life swapping channels and navigating the TV guide. This is similar for consumers in more than half of the countries in this year's study.

In comparison, only 34 percent of VOD viewers say they cannot find anything to watch. While perhaps counter-intuitive, VOD services such as Netflix, Amazon Prime or Hulu nevertheless require more time from consumers to find content they want to watch, as the on-demand viewer has to actively pick something to watch.

The consumer frustration with hundreds of linear channels and nothing to watch can thus be contrasted with viewers spending 45 percent more time searching in VOD services. And yet, 63 percent are satisfied with the content discovery in their VOD service, while only 51 percent of consumers say the same for their scheduled linear TV service.

The time-consuming on-demand discovery process can be frustrating but is an acceptable activity, as it implicitly promises consumers they will find something they want to watch when they want to watch it.





SERVICE EXPERIENCE MATTERS

Net Promoter Score (NPS) measures the willingness for consumers to endorse a particular service to others. When comparing the NPS score between broadcast TV services and on-demand services in a market like the US, we see a major difference (Figure 13). Moreover, the gap between these groups has increased from last year, which indicates that the on-demand satisfaction gap is widening.

To understand this difference, we can look at the derived importance versus satisfaction of a set of factors for both service types (Figure 14). We find the majority of factors in favor of on-demand services, where most are deemed both important and satisfactory, hence their placement on the upper part of the matrix. While several of the explored factors have had a longer tradition with on-demand services, such as mobility and international access, the efforts made by broadcast TV services fall short.

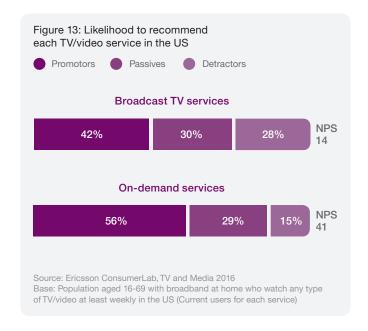
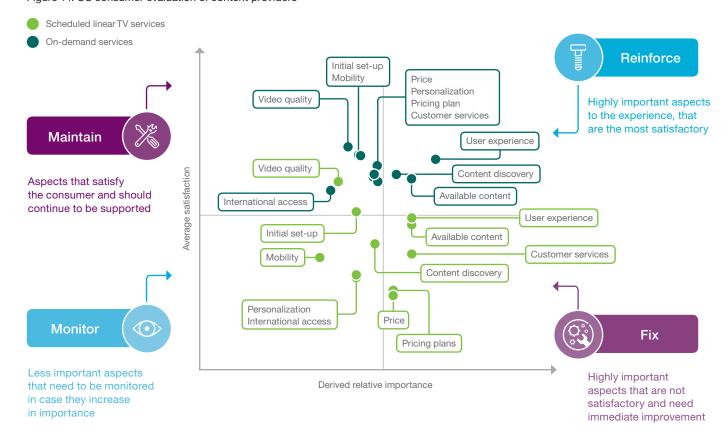
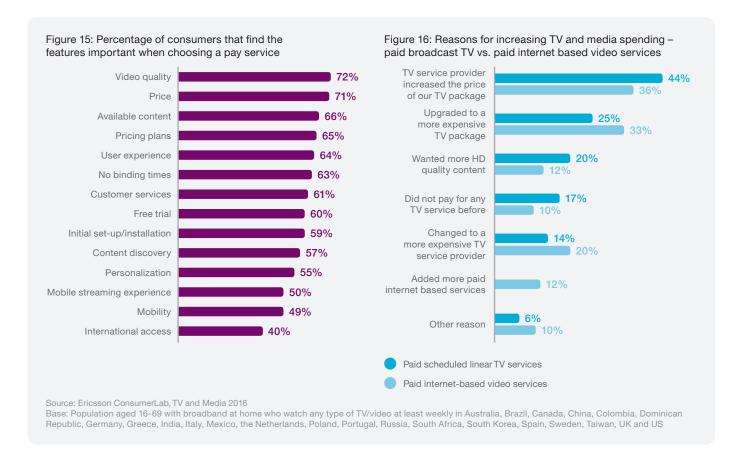


Figure 14: US consumer evaluation of content providers



Source: Ericsson ConsumerLab, TV and Media 2016
Base: Population aged 16-69 with broadband at home who watch any type of TV/video at least weekly in the US



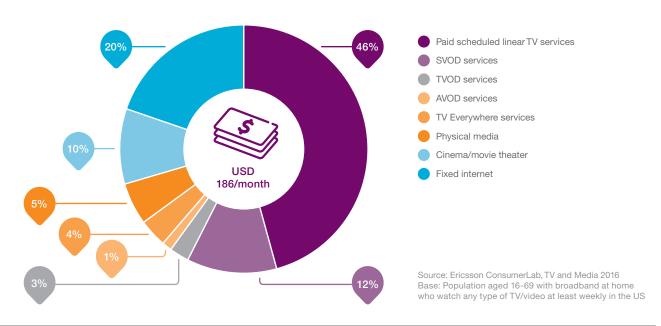
When it comes to the importance of service-specific features, video quality and price tops the list, regardless of age or preference for scheduled linear TV services or on-demand services. The only slight difference with respect to age is with regards to features such as mobility, a good mobile streaming experience and access to content across country borders. Millennials find these features more important, which reflects their general need for flexibility.

Coupled with the importance of a reasonable price point, the needs versus reality differ. While consumers continuously increase their spending on both scheduled linear TV services

and on-demand services, the reasons for this increase vary (Figure 16). The average US household spends almost half of their overall media spending on TV service providers (Figure 17), a stark contrast to the spending size for VOD services. Yet the spending on VOD services is growing the fastest – spending has increased more than 60 percent since 2012.

Moreover, while the average US household has 1.3 scheduled linear TV services, they also use 3.8 VOD services. Coupled with a higher Net Promoter Score for these services, they deliver on one of the most important factors when choosing a new pay TV service – the price point.

Figure 17: Average household spending per month on different TV/video services in the US

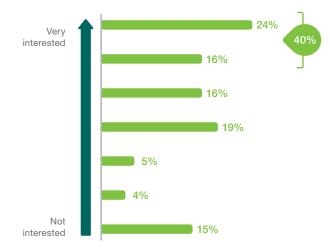


MOBILE CONNECTIVITY SHAPES MEDIA

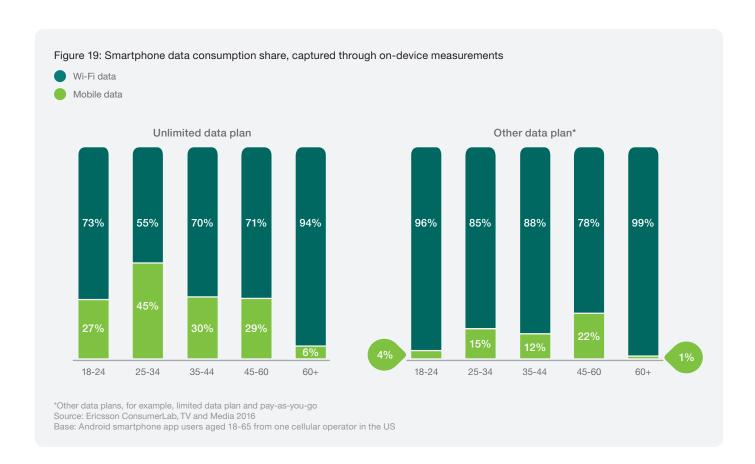
Due to buffering or lack of coverage, streaming video content outside of the home is not a seamless experience, but the possibility alone of viewing content anywhere has continuously driven the consumption of TV and video. In fact, a mobile subscription plan that allows affordable streaming of TV and video content on a mobile device – with reasonable video quality and without having to ration data – is of great interest to 40 percent of consumers globally. Millennials are the most interested group at 46 percent, as these consumers typically use multiple on-demand services across several devices. A similar trend can be observed in individual markets, where consumers in India (72 percent), Colombia (60 percent) and South Africa (58 percent) show the highest interest levels for such capabilities.

Mobile video habits shift when barriers such as mobile data are removed. This can be observed when a US-based service provider introduced a subscription plan that offered these capabilities. This plan enabled consumers to stream video content from a number of services without decreasing their data allowances. Interestingly, more than half of these subscribers in our study were millenials. They also consumed a larger share of mobile video using mobile data on their smartphones rather than Wi-Fi, compared to non-subscribers from the same service provider.

Figure 18: Percentage of consumers interested in a mobile subscription plan, including unlimited video streaming in reasonable quality



Source: Ericsson ConsumerLab, TV and Media 2016
Base: Population aged 16-69 with broadband at home who watch any type of TV/video at least weekly in Australia, Brazil, Canada, China, Colombia, Dominican Republic, Germany, Greece, India, Italy, Mexico, the Netherlands, Poland, Portugal, Russia, South Africa, South Korea, Spain, Sweden, Taiwan, UK and US



THE FUTURE OF TV IS NOW

The evolution of TV and video habits has meant that traditional user groups, such as the TV Couch Traditionalists, have shrunk by more than 30 percent since 2010, in favor of user groups such as the Mobility Centric and Screen Shifters. These growing user groups are dominated by habits that require flexibility in accessing quality

content at their convenience and at a reasonable price point. When consumers are left with a perception of high prices and limited options, their loyalty wears down. One such example is recurring price hikes of paid scheduled linear services, leading to consumers increasingly experiencing a diminishing value

for money. This influences the NPS measurements with a significantly lower pricing satisfaction compared to on-demand services. Even more so, the plethora of services that these user groups engage with reflects the need for services that host more attributes than traditional providers have previously been able to offer.

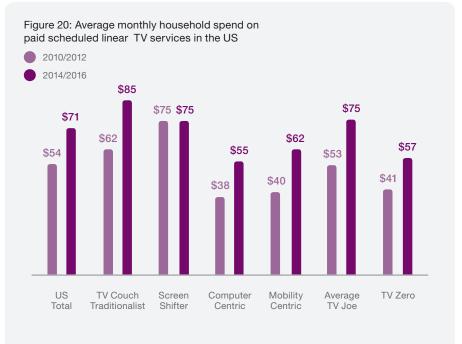


Figure 21: Average monthly household spend on video on demand in the US



Source: Ericsson ConsumerLab, TV and Media 2016 Base: Population aged 16-69 with broadband at home who

watch any type of TV/video at least weekly in the US

(00)

"Content providers focus on their brand and audience, but look for partners that can help with the rest of the experience, and I think that value proposition will continue."

Darcy Antonellis CEO, Vubiquity

TV Couch Traditionalists and Screen Shifters spend the most on paid scheduled linear TV services today, while the Mobility Centrics, TV Zeros and Average TV Joes spend significantly less. Additionally, Screen Shifters and Mobility Centrics pay significantly more for VOD services than ever before.

The demands and expectations of Mobility Centrics and Screen Shifters hint at an interesting future for TV and video services: one that is shaped to better target these user groups. This can be done through à la carte TV content, including both live experiences and on-demand capablities and the ability to watch wherever you are. Flexible pricing that allows consumers to add-on aspects that are more important to them will also be of value. The consumers of tomorrow will require more to be satisfied, but it is a task that is well worth doing because their love for TV and video content will continue to grow in the future.

Leading transformation through mobility

We are a world leader in the rapidly changing environment of communications technology – providing equipment, software and services to enable transformation through mobility.

Some 40 percent of global mobile traffic runs through networks we have supplied. More than 1 billion subscribers around the world rely every day on networks that we manage. With more than 39,000 granted patents, we have one of the industry's strongest intellectual property rights portfolios.

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