



Research brief April 2018

# For Your Eyes and Ears

## Streaming services in Germany

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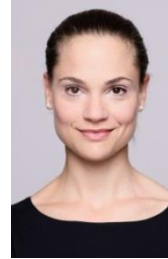


# Imprint

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# Foreword



## It's about money

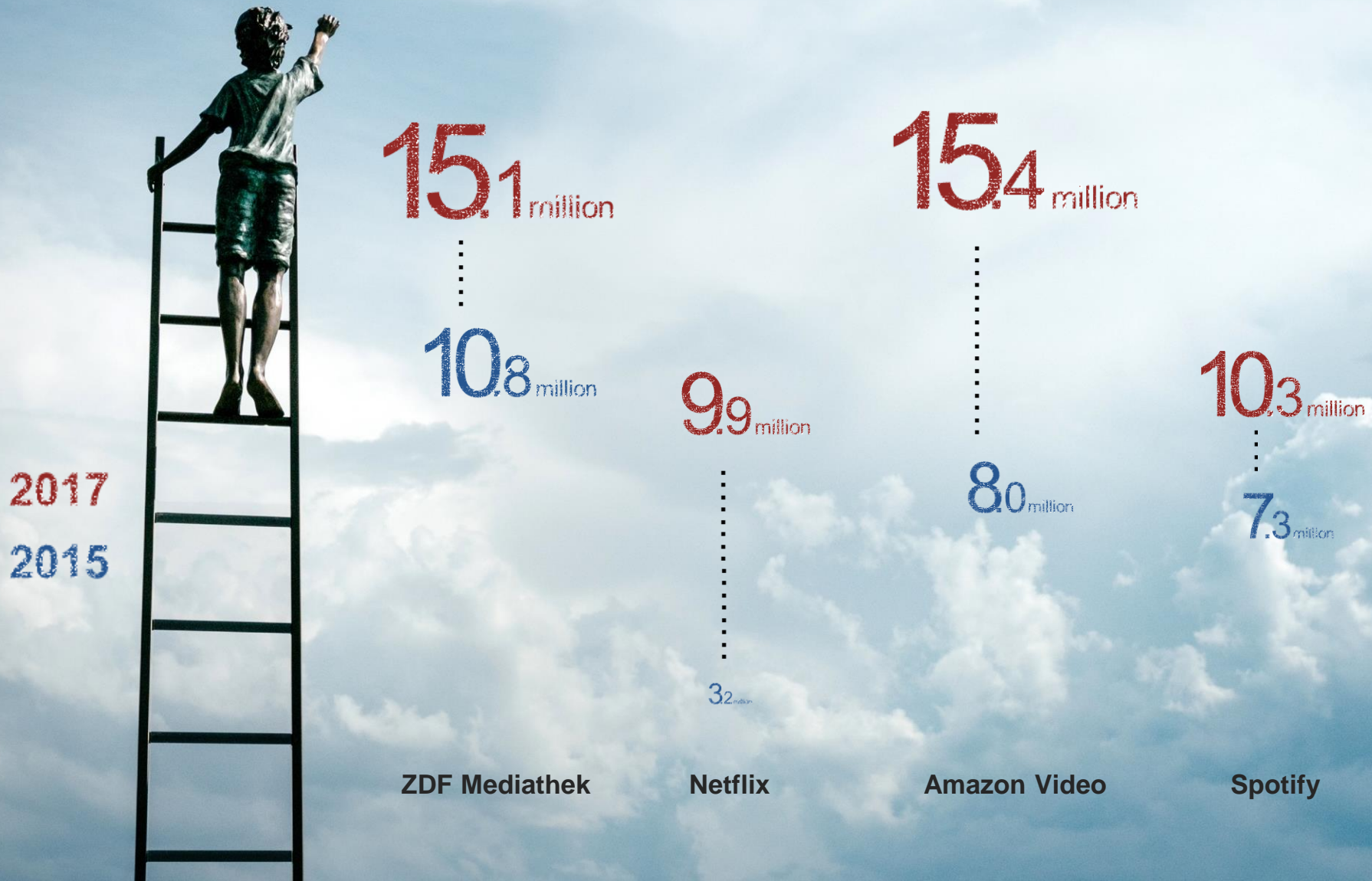
We have been following media usage patterns in Germany together with Fresenius University of Applied Sciences for three years now. Our results clearly show that an increasing amount of audio-visual media is being consumed online. This change in behaviour is, in Germany at least, more prevalent for TV than music content. Given the rising number of alternatives, the future of linear TV may be questioned. For public broadcasting, this translates into yet another debate about the pros and cons of TV licences.

Quality original content is one of the major reasons why consumers are flocking to subscription video on demand (SVOD) services. These services put traditional TV stations under pressure, and that is a good thing. However, with public broadcasters in mind, we must ask whether the rules necessary due to their public funding are friend or foe. A model that is also applied to other regulated sectors of the economy may be more suitable. Specifically, such a model would make a clear distinction between public interest programmes and commercial programmes.

Thus, cross-subsidising could be mitigated effectively. Public broadcasters could actually compete with private services when and where it matters. This would lead to real competition to the profit of consumers.

Last but not least, we can expect that engaging public broadcasters in the competition around better and more interesting content will push innovative services discussed in this study such as augmented and virtual reality. Our initial results indicate that such formats do have significant potential to attract viewers.

# Is the sky the limit?\*



\*Number of users in Germany, estimated on the basis of surveys in 2015 and 2017  
N=1,027 (2015) and N=2,036 (2017).

# Introduction

As shown on the left-hand side, Spotify, Netflix and Amazon Video have made their way into Germany's living rooms, smartphones, tablets and computers. The digital libraries of public broadcasters have been similarly successful. Just like the two preceding studies<sup>1</sup>, the present one explores the apparent changes in the way that consumers in Germany enjoy music and audio-visual content.

Next to the focus on audio-visual media usage patterns, the study addresses two current themes. First, we examine the impact that the growing popularity of streaming services has had on the sales of devices. Specifically, we show if and how new demand for devices like headphones and smart TV sets emerges. Second, the study explores augmented and virtual reality formats as completely new ways of enjoying audio-visual content. We try and find out whether these formats may be heading for the mass market as it has often been stipulated before.

For the present study, we conducted a representative survey of 2,036 consumers in Germany. To interpret these results, we added 20 semi-structured individual interviews with consumers.

<sup>1</sup> Arnold, R., & Schneider, A. (2017). OTT Services: Colour to the Internet. Bad Honnef, Köln: WIK and Hochschule Fresenius;  
Arnold, R., & Schneider, A. (2016). OTT Streaming Services in Germany. Bad Honnef/Köln: WIK and Hochschule Fresenius.



# On Their Way to the Top

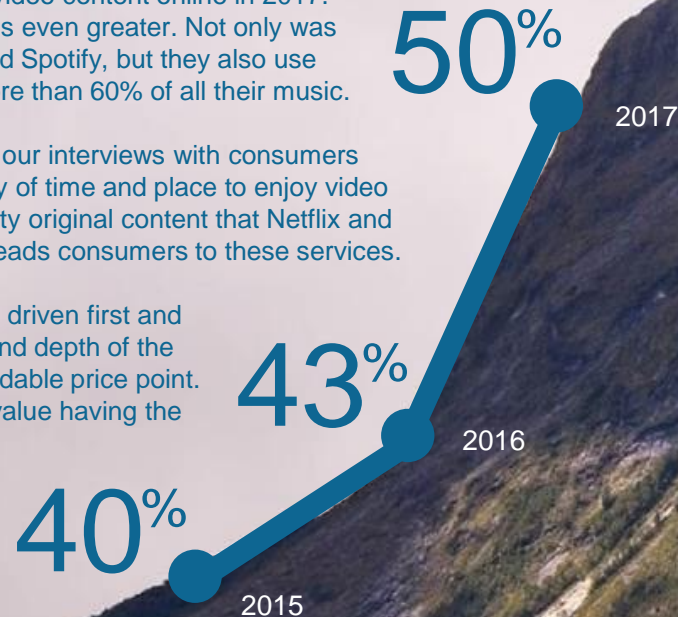
The share of audio-visual content that is consumed online has reached a new record high. At the end of 2017, German consumers watched approximately half of all their video content online. For music content this figure is significantly lower. Traditional media formats dominate here. Nonetheless, around one third of all music content consumed in Germany at the end of 2017 was listened to online.

Sweden's consumers are much more progressive. They watched 59% of all video content online in 2017. For music, the difference is even greater. Not only was it the Swedes who founded Spotify, but they also use the internet to listen to more than 60% of all their music.

Just as in previous years, our interviews with consumers show that it is the flexibility of time and place to enjoy video content and the high-quality original content that Netflix and Amazon Video offer that leads consumers to these services.

Online music streaming is driven first and foremost by the breadth and depth of the content offered at an affordable price point. Beyond that, consumers value having the freedom to choose from all this content when and where they want. They mention this as the most obvious advantage of Spotify or Apple Music over traditional formats.

## Video streaming



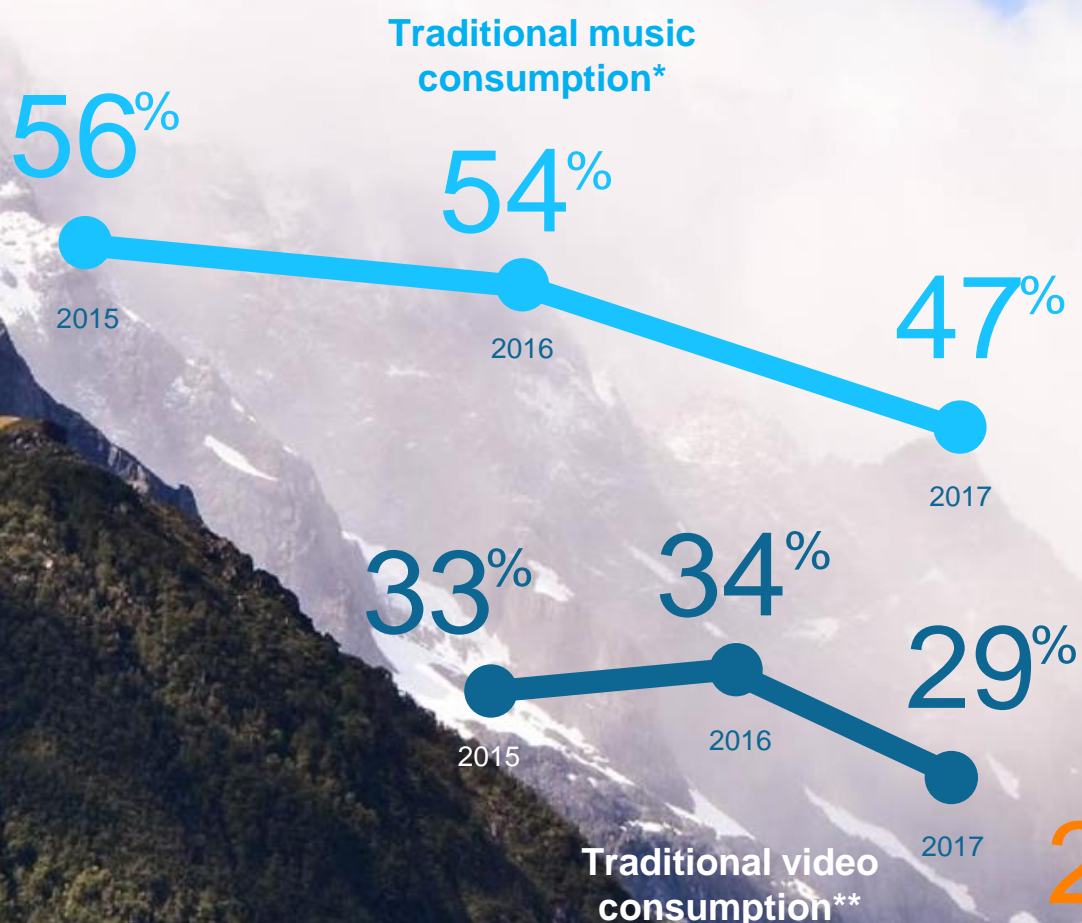
## Music streaming



59%  
Sweden  
in 2017

62%  
Sweden  
in 2017





## Are traditionalists on their way out?

Compared to the steep growth in the amount of music and video content consumed online, the share of those who use only traditional formats changes slowly.

By the end of 2017, almost half of all Germans were listening to music using only traditional formats like CDs or the radio. For video content the figure was 29%.

Even in Sweden, around 20% of respondents stated that they do not use any online sources to watch videos or listen to music. Thus, we expect that in the German market also there is probably a significant share of consumers who will not go online for their videos or music. This group will disappear only slowly from the market, if at all.



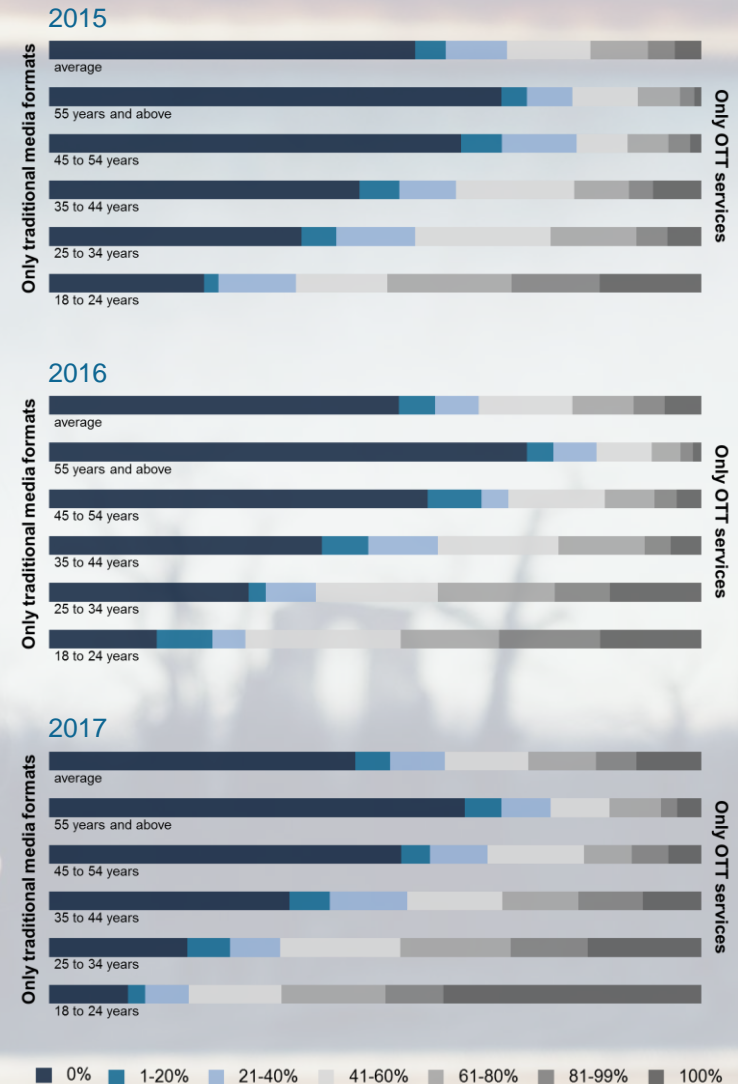
Source: Representative surveys in Germany N=1,027 (2015); N=1,003 (2016); N=2,036 (2017) and in Sweden N=1,018 (2017).  
\*Music consumption via traditional formats like CDs or radio.  
\*\*Video consumption via traditional formats like linear TV or DVD.

# Listen Closely

In Germany, there is still a relatively large share (47%) of consumers who rely solely on traditional formats like CDs or vinyl to listen to music. The detailed data on the right show that the groups of 'traditionalists' that have been decreasing most sharply are the youngest age groups. For those who are 35 or older, the share of consumers who rely solely on traditional formats for listening to music changed only marginally between 2015 and 2017.

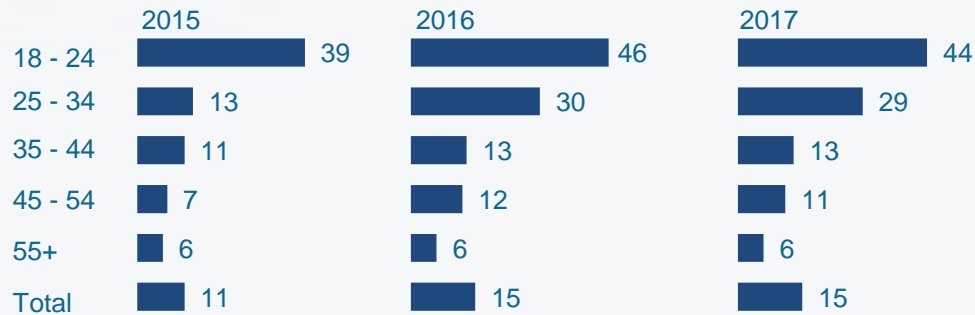
At the other end of the continuum, the comparison across the years 2015, 2016 and 2017 reveals that, in the age group of 18- to 24-year-olds at least, the share of consumers who only listen to music online grew exponentially during 2017. In total, around 40% of this age group use only online formats to listen to music.

The other age groups show comparatively small increases in the share of consumers who rely solely on online formats such as Spotify, Apple Music, Amazon Music or Tidal.



F-1: Usage intensity of OTT music streaming services





F-2: Share of Spotify users in Germany (in %)

## Quo Vadis Spotify?

Following its entry into the German market in 2012, Spotify gained new users very quickly up until 2016. Our latest results for 2017 indicate stagnating user numbers in Germany, while the overall market for music streaming in Germany grew by 3 percentage points.

Unlike Spotify, Apple Music, Amazon Music and Deezer continued to add new users in Germany in 2017. However, the strongest competitor of Spotify may be YouTube. While in 2016 around 15% of German consumers stated that they use YouTube to listen to music, this figure rose to 28% in 2017.



F-3: Share of video streaming users in Germany (in %)



# Watch Closely

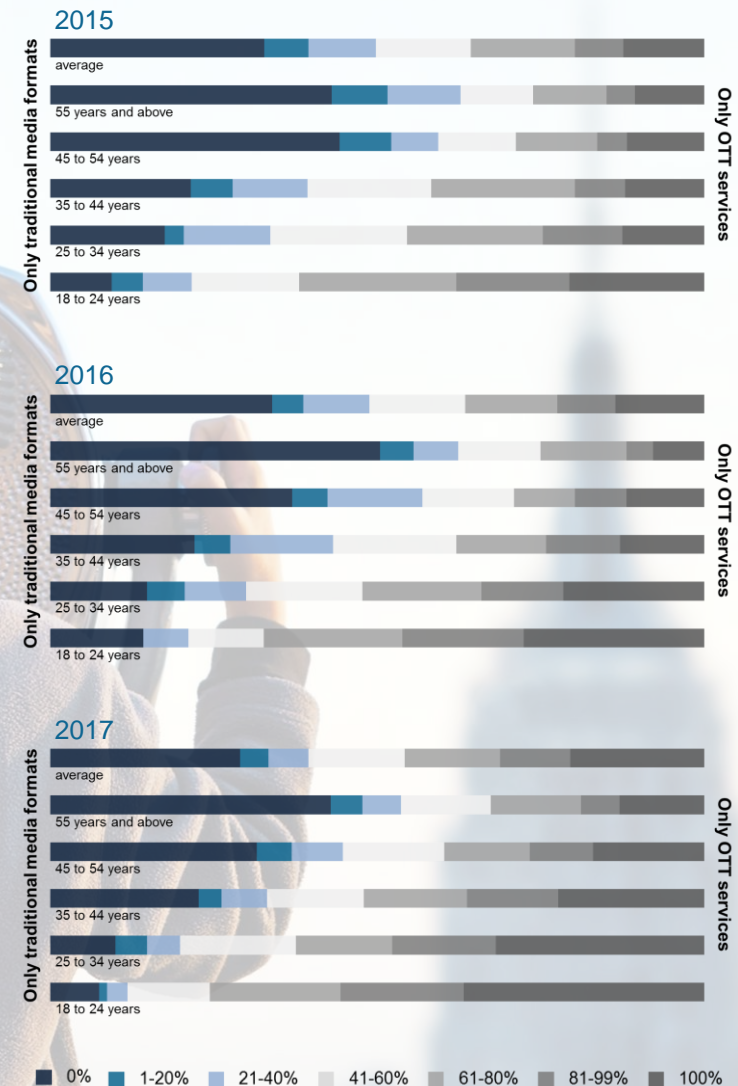
An analysis of usage patterns of video content across age groups and the years 2015, 2016 and 2017 reveals that online streaming services have gained another age group each year. From 2015 to 2016, the largest increase in usage intensity of online streaming services was in the age group from 25 to 34 years of age. One year later, the consumers in Germany aged 35 to 44 showed a similarly strong increase.

Furthermore, we find that the trend that was already visible in the preceding research brief<sup>1</sup> towards more extreme usage patterns continues. Once consumers have got the hang of online video streaming they appear to quickly shift a significant share of their video consumption to these new formats.

The individual interviews conducted for the present study shed light on the rationales behind this behaviour. Our interviewees highlight the overall better (original) content of video streaming services, the flexibility to watch videos when and where they want to and the fact that there is no advertising.

*"Of course, it's perfectly flexible [...] if I were watching a series on linear TV I would have to wait for it every week until the next episode is available, and that's definitely something that would keep me from watching such a series."* (Julian, 25)

*"[...] all those unnerving ads, they simply don't exist with video streaming."* (Vanessa, 23)



F-4: Usage intensity of OTT video streaming services



# The Fight for Subscribers

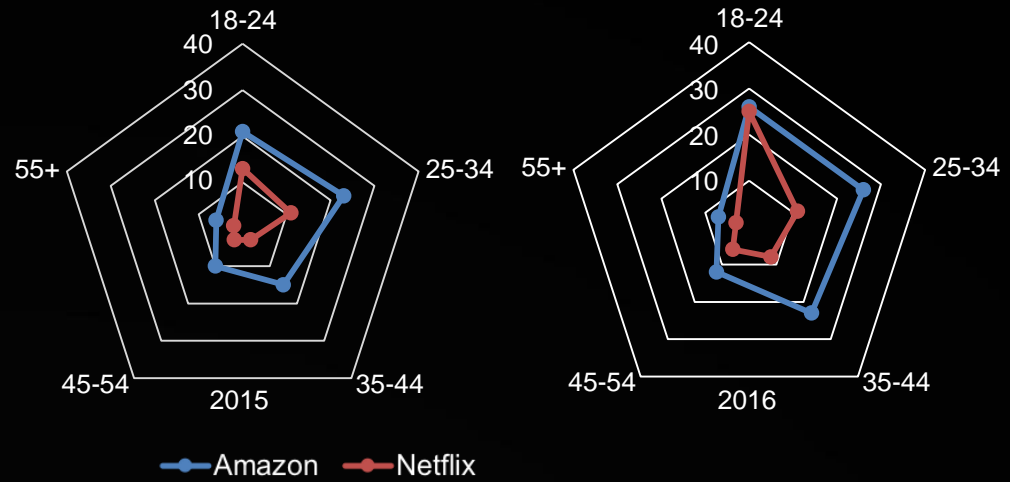
Original content, smart recommender algorithms and intensive marketing; that's how both Netflix and Amazon are fighting for new subscribers. While the means may be similar, the success of the two competitors is not.

Netflix used to lag behind Amazon Video in Germany in 2015 and 2016. From 2016 to 2017, however, Netflix was able to increase its number of subscribers dramatically across all age groups. Netflix was particularly successful among the age group 18 to 24 where they surpassed Amazon Video in 2017. With 25- to 34-year-olds, it was almost a tie at the end of 2017.

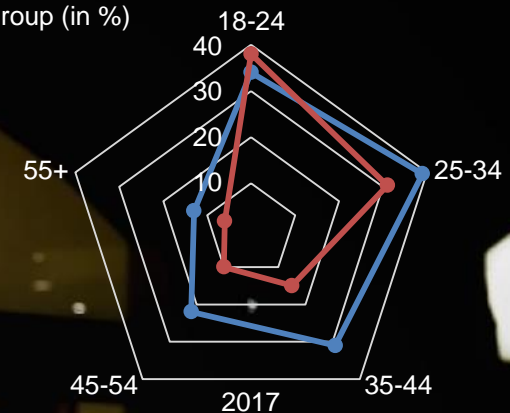
Again, the interviews shed some light on the reasons behind Netflix's success. In particular, interviewees underscored the fact that Netflix performs better than Amazon Video when it comes to usability, recommendations and original content.

*"[Netflix] is simply easier to use than Amazon; you can define your own lists and when you pick up any episode it starts right where you paused it the other day."* (Lisa, 23)

*"Amazon shows me too much stuff that doesn't really fit my profile."* (Nils, 21)

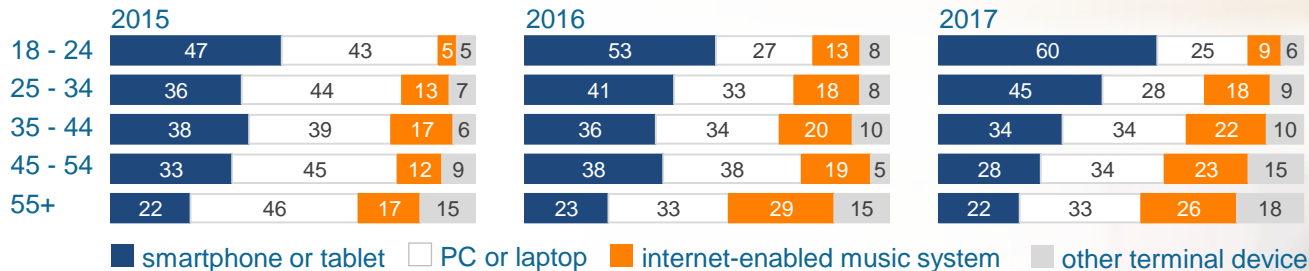


F-5: Share of users by age group (in %)



F-5: Representative surveys in Germany N=1,027 (2015); N=1,003 (2016); N=2,036 (2017) referring to Amazon Video and Netflix users.

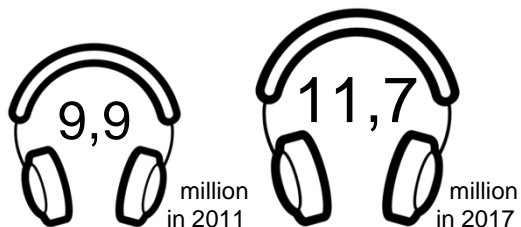
# Where the Music Plays



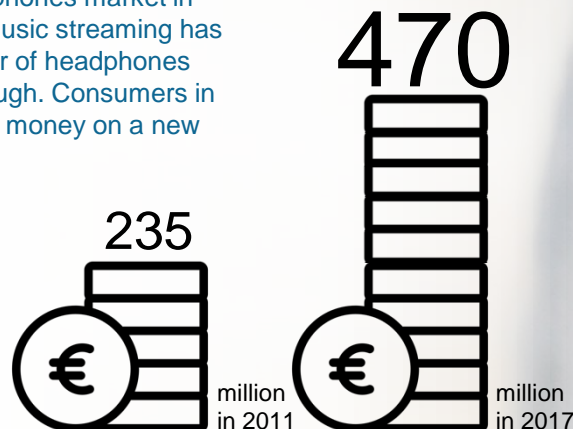
F-6: Devices used for music streaming (in %)

The smartphone remains the device of choice for most German consumers to listen to music. In particular, young consumers increased the share of streamed music enjoyed on their smartphones between 2015 and 2017. However, devices developed specifically to stream music from the internet are also being adopted increasingly by German consumers. PCs and laptops, on the other hand, are being used less frequently to stream music.

Together with the smartphone, all your favourite music can go everywhere with you. However, to actually enjoy music on the move, proper headphones are essential. The recent development of the headphones market in Germany indicates that indeed the trend towards music streaming has driven up revenues. Since 2011, the annual number of headphones sold has increased by 18%; revenues doubled, though. Consumers in Germany are ready to spend almost twice as much money on a new set of headphones than six years ago.



F-7: Number of headphones sold in Germany



F-8: Revenue from sales of headphones in Germany

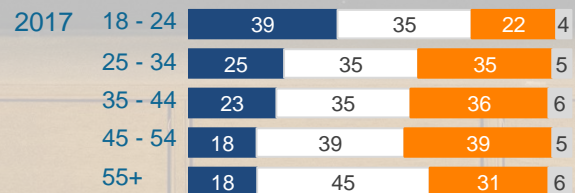
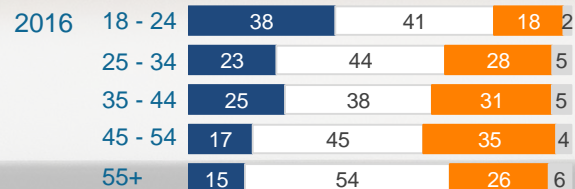
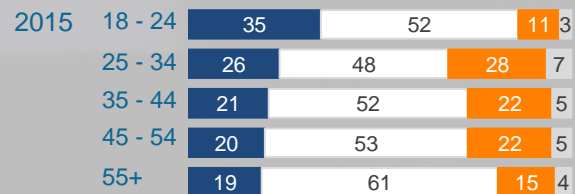
F-6: Representative surveys in Germany N=1,027 (2015); N=1,003 (2016); N=2,036 (2017) referring to users of music streaming services.

F-7, F8: gfu press releases and market figures; Icons: Andrew Cooper, Lee.





F-9: Share of German households using flat-screen TV (in %)



■ smartphone or tablet    ■ PC or laptop  
■ internet-enabled TV    ■ other terminal device

F-10: Devices used for video streaming (in %)

## Smart TVs Finally Connected

Most flat-screen TV sets can stream videos directly from the internet. Although they had conquered vast majority of living rooms in Germany (84%) already by 2016, many owners ignored the opportunity to connect their TV sets directly to the internet for a long time.<sup>1</sup> Are these times over?

At the end of 2017, one third of consumers in Germany 24 years or older were already using a smart TV to stream video content. It may be expected that this group of consumers will grow further in the near future. In the youngest age group, streaming on smart TVs is less prevalent, simply because fewer consumers own a smart TV at that age. Nonetheless, usage intensity of smart TVs for streaming video doubled also in this age group between 2015 and 2017.

*"Mostly my TV, my smart TV, that is, or the iPad. My smartphone I use rarely to watch videos. It's too small. So, it's not a lot of fun, because I can't see half of it." (Martin, 25)*

However, mobile video consumption was and still is an attractive alternative, especially for 18- to 24-year-olds. Large screens and storage capacity of current smartphones drive this trend.

*"When I am at school, where there is no smart TV or tablet, then I watch videos on my mobile." (Marie, 20)*



# Ready to Dive In?

Virtual Reality (VR) may soon make it possible to step into the shoes of a character in a series or a film. Are consumers in Germany interested in doing that? Our results reveal that around one in four of them would like to try this type of VR.

Whether or not one is ready to dive into another role depends strongly on age. While 45% of 18- to 24-year-olds would like to do it, only 13% of consumers 55 or older would like to take on the role of a character in a series or a film.

Psychologically, one can draw on various underlying motives to explain why people are interested in stepping into the shoes of a character different from themselves. While some seek to escape the constraints of their “real world” roles, others proactively intend to find new insights and inspiration for the roles they fulfil in their daily lives by assuming a new character in VR.



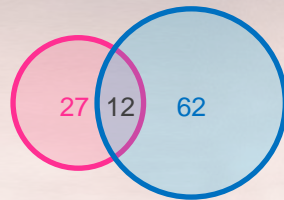


## Which Role to Take on?

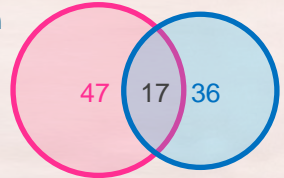
The idea of seeing the world through the eyes of the opposite sex is nearly impossible in real life. Augmented reality (AR) and VR may make this a lot easier in the near future. When it comes to choice of characters at least, women appear to be more interested in taking on the role of men than vice versa, as 53% of women name either a mix of male and female characters or solely male ones that they would like to take on using VR. In stark contrast, 84% of male respondents named solely male characters.

Overall, the choices of male and female respondents differ quite significantly. Curiously, only Big Bang Theory's Sheldon Cooper – hyper-intelligent but socially inept – attracts both men and women.

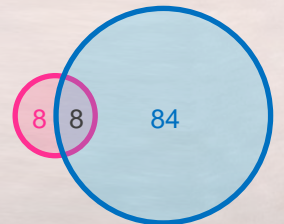
### Total



### Women



### Men



### Top3 Series

Game of Thrones  
The Walking Dead  
Tatort

### Top3 Chosen Characters

Daenerys Targaryen  
Sheldon Cooper  
Penny

### Top3 Chosen Characters

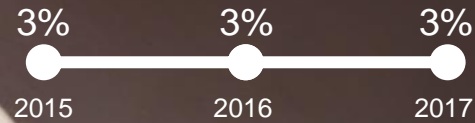
Sheldon Cooper  
Jon Snow  
Rick Grimes

F-12: Share of male and female characters chosen by respondents in VR (in %)





# One App for Everything



F-13: Zattoo: Share of users in Germany

Consumers may often feel overwhelmed by the sheer breadth of available services and content. An app that combines all audio-visual content in one neat user interface seems like the perfect solution.

*"The best thing would be to have Netflix, Amazon Prime and public broadcasters and maybe the odd private TV station in one app with the usability of a streaming service or a media library of a public broadcaster." (Kristina, 21)*

Still, service providers like Zattoo have yet to see growth in the German market. Why is that? The answer is that most consumers can satisfy their demand with a small number of online streaming services. Thus, they don't really 'suffer' enough to look for new alternatives.

*"Even when you combine Amazon and Netflix, there is something missing. Well, Game of Thrones. But, yeah, basically Netflix gives me all I want." (Jeanette, 25)*





# Conclusion

The results of the present study, which is our third one to analyse online streaming services usage patterns in Germany, emphasises the fact that these services are becoming increasingly popular. Notably, the growth of music streaming has slowed down recently. Only among 18- to 24-year-olds has the usage intensity of Spotify and similar services increased significantly again. The stagnation of Spotify's user numbers shows, however, that this increase is not due to new users of music streaming, but is more likely attributable to an intensified use by existing consumers.

Video streaming has developed completely differently. Our results show that both the number of users and the usage intensity increased sharply from 2016 to 2017. In Germany, Netflix profits the most from this trend. In fact, Netflix is now much closer to its main competitor Amazon Video than ever before. It has even overtaken the former clear champion in the age group 18 to 24.

Music streaming on smartphones seems to drive up revenues of headphone producers as it goes hand-in-hand with better devices and LTE mobile plans offering more data volume than ever. Notably, some pay monthly plans in Germany even offer zero-rating for music streaming. Additionally, headphones as a new status symbol can counter the trend of smartphones becoming harder and harder to distinguish if they are not hidden in one's pocket anyway.

Finally, the present study reveals substantial interest in AR and VR in Germany. These new technologies may provide a completely new format for consuming audio-visual content. Around one in four consumers in Germany would like to assume a new role with the help of VR. These results will require further attention from researchers in the future.



### ***About this study:***

The online survey for this study was conducted with three representative samples of 1,027 consumers between 30<sup>th</sup> November 2015 and 7<sup>th</sup> December 2015, 1,003 consumers between 30<sup>th</sup> November 2016 and 5<sup>th</sup> December 2016 and 2,036 consumers between 29<sup>th</sup> November and 5<sup>th</sup> December 2017 respectively by the international market research institute YouGov. The results were weighted to draw representative conclusions for the German population (age 18+). Additionally, 20 qualitative interviews were conducted in November and December 2017.

### ***About WIK:***

Founded in 1982, WIK (Wissenschaftliches Institut für Infrastruktur und Kommunikationsdienste) in Bad Honnef, Germany offers consultancy for public and private clients around the world. Its focus is on the telecommunication, Internet, post and energy sectors giving advice on policy, regulatory and strategic issues.

More information is available at: [www.wik.org](http://www.wik.org).

### ***About Fresenius University of Applied Sciences:***

Founded in 1848 by Carl Remigius Fresenius, and with its roots in the Fresenius Chemical Laboratory, the Fresenius University of Applied Sciences can look back on over 168 years of privately funded educational tradition in Germany. True to the intent of its founder, it combines teaching, research, and practical application.

More information is available at: <http://www.hs-fresenius.de/en>.