



Research brief, July 2021

# Let's stay home!

Communication behaviour and  
the use of streaming services in Germany

Serpil Taş  
Dr Lukas Wiewiorra  
Prof Dr Anna Schneider

## Authors of the study:



Serpil Taş  
Senior Economist | Markets & Perspectives  
Contact: [s.tas@wik.org](mailto:s.tas@wik.org)  
+49 (0)2224 92 25 96



Dr Lukas Wiewiorra  
Head of Department | Markets & Perspectives  
Contact: [l.wiewiorra@wik.org](mailto:l.wiewiorra@wik.org)  
+49 (0)2224 92 25 25

## Contact details of the research institutes:

WIK Wissenschaftliches Institut für  
Infrastruktur und Kommunikationsdienste GmbH  
Rhöndorfer Str. 68, 53604 Bad Honnef, Germany  
Tel.: +49 2224 9225-0  
Fax: +49 2224 9225-63  
eMail: [info@wik.org](mailto:info@wik.org)  
[www.wik.org](http://www.wik.org)

General Manager and Direktor: Dr Cara Schwarz-Schiling  
Chairwoman of the Supervisory Board: Dr Daniela Brönstrup  
Registered: Amtsgericht Siegburg, HRB 7225  
Tax No.: 222/5751/0722  
VAT No.: DE 123 383 795

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**Layout:** Karin Wagner (WIK)



Prof Dr Anna Schneider  
Professor of Business Psychology  
Contact: [anna.schneider@hs-fresenius.de](mailto:anna.schneider@hs-fresenius.de)  
+49 (0)221 97 31 99 715

Hochschule Fresenius – Fachbereich Wirtschaft & Medien  
Business School · Media School · Psychology School  
Im Mediapark 4c, 50670 Köln, Germany  
[www.hs-fresenius.de](http://www.hs-fresenius.de)

General Manager: Prof Dr Tobias Engelsleben, Sascha Kappes, Kai Metzner  
Registered: Amtsgericht Wiesbaden HRB 19044

## Is multihoming becoming the norm?

The fifth edition of our joint study with Hochschule Fresenius University of Applied Sciences examines not only the intensity of use of internet-based communication and streaming services, but also the simultaneous use of multiple services, known as multihoming. Our findings confirm that internet-based communication and streaming services continue to be successful. Video telephony, in particular, became increasingly prominent during the Covid-19 pandemic due to its rich and diverse interaction experience.



Nevertheless, most respondents remain loyal to traditional telecommunications technologies and use them alongside internet-based services. Thus, almost all users of communication services generally use more than one service. There are numerous reasons for using multiple services, including access to different functions, convenience and the possibility of reaching different social groups. Internet-based communication services are usually inexpensive, if not free, thus reducing the barriers for use of multiple services.

In contrast, streaming services are often subject to a fee. Although the willingness to pay for video streaming services is constantly increasing, only few consumers were willing to purchase multiple services at the end of 2020. Despite this, several new providers have launched streaming services in Germany in recent years or announced a launch for the future. It therefore remains to be seen whether these new players will be able to compete in the market in the long term and how the increasing fragmentation of the market will affect established services such as Netflix and Amazon Prime Video.

Dr Cara Schwarz-Schilling

## Between communication and entertainment



Our results show that the adoption rate of internet-based communication services is currently around 91%. In addition, almost all respondents continue to use traditional communication services such as fixed-line and mobile telephony as well as text messaging. This illustrates that most respondents use conventional and internet-based technologies in a complementary way and thereby typically use more than one service. Around 95% of communication service users engage in multihoming. On average, respondents use around 5.4 services. Our results suggest that multihoming is mainly stimulated by product differentiation and innovation as well as a heterogeneous circle of contacts. However, multihoming is inhibited by strong network effects. Multihoming behaviour may also be negatively influenced by the additional effort required to use multiple services in parallel.

With regard to streaming services, multihoming is less common and less pronounced. Despite a growing willingness to pay, the willingness to purchase multiple streaming services seems to be low.

For this research brief, a representative survey of 3,090 consumers in Germany was conducted to examine the use of internet-based communication and streaming services. To interpret the results, we also drew on insights from interviews and previously published research papers. The surveys and the majority of the interviews were conducted in the fourth quarter of 2020 and thus after Germany's first wave of the Covid-19 virus.

The interviews and survey data confirm the ongoing success of internet-based communication and streaming services and the rising level of intensity regarding the use of each service. We have already reported in the past that internet-based communication services have gained significant importance as a means for interpersonal interaction but without completely replacing traditional communication services. Our current study also reflects this trend. The vast majority of respondents continued to use both conventional and internet-based communication technologies at the end of 2020. On average, consumers use around 5.4 different services.

A key focus of this research brief is to examine multihoming in communication services and the factors that promote or inhibit this behaviour. It also examines the development of the video and music streaming market as well as consumers' willingness to pay for streaming services. Lastly, the brief looks at the market position of the most popular video streaming services: Netflix and Amazon Prime Video.

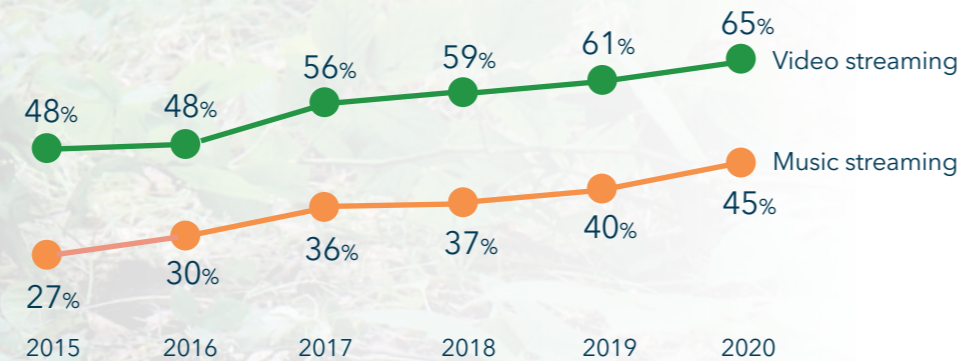


# Share of internet-based services continues to rise

A direct comparison of the development of video and music streaming services shows that video streaming continues to stay ahead. In 2020, almost 60% of the video content consumed was obtained via the internet. Music, on the other hand, continued to be played to a greater extent via traditional media formats.

Younger consumers stream far more frequently than older consumers. There has recently been a considerable increase in music streaming among consumers aged 18 to 24 (+27%). This shows that the trend observed in our last survey is continuing.

In general, however, the growth in users of internet-based entertainment is levelling off. The days of strong growth are over.



**Consumers in Germany who stream at least 50% of the content they consume**

Data based on WIK's annual online survey. N=1,027 (2015), 1,003 (2016), 2,036 (2017), 3,184 (2018), 3,016 (2019), 3,090 (2020). Analysis excludes "no answer"/"don't know" responses.

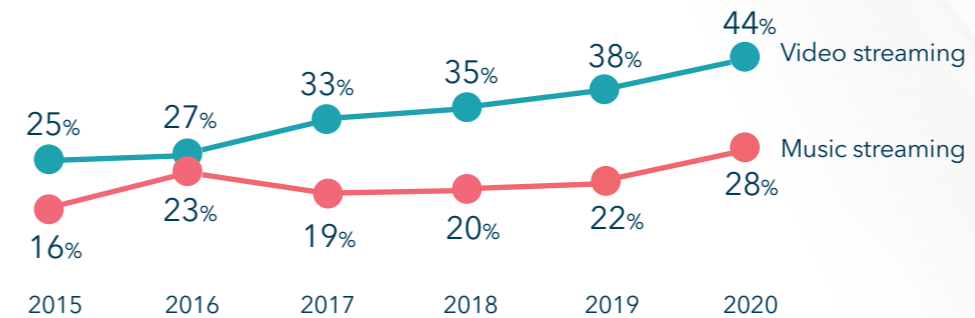
# More time at home, more paying customers?

Music streaming services often feature a "freemium" subscription model. This means that basic services can be accessed free of charge as long as the user accepts advertising. Alternatively, a paid subscription can be purchased and then the user does not see advertisements.

Although the willingness to pay has been rising continuously since 2015, very few users sign up for a paid subscription with their music streaming provider. On average, more than 50% of music streaming users do not pay any fees to their music streaming provider.

The use of video streaming services is generally charged for. Although the proportion of consumers willing to pay has almost doubled since 2015, only a few consumers opt to use several of these paid services.

On average, users currently access 1.6 different services, although the catalogues of providers are becoming more diverse as new streaming providers enter the market.



**Share of consumers willing to pay (video and music streaming) in Germany**

Data based on WIK's annual online survey. N=1,027 (2015), 1,003 (2016), 2,036 (2017), 3,184 (2018), 3,016 (2019), 3,090 (2020). Analysis excludes "no answer"/"don't know" responses.

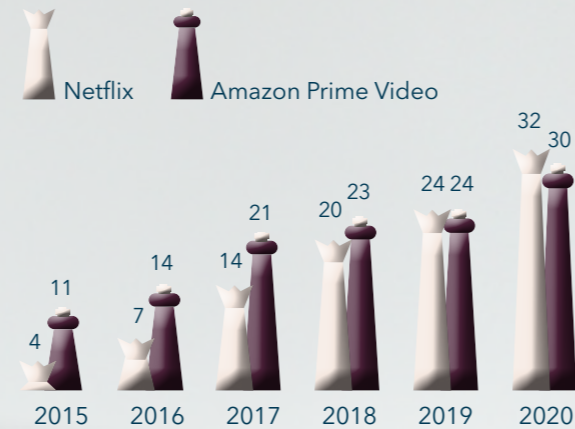


# Netflix versus Amazon Prime Video

Netflix and Amazon Prime Video are among the most widely used video streaming services in Germany. The number of users of both services has been rising continuously since 2015. In order to reach customers, however, the two providers use different sales models. While Netflix primarily markets standalone subscriptions, Amazon bundles its service with other elements, such as an annual flat-rate shipping fee and access to music streaming.

In terms of usage, Netflix lagged behind Amazon Prime Video in Germany by a considerable margin until 2018. Netflix remains particularly well represented in the younger age groups, where the service has made massive gains since 2018. At the same time, Amazon is increasingly losing its appeal for customers aged between 25 and 34.

According to our survey results, Netflix's share of monthly users in 2020 surpassed that of its main competitor for the first time.



Share of monthly users of Netflix and Amazon Prime Video (in %)

Data based on WIK's annual online survey. N=1,027 (2015), 1,003 (2016), 2,036 (2017), 3,184 (2018), 3,016 (2019), 3,090 (2020). Analysis excludes "no answer"/"don't know" responses.

"Amazon Prime Video is included with the Prime membership and therefore you check it out sometimes." (Tamara, 25)

"Netflix definitely, but Amazon, I don't think I'll be using it when I'm not a student anymore." (Kathrin, 24)

"Diversity and quality of content. (...) If you watch a series now, you can stop at any point, so to speak, and automatically start again at the point at which you paused." (Hans-Werner, 61)

"Then I would actually pick Netflix because Netflix is not limited to its own content like Disney+, and [because] the portfolio, the sum or the amount of movies and series available is greater overall than anywhere else." (David, 36)

## Who's ahead?

Netflix and Amazon Prime Video are the most popular streaming providers in Germany. In a direct comparison, Netflix is ahead in terms of shares of monthly consumers and also has more loyal users.

Amazon Prime Video is valued most as an "add-on" to the free shipping option than as a standalone video streaming service. Target groups that benefit from a discount (e.g. student rates) in particular show a willingness to leave as soon as costs threaten to rise.

This reduced customer loyalty is also reflected in other consumer groups. Netflix has established itself as the provider that best meets the demand for diversity, exclusive content and user-friendliness from the customers' perspective.

Although consumers are increasingly willing to pay for streaming and multihoming, they still want to be provided with as comprehensive a service as possible by a single provider. Faced with the choice of being able to use only one provider, Netflix clearly outshines the competition.



# A boost for videoconferencing providers

In 2020, interpersonal communication was significantly influenced by the Covid-19 pandemic. The consequence of lockdowns, social distancing and other regulations was that personal interaction was significantly reduced for most people. These drastic changes affected consumers' private and professional lives.

Although traditional fixed-line and mobile telephony continued to be preferred over internet-based telephony via Skype, WhatsApp and others, these internet-based services also enjoyed growth in usage according to our latest survey results.

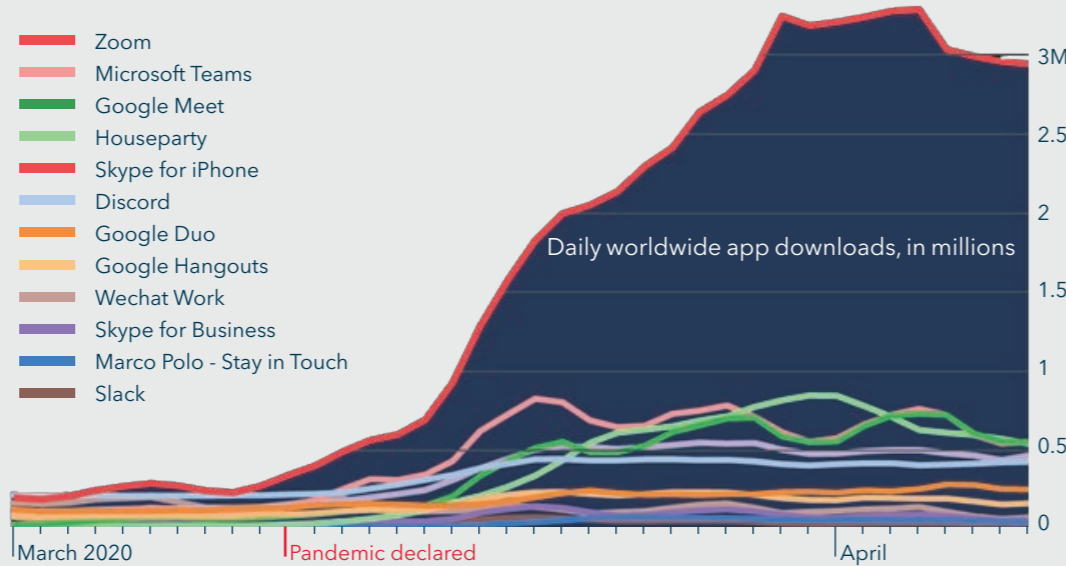
In particular, providers that enable video telephony and thus offer a richer interaction compared to texting or traditional telephony have seen huge leaps in user numbers in the past year. In the private sphere, social interactions, especially with close friends and relatives, were enabled with the help of video telephony:

*"Simply because you couldn't meet people and you might have been more likely to call them via video on the weekend when [otherwise] you would have met in person at a café somewhere or at someone's house."* (Oliver, 27)

*"Because you can meet each other less in person, this way you might actually see the other person. (...) Only with people who are already close to [you] anyway."* (Selina, 24)

## Covid-19 / Zoom-a-Zoom-Zoom

There's only one winner in the work-from-home meeting app wars



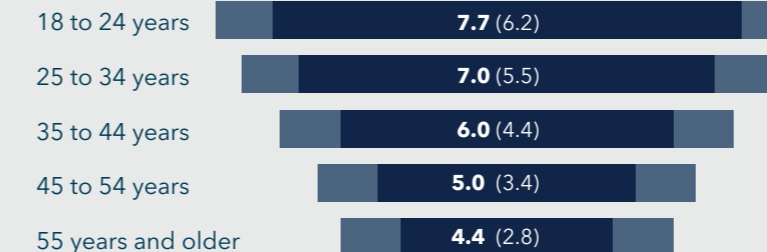
Source: Apptopia, Ben Schott, zitiert nach BloombergOpinion

## Would you like another one?

Consumers in Germany generally communicate via more than one channel; the average for 2020 was 5.4 different services. Younger consumers use almost twice as many services as older consumers.

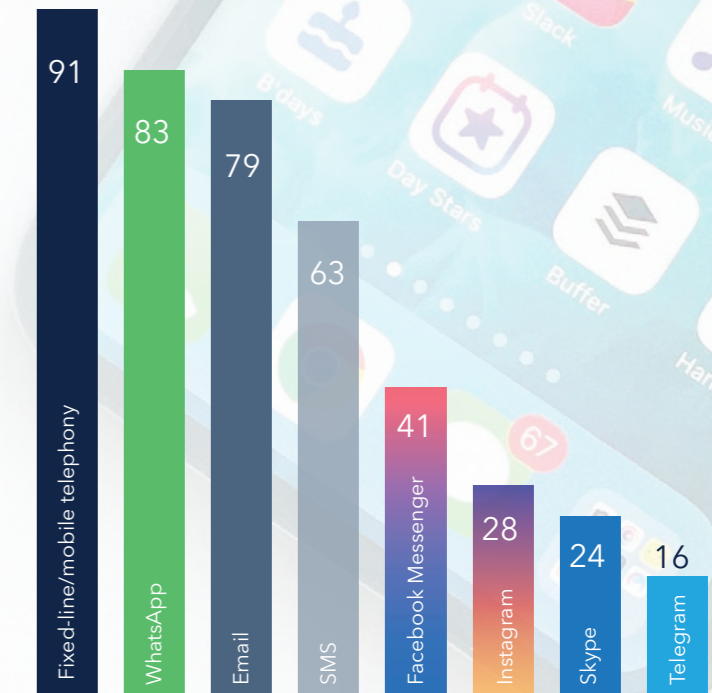
For most consumers, fixed-line and/or mobile telephony as well as email are still the norm. However, WhatsApp has also become a significant communication channel for both younger and older consumers: a total of 83% of consumers had used the service within the four weeks prior to the surveys. Facebook's other services are also among the most popular in Germany. For example, Facebook Messenger was used by 41% of consumers and Instagram by 28%, both of which are clearly ahead of Skype (24%) or Telegram (16%). However, after the announcement of new Terms and Conditions for WhatsApp at the beginning of 2021, alternative services such as Telegram, Threema and Signal saw massive increases in downloads.

### Number of services used<sup>1</sup> by age group (excluding trad. services)



Data based on WIK's annual online survey. N=3,090 (2020). Analysis excludes "no answer"/"don't know" responses. (1) Services considered: fixed-line/mobile telephony, SMS and 26 other Over-The-Top (OTT) services.

### Communication service usage in Germany in %





# Where there's a will, there's a way

Average number of services used



Average share of private contacts communicated with via each service (in %)

According to previous studies, multihoming, the simultaneous use of different communication services, is often coupled with maintaining contacts belonging to different social groups (family, friends, club members, etc.).<sup>1</sup> In addition to issues related to social proximity or distance, the accessibility of individual contacts via certain channels has an impact on services used. A highly heterogeneous circle of contacts preferring different communication services can thus lead to consumers using more services in parallel.

For example, our survey showed that the number of services used increases by an average of 0.7 for each additional social group with which private interaction takes place. Similarly, the larger the number of contacts reachable via a single service, the fewer services will be used.

Data based on WIK's annual online survey. N=3,090 (2020). Analysis excludes "no answer"/"don't know" responses. Services considered: fixed/mobile telephony, SMS and 26 other OTT services. (1) Arnold, R., Schneider, A., & Lennartz, J. (2020): Interoperability of Interpersonal Communications Services - A Consumer Perspective, Telecommunications Policy, 44(3), 101927; Arnold, R., & Schneider, A. (2017): The Functionalities of Success: A Psychological Exploration of Mobile Messenger Apps Success, Paper presented at the 45th TPRC Conference, 8th - 9th September 2017, Arlington, VA; Arnold, R., & Schneider, A. (2017): An App for Every Step - A Psychological Perspective on Interoperability of Mobile Messenger Apps, Paper presented at the 28th ITS European Conference of the International Telecommunications Society, 30th July - 2nd August 2017, Passau.

Furthermore, the features provided within the services are also a driving factor in multihoming behaviour. The more distinct the features are, the more likely people are to use several different services.

However, multihoming is restricted by the greater effort involved in handling multiple services. Consumers who only use one service perceive using multiple services as "cumbersome" or "inconvenient".

"You actually approach the lowest common denominator and then you say 'Okay, there's an overlap, it just fits with everybody' and that's when one of those services is used." (Andreas, 48)

"I would say that it depends on the person and the time. (...) If I were to call my grandma now, I wouldn't write her a message, I would call her. With friends, I would just prefer to write a message and then call as a second priority." (Kim, 22)

Data based on WIK's annual online survey. N=3,090 (2020). Analysis excludes "no answer"/"don't know" responses. Services considered: fixed/mobile telephony, SMS and 26 other OTT services. (1) At least two different services are used.

Agreement from "strongly disagree/do not agree at all" (1) to "strongly agree/agree completely" (5)

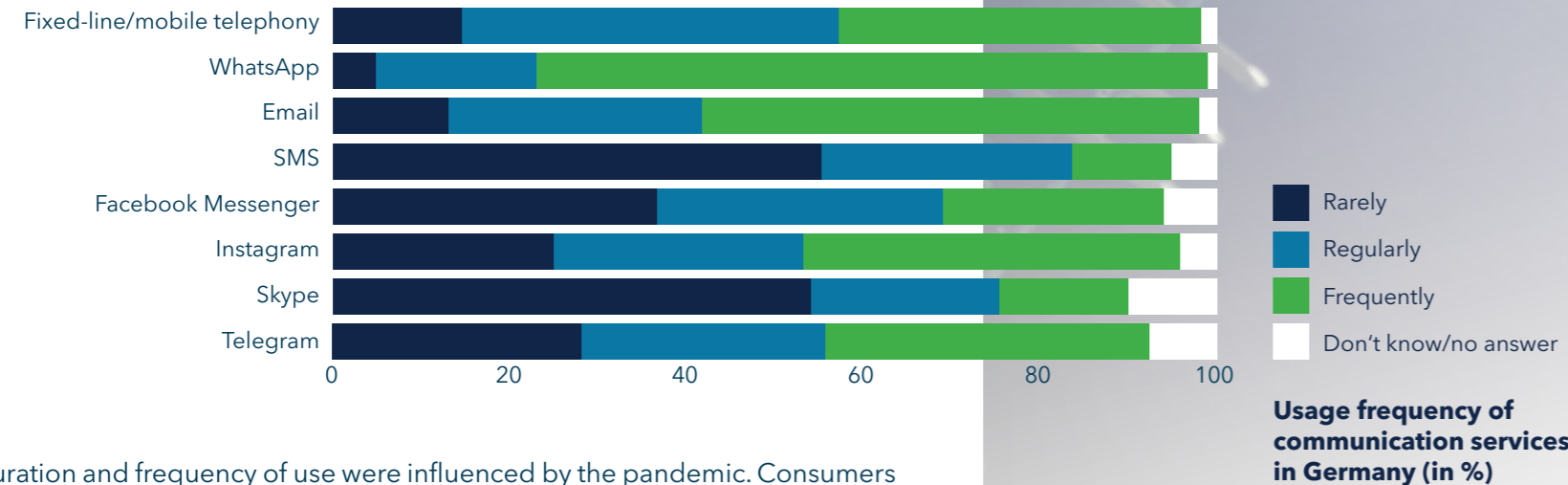
Users of multiple services<sup>1</sup>  
Users of one service





# Always-on during the pandemic

Consumers generally use communication services a lot. WhatsApp in particular is used very frequently. Around 68% of WhatsApp users stated in our survey that they use the service several times a day. Facebook's other services are also used often, especially by young consumers. In comparison, fixed-line and mobile telephony are used less frequently: slightly less than 30% stated that they use these services several times a day.



Duration and frequency of use were influenced by the pandemic. Consumers said they used communication services significantly more compared with the time before the pandemic broke out. This was particularly noticeable for work-related communication.

Data based on WIK's annual online survey. N=3,090 (2020). Distribution refers to users of the respective services.

## Outlook

The intensity of use of internet-based communication and streaming services continued to increase in 2020.

Since our initial market surveys in 2015/2016, however, there has been little change in the market dynamics to date, although the variety of services available continues to increase. For example, Facebook's communication services, which include WhatsApp, Instagram and Facebook Messenger, continue to lead the way in their market segment. Nevertheless, the more recent development in connection with WhatsApp shows that consumers are quite willing to leave this popular service. Following the announcement and proposed enforcement of the new terms and conditions, millions of users turned to alternative services at the beginning of 2021, according to media reports. Services such as Telegram, Threema and Signal benefited from this, with massive increases in their download numbers.<sup>1</sup> Whether these success stories will continue in the longer term will become clear in future studies.

In terms of video streaming, Netflix and Amazon have been on the top for years. Nevertheless, Disney+ has been able to capture an ever-growing market share since its launch in Germany in March 2020. According to our research, within less than a year of its launch in Germany, the user share for Disney+ was 13%. According to more recent media reports, the service's market share is currently even higher, at around 16%, with Amazon Prime Video and Netflix losing market shares.<sup>2</sup>

However, providers are increasingly focusing on the production and marketing of exclusive content, contributing to a growing fragmentation of the content offering. Currently, the increase in willingness to pay for video streaming services cannot keep pace with the growing number of providers. The increasing differentiation of providers via exclusive content combined with the growing number of providers suggests significant changes in the future.

(1) <https://www.digitalinformationworld.com>; <https://www.theguardian.com>; <https://www.focus.de>;  
 (2) Market analysis by justwatch.com quoted from <https://www.4kfilme.de>.



### **About this study:**

The online survey for this study was conducted with 3,090 consumers in the last quarter of 2020 by the international market research institute YouGov. The results were weighted to draw representative conclusions for the German population (age 18+). Additionally, 45 qualitative interviews were conducted in the autumn of 2020.

### **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.

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