



Research brief – September 2019

# Got the message?

Communication behaviour in Germany

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# Imprint

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# Foreword



## Lots of users, little revenue?

Today, communication takes place on our smartphones and tablets – anywhere and anytime. On their devices, consumers use various applications complementarily to communicate with different groups of acquaintances or to use specific functions. The majority of these applications can be downloaded and used without consumers having to pay for them. Thus, consumers usually do not think twice about downloading and using these applications. Consequently, we are not surprised to see an increase in usage intensity of mobile messaging applications.

However, the fourth edition of our study on communication behaviour in collaboration with Hochschule Fresenius University of Applied Sciences clearly shows that growth rate of mobile messaging applications usage intensity is slowing down. This suggests that, in Germany at least, the times when it was enough to present more registered users every quarter to keep investors happy may be drawing to an end. Consequently, this study sets out to shed light on the monetisation of mobile messaging applications.

Unlike traditional telecommunications providers, companies offering mobile messaging applications seem to have figured out that combining various services and functions will work their advantage. So, we expect to see Google, Facebook and others further enhancing their applications with payment systems and authentication functions. We will have to wait and see though if traditional telecommunications providers can find suitable answers to such innovations.

Dr Iris Henseler-Unger





## In need of sharp ideas

With billions of users but very little revenue, it is not just OTT service providers that have to be profitable; traditional telecoms operators need to make money too. Unlike traditional providers of communications services, OTT providers have successfully established additional functions within their applications that enable them to position themselves as intermediaries and tap complementary revenue sources.

As the present study underscores, communication is happening more and more online. In the same vein, the technology behind traditional telecommunications services depends increasingly on the internet protocol. Very soon, traditional telecommunications services and OTT services will be difficult to distinguish from each other, at least on a technical level. Sharp ideas will be required in terms of how to handle this evolution. Presumably, OTT providers may be better equipped for an increasingly level technological playing field as their business perspective is already global by default.

However, traditional telecoms operators still control the internet access and thus the initial consumer interface and usually their email service too. They will have to reap the benefits of this position.

# Introduction

The ways we communicate change constantly. The fourth edition of our research brief on communication behaviour in Germany traces these changes and sheds light on the long-term evolution in usage patterns of communications services. So-called over-the-top (OTT) services play an increasingly important role as complementary means of communication next to traditional telecommunications services. This key result transpires from all our previous research briefs.

The present research brief differs from the previous ones as it gives rise to doubts about the infinite growth potential of WhatsApp, Instagram and similar services. With this in mind, the question of how to generate revenue from the existing users is more pressing than ever before if the providers of these services want to continue riding the wave of success. As part of their strategy, some providers may consider making their individual services interoperable in order to increase the number of addressable consumers even further. In this research brief we explore these questions and investigate how German consumers may react to some of the potential strategies to make OTT services profitable in the near future.

To this end, we conducted a representative survey of 3,184 consumers living in Germany.

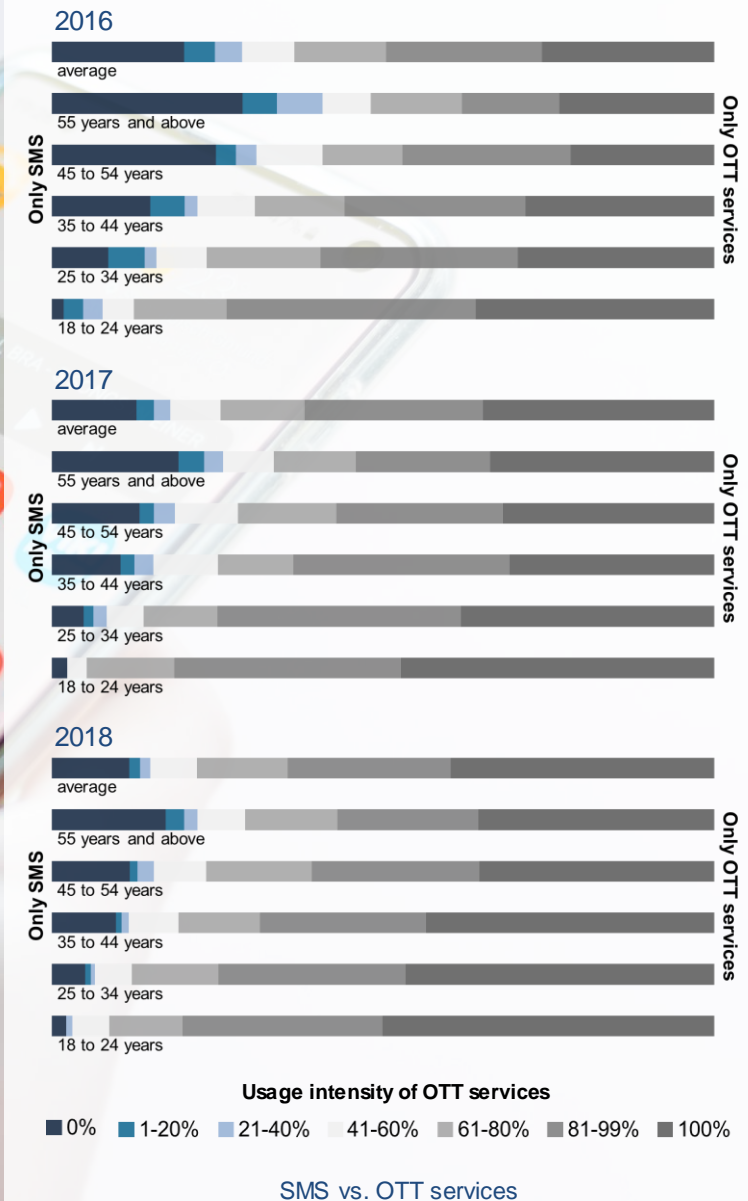


# Is the growth coming to an end?

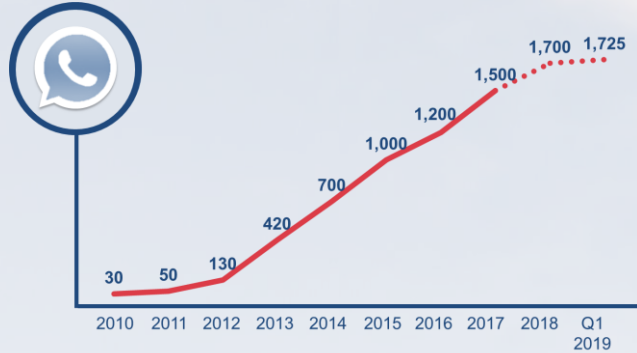
The number of users of OTT messaging services in Germany is still growing. However, this growth has slowed down substantially in most age groups compared to previous years. In our survey, around 87% of respondents stated that they have texted or sent other messages on WhatsApp, Instagram, Facebook Messenger and similar services. One year before, the figure was 80%. Looking back over a longer period, the group of users who rely solely on OTT services for messaging has shown particularly strong growth. In 2016, only 26% of consumers in Germany had turned their back on SMS completely. Two years later, 40% of respondents use only OTT services.

Young consumers are still in the lead when it comes to OTT services usage. In 2018, 95% of 18- to 34-year-olds used OTT services for more than half of their messaging needs. However, older consumers are catching up. In 2018, 85% of respondents aged 45 and older stated that they use OTT services to send and receive messages.

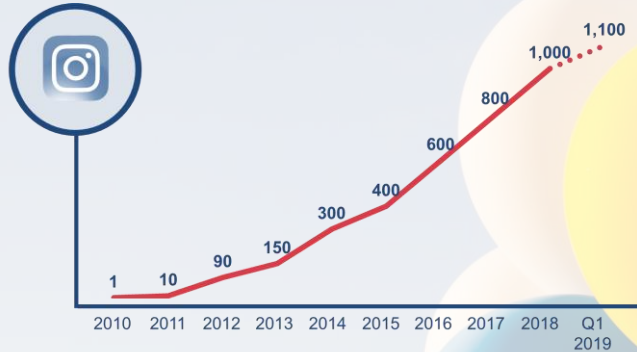
It is obvious nonetheless that compared to previous years there is no substantial increase this year in usage intensity of OTT services for all age groups except the 35- to 44-year-olds. This might indicate the beginning of saturation for these services in Germany and thus the end of the rapid growth of recent years for WhatsApp and similar services.



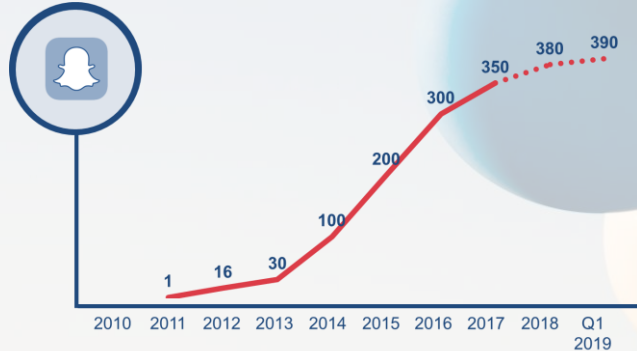
## WhatsApp



## Instagram



## Snapchat



— Monthly Active Users (in millions)

## Up in the air

Globally, OTT services remain very popular. WhatsApp grew between 2012 and 2017 almost linearly. By the end of this five-year period, the service had 1.5 billion MAUs. In particular, the increase in internet adoption among Indian consumers has probably boosted WhatsApp's number of MAUs further. However, WhatsApp has refrained from publishing any official MAU figure in recent years. According to our own estimate, there are currently a little more than 1.7 billion MAUs of WhatsApp worldwide. Compared to the 8.2 billion mobile subscriptions globally, virtually all of which come with a default SMS service included, this is still a relatively small number.

In 2018, Instagram also hit the 1 billion MAUs mark. The service is particularly popular with young consumers. According to our own estimates, currently 1.1 billion users post pictures, follow others or communicate via the service at least once a month.

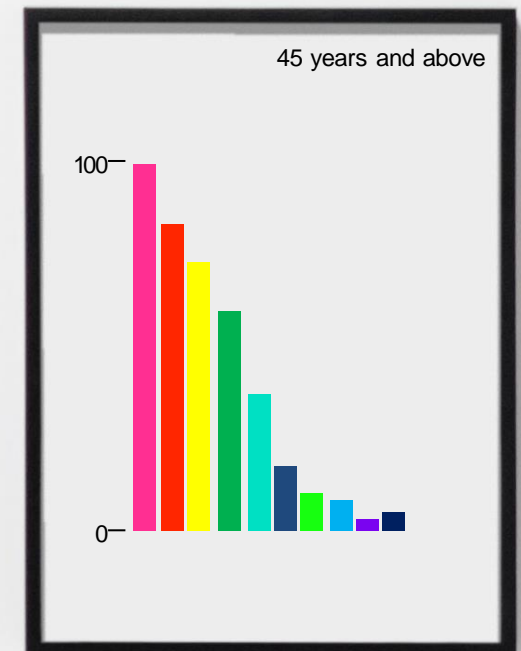
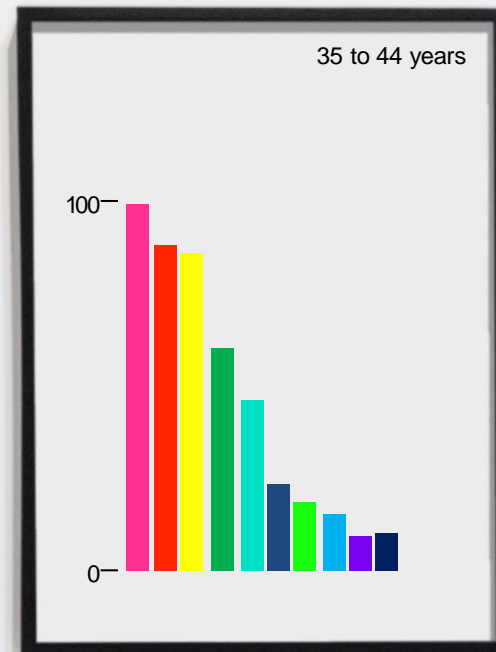
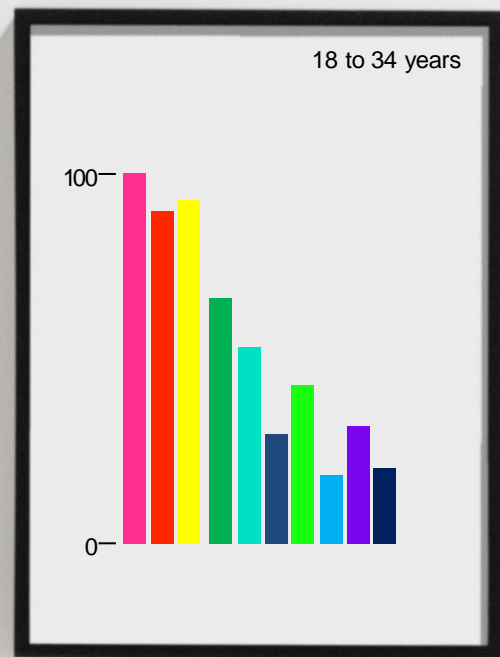
The number of Snapchat users has stagnated over recent years. Nonetheless, the service is an interesting one to explore in more detail as it is one of the most innovative, experimenting constantly with new business models. While OTT services such as LINE in Asia rely on stickers and other in-app purchases, Snapchat has expanded its collaborations with other OTT actors, successively crafting its own position as an important platform intermediary. Indeed, a service needs much more than just a lot of users to be successful and profitable in the long run. Otherwise, it is only hot air that remains.

# Colourful communications

Consumers in Germany use on average 4.9 services to communicate. Among them are virtually always landline and mobile telephony as well as email. WhatsApp is part of the default mix for many, especially young consumers. In general, they use a wider variety of services in parallel than older consumers. This is particularly true when it comes to Instagram and Snapchat.

Usage of communication services in Germany according to age groups

- Landline or mobile telephony
- Email
- WhatsApp
- SMS
- Facebook Messenger
- Skype
- Instagram
- Twitter
- Snapchat
- iMessage





## Would you like to receive a WhatsApp from any Instagram follower?

Using various applications for interpersonal communication next to each other is common practice also for the three popular services offered by Facebook – WhatsApp, Facebook Messenger and Instagram. Recently, Facebook's alleged plans to make the messaging functions of these applications interoperable made the headlines. If they did, anyone using at least one of the three services could exchange messages directly with anyone else registered on one of the three services. So far, there are no insights into how many users would be affected by such a new interoperability or how they would likely react to it. We seek to shed some light on these two issues.

In Germany, around half of the consumers who were using at least one of the three services at the end of 2018 indeed utilised only one out of the three. The majority of this group used WhatsApp. The other half of users relied on at least two out of the three services. Approximately a third of the consumers considered here used all three applications.

An extension of addressable relevant contacts would affect only around half of the consumers considered here. But interoperability by default works in both directions i.e. everyone who is registered with a service other than oneself could contact the other even on the different platform, even though one might have consciously decided against using the service of the sender of the message. This might incline some users to leave the applications offered by Facebook behind altogether. A notable consumer harm could also emerge for those who use two or all three services alongside each other. As we showed elsewhere, this multi-homing usually has the aim of proactively separating different groups of social contacts or audiences from one another. Interoperability would evaporate these boundaries relied upon by consumers and would probably force users to develop a new set of coping strategies to maintain separation of social groups.



<sup>1</sup> Kroon, P. & Arnold, R. (2018). Die Bedeutung von Interoperabilität in der digitalen Welt – Neue Herausforderungen in der interpersonellen Kommunikation. WIK Diskussionsbeitrag Nr 437. Bad Honnef: WIK.  
<sup>2</sup> Survey n=1647.



# The long and winding road to monetisation

## Conversational Commerce

Companies no matter their size should be available for their customers via messaging services. Many requests can be handled by chatbots more efficiently than by human agents. This opens a potential revenue stream for OTT actors who provide these chatbots as a service.

## Snapchat

Shoppable reality – simply taking a picture of a pair of trousers and purchasing them directly online. Snapchat enables this in collaboration with Amazon. They receive a share of the revenue from the purchase for their intermediation.

The function is so far only available in the US. Besides additional revenue, these “snaps” generate relevant insights into consumers via the metadata collected around the purchase. Ultimately, these data can help to train other algorithms, which in turn may enable new innovative functions.

## Application-to-Person (A2P) Messaging

TAN authentication, boarding passes and direct marketing are only a few examples for messages for which companies have a high willingness to pay to engage directly with consumers. Currently, the majority of these messages are sent via SMS. But WhatsApp, Viber and other OTT services are starting to gain a foothold in the A2P messaging market whose size is estimated at US\$11.9 billion globally.<sup>1</sup>

<sup>1</sup> <https://www.tatacommunications.com/wp-content/uploads/2017/06/an-A2P-messaging-monetisation-study.pdf>

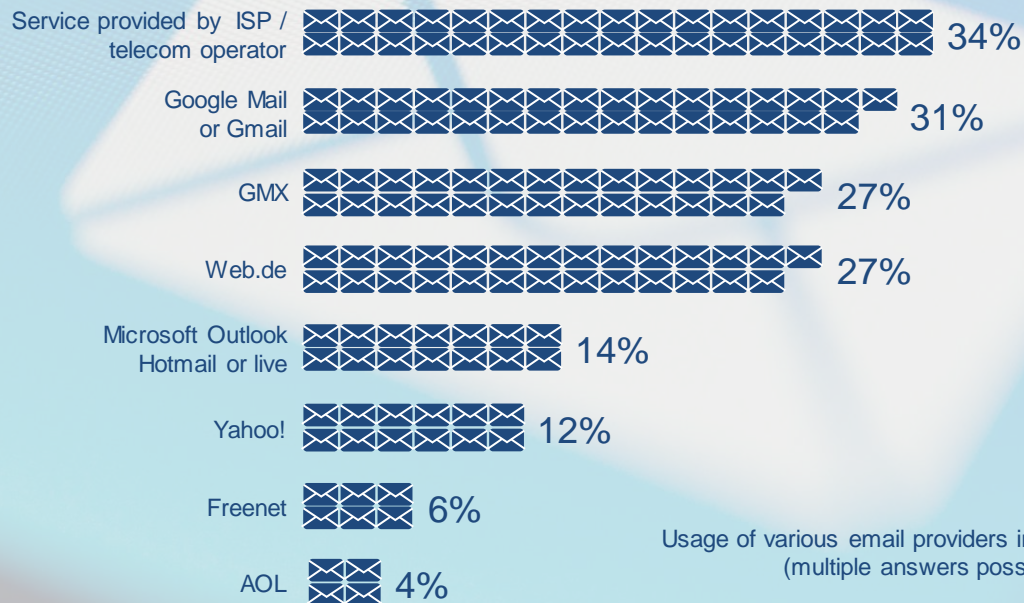


# Email – A missed opportunity?

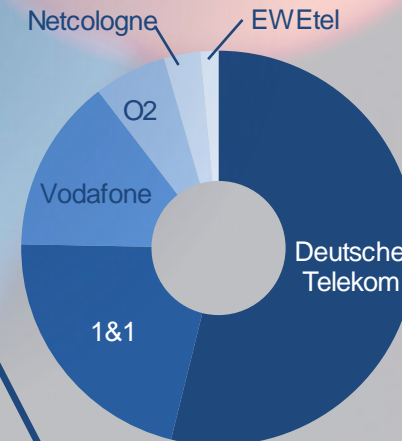
Virtually no one thinks of email in relation to OTT services, although it is and remains the most widely used OTT service. On average, 84% of consumers in Germany use at least one email service monthly. Among them, the email services offered by the internet service providers (ISPs) are particularly popular. The largest group (34%) of respondents uses such a service which is typically offered in the bundle with the internet access.

In Germany, ISPs have direct contact with a large share of consumers. Often these are the same individuals who receive telephony and SMS services from the same ISP or are even on the same contract as the internet access and email service. Evidence that traditional telecommunication providers have reaped the benefits of this customer access is scarce. Just like with mobile messaging applications, OTT providers were much more successful in combining the communication function of their e-mail services with other services and offering advertising space.

On average, consumers use **1.7** email services



Usage of various email providers in Germany  
(multiple answers possible)





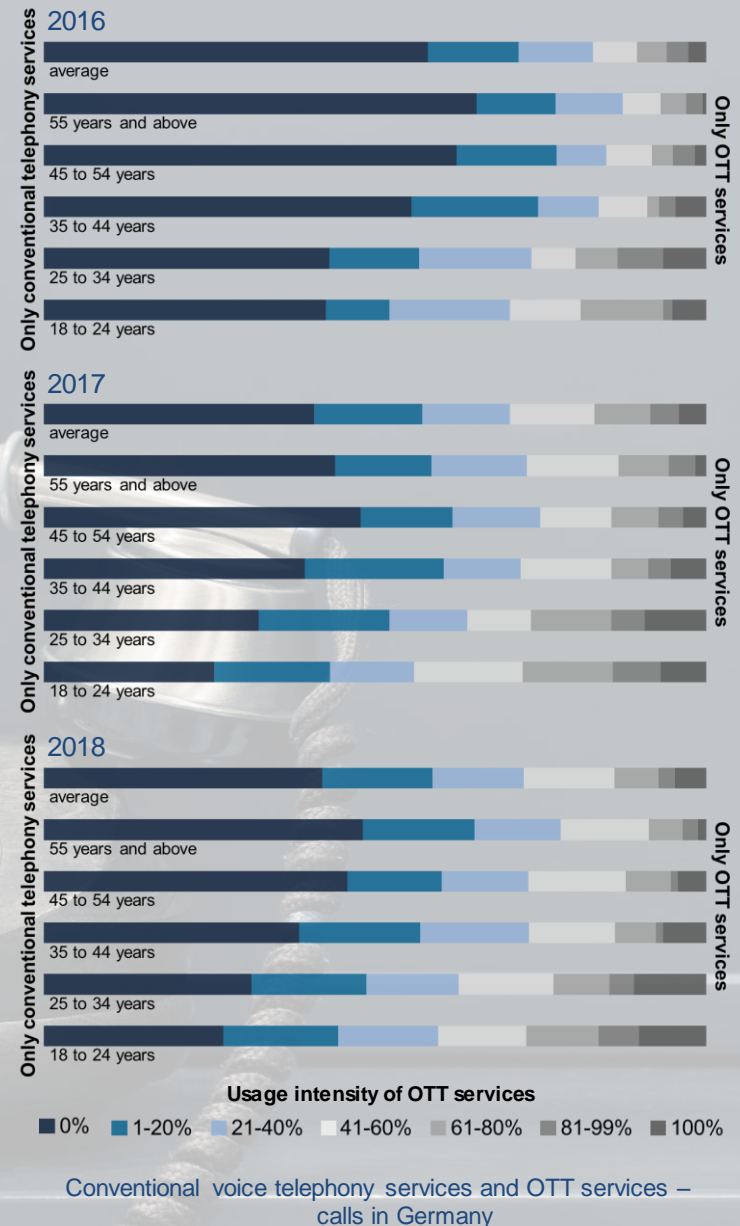
# Traditional chatterboxes

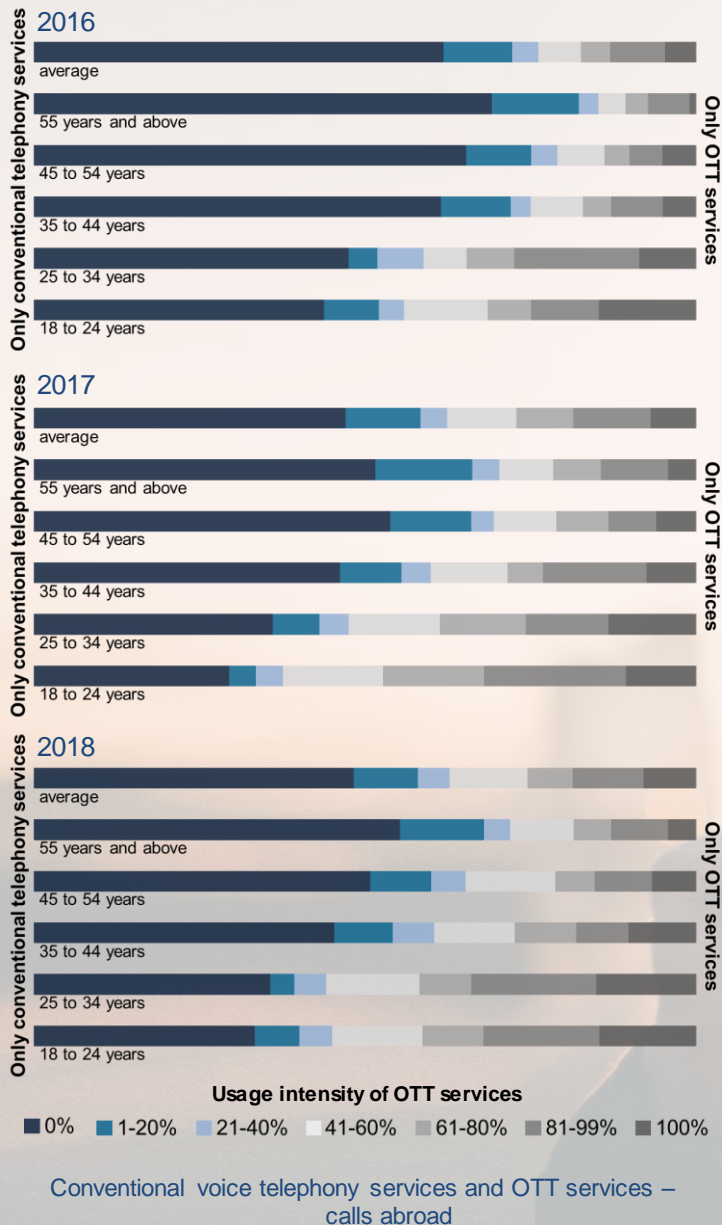
Unlike short messages for which OTT services can still claim some usage increase, consumers in Germany still prefer landline and mobile phone calls over Skype or WhatsApp calls when they want to speak with someone else across a distance. In 2018, on average more than 40% of respondents rely solely on traditional phone calls.

A comparison of the age groups shows marked differences. In particular, 45-year-olds stated that they use only landline or mobile telephones for making calls. Younger consumers (18 to 34 years old) were more open to OTT service usage. However, even they use these services alongside traditional phone calls in most cases.

Despite this overall inclination towards OTT services, one in three consumers in the 18 to 34 age bracket stated that they rely solely on traditional services. The share of those who claimed to use only OTT services for their calls within Germany is still below 10 %.

In summary, there is little difference between the usage patterns registered in 2017 and 2018. This indicates a possible saturation for OTT services.





For calls abroad, it is obvious that fewer consumers rely on traditional landline or mobile calls than for calls within Germany. A plausible reason for this difference is first and foremost the relatively high cost of calls abroad. This is particularly true for calls outside of the European Union. Using OTT services can reduce the cost of calls substantially, or even to zero in some cases. Speaking to someone and possibly using additional features such as video telephony can thus be cheaper and more comfortable for consumers than using the phone.

Between 2017 and 2018, the number of consumers who relied only on traditional phone calls even for calls abroad increased. "Roam Like at Home" as well as the regulation on intra-EU calls have probably had a positive effect on consumers' intention to use traditional phone calls.



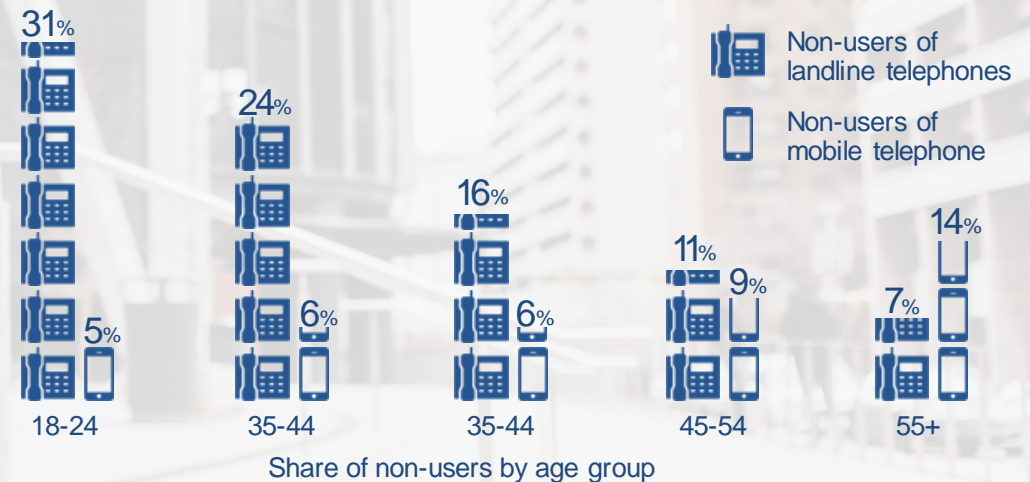


# Who is picking up the phone?

The simple traditional phone call is still the most commonly used service for telecommunication in Germany. Today, mobile phones are the dominant device to make such calls. The landline phone is becoming marginalised, especially by young consumers.

Within the youngest age bracket of respondents, almost one third of consumers were no longer using a landline telephone by the end of 2018. Among the 35- to 44-year-olds, every fourth consumer does not touch a landline phone anymore. On the other hand, almost all consumers who are 55 and older (93%) use their landlines. But even among these consumers, only 14% do not use a mobile phone.

Roughly 30 years after the first affordable mobile telephones were introduced, it seems as if this technology may fully substitute the telephone at home. This substitution brings with it a complete transition of the underlying technology to the internet protocol. Thus, the telephone number as such may not be as important as a unique identifier as it used to be. Against this backdrop, it might be relevant to envisage a future not only void of wires, but also telephone numbers.







## Looking ahead: Time's running out

As the present research brief shows, the most significant potential for monetisation of communications services is in innovative functions and integrated services. OTT providers already have promising approaches to show. Traditional telecommunications providers on the other hand appear fixated on revenue directly associated with the communications services themselves.

Next to monetisation strategies outlined here covering, for instance, adding or linking sales platforms to mobile messaging applications or using them for marketing communications, OTT providers may find integrating identification and authentication functions a promising avenue to augment their services. Already today, email addresses function as unique identifiers. Alternatively, Facebook or Google log-ins are available for consumers to register with various online services. Fingerprints or Face-ID enable us to access our smartphones or some payment services. Voice assistants can recognise their authorised users by their voices.

But the accurate and secure authentication of the user is only one side of the coin. In particular, in a time when more and more OTT services rely on revenues from targeted advertising, tracking consumers accurately across various services and websites is a tremendously valuable asset. This is the only way to register the success of advertising campaigns and bill the clients accordingly. Conceptionally, that is not far off the original idea of the telephone number, which was equally essential for accurate billing. How well this means of identification still functions is evidenced by the fact that even today WhatsApp and other OTT messaging services use the telephone number for their initial registration and synchronisation of contacts.

One may however question whether the public numbering space would continue to play such a central role, if telephone numbers were neither technologically necessary nor relevant for the identification of individual users, because e.g. Face-ID or a similar technology represented a superior alternative. Furthermore, there is some doubt whether national telecommunications providers will then remain a relevant actor in the direct business interaction with consumers or whether they might retreat to simply offering network capacity.

Independent from the future role of telephone numbers, the pressure on telecommunications providers is increasing, not least because shareholders of large OTT players want to see further revenue and profitability growth. A2P messaging will probably be a substantial opportunity to achieve exactly this. Unsurprisingly, OTT providers engage strongly in this market: Google has RCS, Facebook offers WhatsApp Business and Viber boasts its own business messaging solution. So far, telecommunications operators' A2P revenues and the high associated margins have remained almost unchallenged.





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

The online survey for this study was conducted with 3.184 consumers in November 2018 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 the autumn of 2018. The complete survey results are published in WIK discussion paper No. 440 which can be ordered online at [www.wik.org](http://www.wik.org).

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