

Mobile Payment Report 2019

This report analyses customer acceptance of Mobile Payment in Germany, Austria, Switzerland, the Netherlands, Belgium and Turkey.



Mobile Payment Report 2019

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Preface

People have been exchanging goods and services via various means of payment for as long as humans have existed. From gold coins to hand-crafted leather sheets, the apparatus for these exchanges has always reflected the current needs and customs of society. In our digitally connected world, Mobile Payments now offer unprecedented potential to change the way we pay for goods and services.

In theory, Mobile Payment should:

- Make transactions simpler and faster,
- Increase transaction security,
- Enable transparency of transactions, and
- Remove the burden and risk of carrying cash.

This report aims to understand people's attitudes to using Mobile Payment technology and evaluate future payment trends.

We will consider Mobile Payment in terms of:

- Mobile Payment usage areas
- Advantages and disadvantages of Mobile Payment
- Future expectations about Mobile Payment
- Requirements that would increase the penetration of Mobile Payment
- Attitudes to alternative providers (like banks)
- Technology companies' current reputations

The report is based on a representative, international survey of the general population on the topic of "Mobile Payment" that was commissioned by PwC. Between September and October 2018, the survey reached 5,500 people across six countries: Germany, Austria, Switzerland, the Netherlands, Belgium and Turkey.

We define Mobile Payment as a non-cash payment for goods or services that is made using a smartphone or tablet. Mobile Payment can occur in the following situations:

- At a stationary point of sale (POS), such as a shop or petrol station
- At a vending or ticketing machine
- On a mobile website
- Through a smartphone app with an integrated payment function

One special case of Mobile Payment is the transfer of money between two individual people. This is known as person-to-person (P2P) payments.

All in all, we believe the future looks extremely promising for the penetration and acceptance of Mobile Payment in these six countries, and expect the future to feature further steps towards becoming a cashless society.

Please reach out to us to discuss the results of this report.



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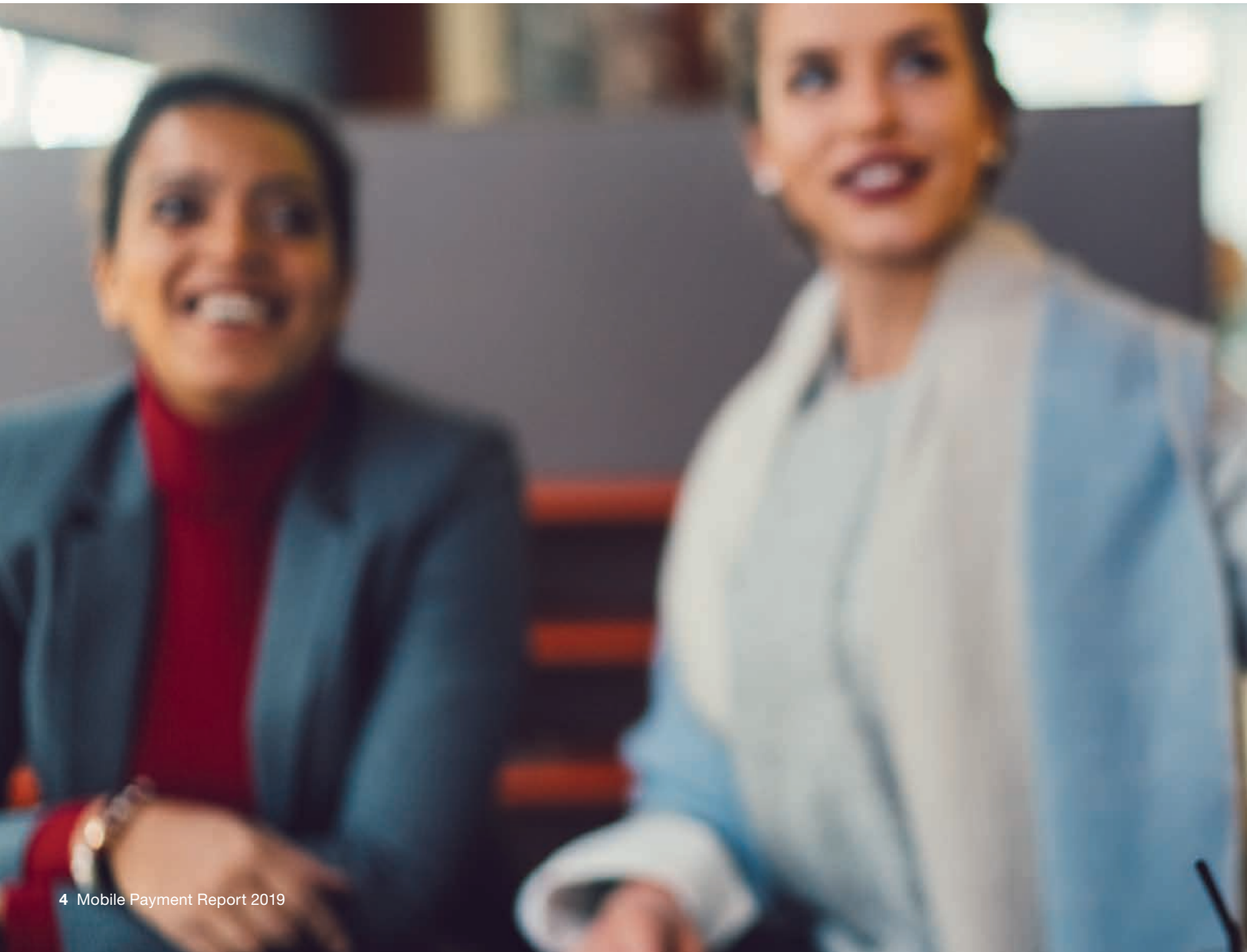


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A Mobile Payment widely accepted and used

Although Mobile Payment is gaining traction, it is still way behind traditional payment methods in terms of usage frequency

Traditional payment methods are widely used across all of the countries surveyed. Around 90% of respondents stated that they use cash, SEPA transfer and debit card frequently. The only exception was the use of SEPA transfers in the Netherlands and Belgium, with 72% and 60% usage rates respectively.

Credit card usage varies widely across countries. Turkish respondents had the highest usage rate, with 79%. This is probably due to the numerous

campaigns run by retail banking companies, as well as the overall cash balance of Turkish consumers. The Netherlands, on the other hand, has the lowest usage frequency for credit cards, with 48%. Contactless payment lags behind other forms due to low levels of infrastructure penetration, hand in hand with safety concerns when compared to credit card usage. Usage rates for contactless payment are only significant in Turkey and the Netherlands, with 61% and 70% respectively.

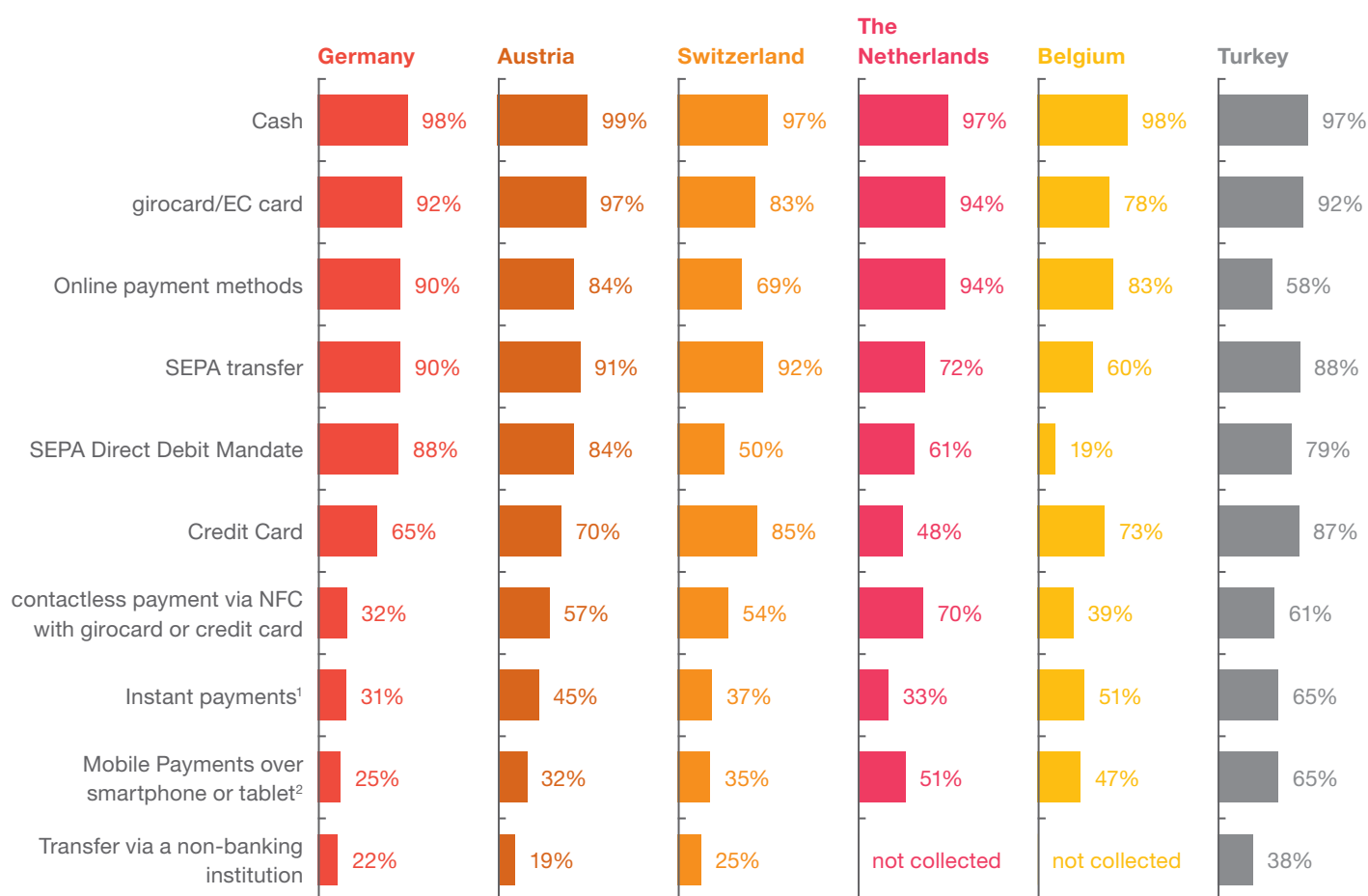
Online payment is frequently used in Germany, the Netherlands, Belgium and Austria, with more than 80%

of respondents stating that they use it. Surprisingly, Turkey has the lowest rate of online payment, with 58%. This might be directly linked to some regulation issues that Turkish consumer have been facing.

On the other hand, Mobile Payment is very popular in Turkey, with a 65% usage rate. Germany has the lowest rate of Mobile Payment usage, with 25%, which seems to be correlated to the higher safety concerns. The Netherlands and Belgium have an above average rate of usage compared to the other countries surveyed, with 51% and 47% respectively.

Fig. 1 Which payment methods are used?

Mobile Payment is used much more frequently in Turkey, Belgium and the Netherlands than in German-speaking countries.



Basis: all survey participants, D: N = 1,000, AT, CH, NL, BE, TR: N = 500 in each case

¹ electronic realtime transfers where payment is debited and credited in seconds, 24 hours per day

² ie, contactless payment using mobile devices

Mobile Payment will complement rather than replace traditional payment methods

Traditional payment methods can be expected to remain dominant in the near future, with more than 90% of respondents stating that they will continue to use cash, SEPA transfer and debit card.

Online payment will gain further traction, especially in Switzerland and Turkey. It is stated that usage rates will rise from 69% to 82% in Switzerland and from 58% to 78% in Turkey, which is a substantial increase.

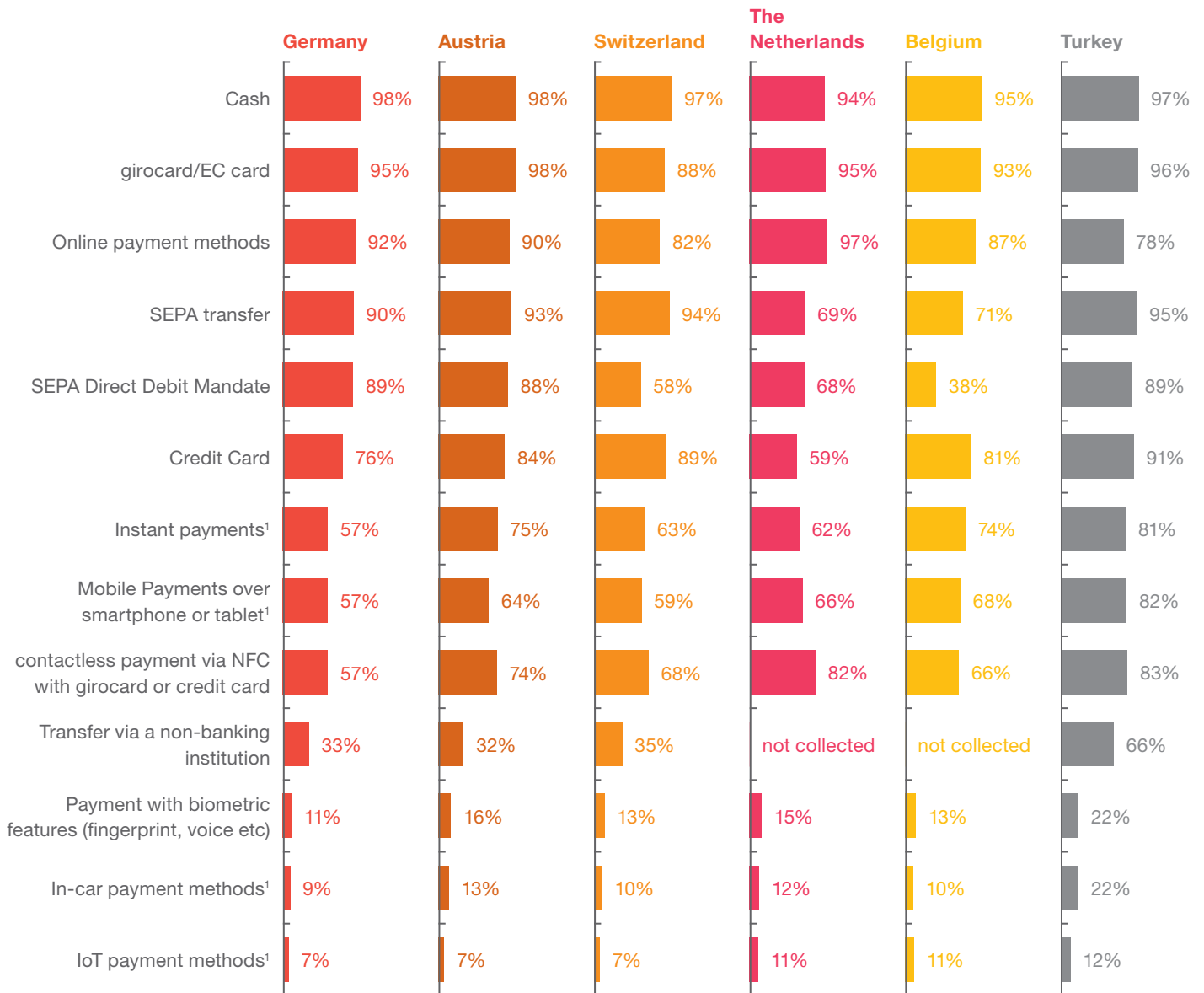
Mobile Payment also is expected to grow strongly. Respondents in Germany and Austria stated that they will use Mobile Payment almost twice as often in the near future.

Respondents in Switzerland and Turkey will also use Mobile Payment more frequently, with a rise from 35% to 59% in Switzerland and from 65% to 82% in Turkey.

New payment technologies, such as payment using biometric features (fingerprints, facial recognition, etc.), in-car payment and IoT payment remain unpopular among consumers, with stated usage rates of around 10–15%.

Fig. 2 How often will payment methods be used in future?

Mobile Payment is likely to complement rather than replace traditional methods. But people remain sceptical about biometric and automated methods.



Basis: all survey participants, D: N = 1,000, AT, CH, NL, BE, TR: N = 500 in each case

¹ These items were illustrated using examples.

Mobile Payment seems to have a similar usage rate across product categories and countries

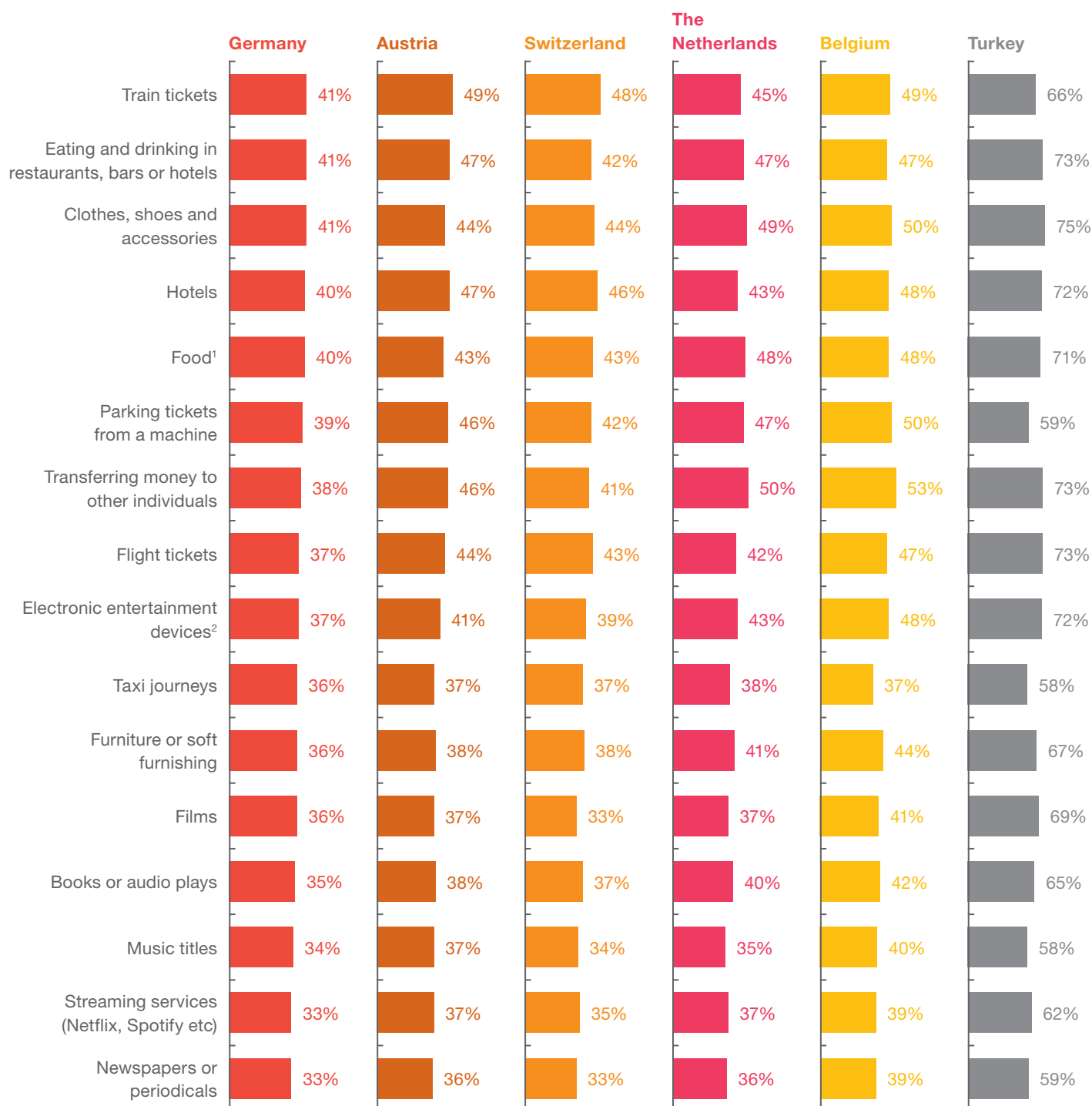
There are only rather smaller differences between the Mobile Payment purchase behaviour of

consumers across different product categories. It is safe to assume that the usage rate for Mobile Payment methods is mainly dependent on the availability of these methods across product categories. Across all of the

countries surveyed, an incremental difference in the use of Mobile Payment can be seen in payments for eating and drinking in restaurants and bars; clothes, shoes and accessories; and commuting in general (train, flight, taxi etc.).

Fig. 3 What are Mobile Payments used to pay for today or will be in the future?

One third to half of the respondents, apart from Turks, plan to pay for individual product groups on their mobile device.



Basis: all survey participants, D: N = 1,000, AT, CH, NL, BE, TR: N = 500 in each case

¹ ie, food and drink at the supermarket

² such as computer, laptop, television, HiFis, games consoles etc

Security concerns regarding Mobile Payment are stated as a major challenge

In the eyes of the consumers, security is the biggest question mark with regard to Mobile Payment. Consumers have concerns about hackers and about having their devices stolen. Concerns about stolen devices are perceived as the largest disadvantage across countries, with around 75% of respondents stating this concern. Alongside worries related to hackers, this concern is especially relevant to German-speaking countries. Only around one third of respondents from German-speaking countries are confident that Mobile Payment is safe against hackers. Interestingly this figure is much higher than the fear of having your wallet stolen with all your cash and cards.

The amount of information shared when using Mobile Payment is another concern. Around three quarters of respondents also worry about identity theft when using Mobile Payment. When looking at the behaviour of the population in the last 12 months however, we see a dramatic increase in sharing of personal and even health data in all the countries surveyed. So this might just be an alleged reason.

Ease and speed of payment seem to be the main advantages of Mobile Payment. Respondents across countries also stated that being able to monitor the flow of payments is another advantage. Only Turkish respondents saw a distinctive advantage in checking whether they have enough cash on them, compared to respondents from the other countries surveyed.

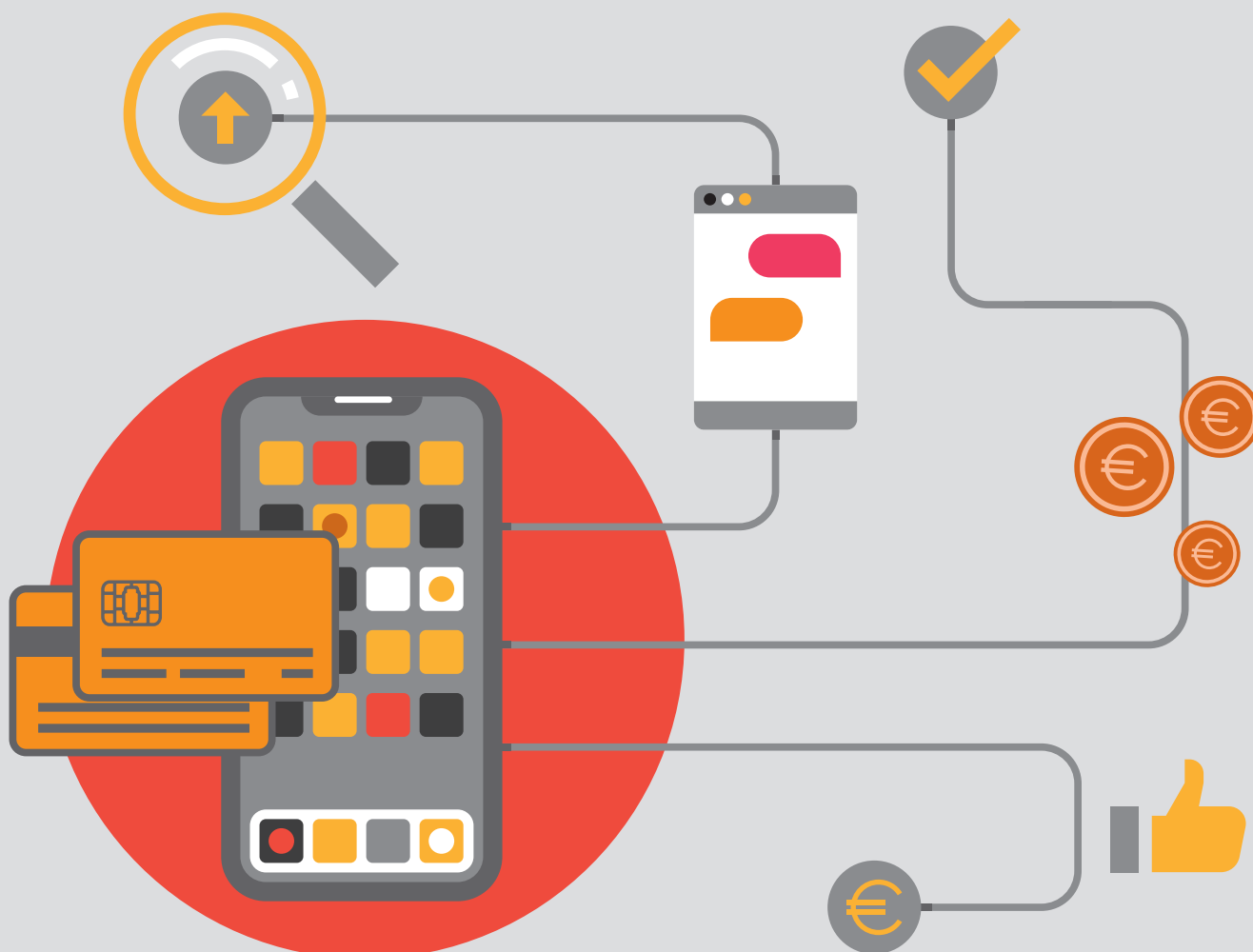


Fig. 4 What are the advantages and disadvantages of Mobile Payment?

Less than four out of ten respondents in German-speaking countries are confident that Mobile Payments are secure.



Basis: all survey participants, D: N = 1,000, AT, CH, NL, BE, TR: N = 500 in each case

Nine out of ten customers consider their local bank to be reputable, reliable and competent

Local banks had by far the best image of the various payment methods and platforms that were included in this survey. In the German-speaking countries and Turkey, more than nine out of ten customers stated that

they consider their local bank to be reputable, reliable and competent. There were no concerns about data protection or security in any of the countries surveyed. Due to this good image, between two and three quarters of respondents indicated that they would be most likely to share personal data with a bank.

Fig. 5 What is the image of the local bank?

In the German-speaking regions and Turkey over nine out of ten customers think their local bank is reputable, reliable and competent.



Basis: all survey participants, D: N = 1,000, AT, CH, NL, BE, TR: N = 500 in each case

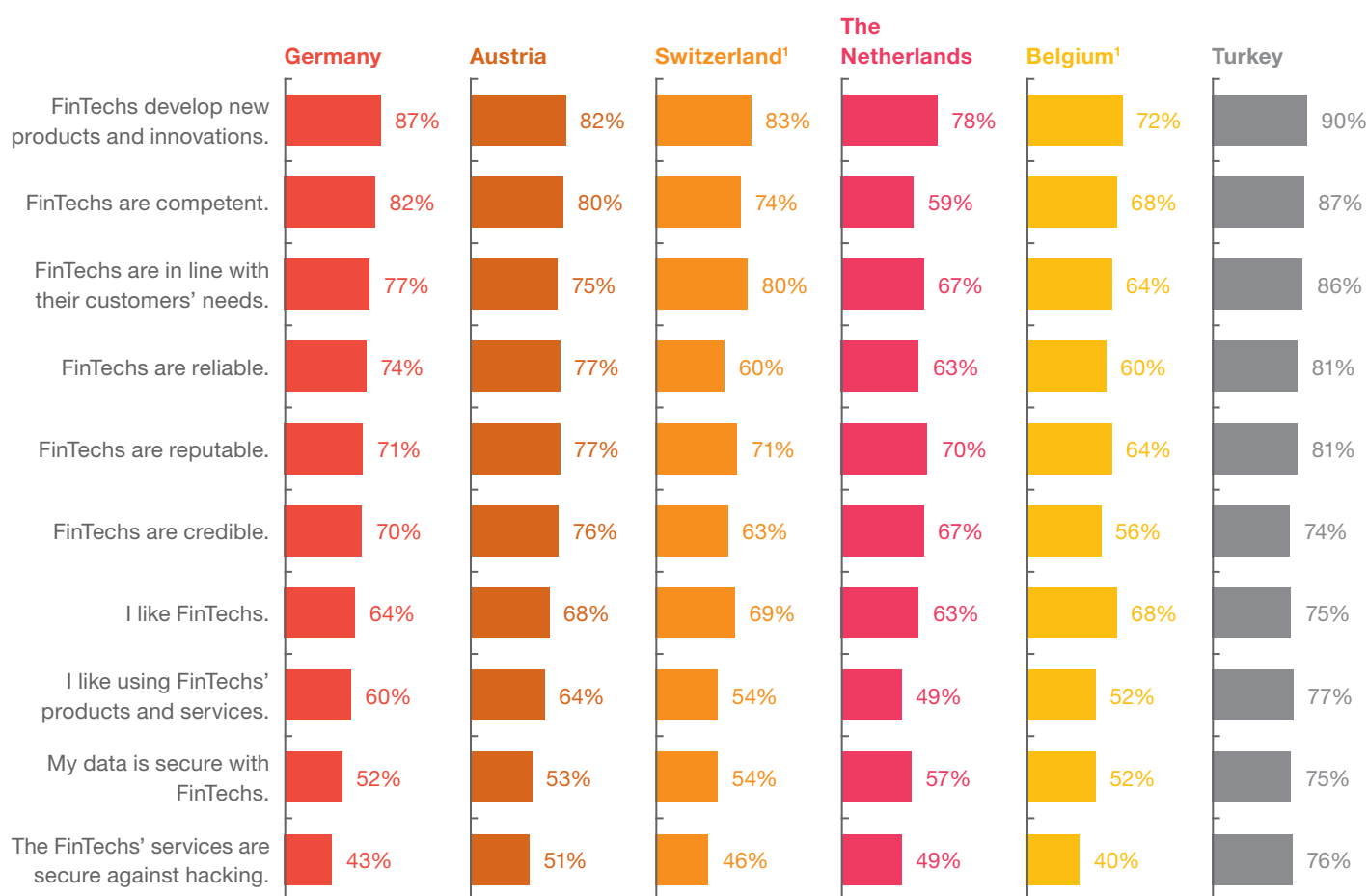
Fintechs only familiar to a small number of respondents

Fintechs were only familiar to a small group of the respondents surveyed, with the highest number (21%) in Germany. However, although they are not very well known, they have a very positive image among people who use their services, particularly with

regard to innovative strength. However, concerns about hacking attacks are more common in relation to FinTechs than with the large technology companies Google, Amazon, Facebook and Apple (GAFA) in Central Europe. On top of this, respondents frequently stated that they do not trust FinTechs to keep customer data secure.

Fig. 6 What image do FinTechs have?

FinTechs have a very positive image if people are familiar with them. But concerns about hacking are more common in Central Europe.



Basis: respondents familiar with the term FinTechs by name, D: N = 211, AT: N = 91, CH: N = 35, NL: N = 51, BE: N = 25, TR: N = 83

¹ low number of responses!



B Mobile Payment 2019 – Country Deep Dive

1 Germany

25% use Mobile Payment

46% of people under the age of 30 use Mobile Payment systems

98% believe that cash will still be used in 5 years' time

7 out of 10 Germans under the age of 40 intend to use Mobile Payment in the next five years

15% have sent money to other people from a mobile device systems

44% are concerned about protection of data

30% of men use Mobile Payment

21% of women use Mobile Payment



Mobile Payment is most popular when shopping for



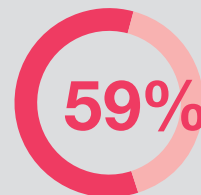
15% Clothes, shoes, and accessories

15% Transferring money to other people



14% Hotels and Accommodation

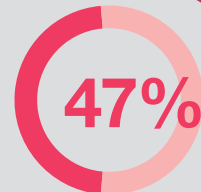
Advantages of Mobile Payment



makes buying and paying less complicated



being able to check movements of money on my mobile



no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

77% worried their mobile might be stolen and misused to make Mobile Payments

74% worried about identity theft

69% worried that using Mobile Payments encourages you to buy more quickly

Of the six countries surveyed for this report, Germany has the lowest share of Mobile Payments via smartphone or tablet (25%).

Germany is one of the world's leading economies in terms of GDP, industrial power and labour force. It is for this reason that the general situation related to Mobile Payment via smartphone or tablet in Germany requires a closer look. Based on the answers of the 1,000 respondents in Germany, PwC estimates the penetration rate of Mobile Payment in Germany to be 25%. In other words, one out of four Germans makes payments using their smartphone or tablet. 46% of Germans under the age of 30 use Mobile Payment systems, compared to 40% between the ages 30–39, 23% between the ages 40–49, 21% between the ages 50–59 and 12% over the age of 60. It can be said that there is a negative correlation between age and the penetration of Mobile Payment. In Germany, older people tend to prefer Mobile Payment much less than younger people.

In Germany, Mobile Payment is more common among men and more educated people.

University graduates use Mobile Payment methods more frequently than the national average. For example, German university graduates tend to use Mobile Payment twice as much as school leavers. On the other hand, based on the answers of 489 male respondents and 511 female respondents, 30% of men and 21% women use Mobile Payment via smartphone or tablet. Moreover, men tend to use Mobile Payment more than women for every product group.

Findings relating to the future of Mobile Payment via smartphone or tablet show that Mobile Payment is likely to complement rather than replace traditional methods.

This is the case for the six countries covered by this survey, including Germany. Mobile Payment via smartphone or tablet cannot replace dominant methods like cash or credit card. 98% of Germans believe that cash will still be used in five years' time, and 76% of them say that they will continue to pay by credit card over the same period. Although the estimated use of Mobile Payment via smartphone or tablet is expected to rise from 25% up to 57%, Germany will still have the lowest share of the six countries that were surveyed. The CAGR over that five-year period is 15%, but it is not enough for Germany to reach the same level as the other five countries surveyed.

Seven out of ten Germans under the age of 40 intend to use Mobile Payment in the future (in the next five years). This rate is 69% for people who are between 18–29 years old, 58% for those who are between 40–49, and 55% and 47% for those who are between 50–59 and over 60 years old, respectively. For this reason, the negative correlation between age and Mobile Payment penetration is expected to continue in the near future.

Mobile Payment is expected to continue to be used more often by men and more educated people. Mobile Payment penetration is expected to increase from 25% to 57%, and its share will increase in each segment (segments according to gender, education level etc.). Forecasts predict that 64% of men and 51% of women plan to use Mobile Payment via smartphone and tablet in the future. On the other hand, Mobile Payment will continue to be more popular among university graduates (65%) than among school leavers (47%), GCSE or equivalent graduates (55%), and people who are classified in the school-leaving examination/technical college qualification category (58%).

In Germany, Mobile Payment is most popular when shopping for clothes, shoes and accessories (15%), transferring money to other individuals (15%), making hotel reservations (14%) and buying furniture or soft furnishings (14%).

Mobile Payment is used for 16 categories of products and services. In Germany, Mobile Payment has a share of between 9% and 15% of the payments for these categories. Taxi journeys are the category for which Mobile Payment is used least frequently (9%), while the categories with the most frequent use were buying clothes, shoes and accessories, as well as transferring money to other individuals (15%). However, this may change over the next five years: train tickets, eating/drinking in restaurants/bars/hotels, and shopping for clothes, shoes and accessories are expected to lead (each at 41%), followed by hotel reservations (40%). That said, however, when we compare the “plans” (estimated shares) in 2016 and 2018 with the “actual” figures in these years, we see that less than half of Germans were willing to make Mobile Payments for certain goods. For this reason, it is recommended to view estimations and plans with some scepticism.

In Germany, 15% of the sample group has sent money to other people from a mobile device.

Parallel to the negative correlation with age and Mobile Payment penetration, transferring money to other individuals through mobile devices is also less popular among older people. In fact, 31% of people under 30, 24% of people between the ages 30 and 39, 13% between 40 and 49, 12% between 50 and 59, and 5% over 60 years old transfer money via smartphones and tablets. Again parallel to general trends, university graduates and men use this technology more than less educated and female respondents, respectively. For each above-mentioned category, mobile money transfers to others are more popular among university graduates and men.

Concerns about protection of data (44%), general habits (36%) and fear of hackers (34%) are the three most common reasons why Germans abstain from using Mobile Payment methods.

It was revealed that 44% of Germans have concerns about protecting their data and do not really trust Mobile Payment systems. In this respect, Germany represents the largest share among the six countries examined. 12% of respondents in Germany did not have access to a smartphone or tablet, which is also the largest share among the countries surveyed. This may be due to the fact that the German sample group had the largest share of people who are older than 60 (33%).

Concerns over data protection have risen steadily over the last three years. The proportion of people surveyed who mentioned concerns about data protection was 36% in 2015, 29% in 2016 and 44% in 2018. Except for the responses “I don’t have a smartphone or tablet” and “I don’t know any company that offers this payment option”, each of the responses’ share has increased in the last three years. As the majority of the responses are about security

and trust issues, prejudices and some unfounded allegations about Mobile Payment should be challenged by the authorities. The general abstention from Mobile Payment is spread across all segments of the population: males and females, university graduates and school leavers do not fully trust the integrity and transparency of Mobile Payment. For example, more than one in two university graduates (52%) do not use Mobile Payment due to data protection concerns.

In addition to the above-mentioned concerns, 77% of German respondents worry that their mobile phone might be stolen and misused to make Mobile Payments. Similarly, 74% of German participants think using Mobile Payment would give away too much information about them and they could be a victim of identity theft. Last but not least, 41% of the German sample group mention that they can only imagine using Mobile Payment in future if the payment method is secure and accepted everywhere. For this reason, appropriate marketing and advertising activities should be carried out to moderate the German public’s sceptical views.



69% of German respondents say using Mobile Payment enables them to make purchases more quickly.

Despite these negative views, a considerable number of Germans prefer Mobile Payment methods because they are practical, less complicated and secure.

69% of German respondents say using Mobile Payment enables them to make purchases more quickly, while 59% think Mobile Payment makes buying and paying less complicated. However, Germany has the lowest score among the six target countries in terms of people's positive views about the practicality and simplicity of Mobile Payment. Only 47% of Germans point out that it is a great relief to no longer have to check whether they have enough cash. Germany also has the lowest scores in this regard.

In line with the results from other areas of this survey, older people do not believe that Mobile Payment makes buying and paying less complicated, and that it is a great relief to no longer have to check whether they have enough cash. When compared to respondents from younger age ranges, the trend emerges that the advantages of Mobile Payment are much more attractive for under 40s.

Alongside the trends related to age and gender, there is also another trend related to income: Responses show that being able to monitor the movement of money directly on their mobile is more important for Germans with higher incomes. In fact, 50% of people with a net monthly household

income that is lower than €2,000 find this advantage important whereas this rate increases to 64% for those who have a net monthly household income that is greater than €4,000. Similarly, 69% of Germans with higher incomes think Mobile Payment makes buying and paying less complicated, while only 52% of people belonging to lower income groups shared this view.

In Germany, the majority of Mobile Payment users and planners are concerned about misuse after theft of their mobile phone. 72% of users, 81% of planners and 77% of non-users have concerns about this issue. Not surprisingly, non-users have higher scores in negative aspects and lower scores in positive aspects compared to planners and users.

A third of Germans would not use Mobile Payment more frequently, even if additional services and security features were provided.

For the question "What would Mobile Payment have to offer for you to use it or use Mobile Payment (even) more frequently?", 52% of respondents in 2018 required guaranteed security while paying. This figure was 60% in 2016 and 59% in 2015. 48% responded "no hidden fees", which had a share of 58% in 2016 and 53% in 2015. These two answers show that the requirements and expectations of German users have softened as the penetration of Mobile Payment has increased.

For younger people, the tried and tested advantages of using Mobile Payment and bonus programmes or loyalty cards are more important than for the average respondent to this survey. 45% of under 30s requested coupons/vouchers/discounts for using Mobile Payment, while only 14% of people over 60 years old want these advantages. On the other hand, 35% of under 30s expect their Mobile Payment solution to be compatible with all of their loyalty cards and bonus programmes, but this rate is only 14% in the over 60 group.

Security aspects and transparent fees are a priority for future Mobile Payment users. In other words, people who are planning to use Mobile Payment in the future ("planners") care about security aspects and transparent fees the most. 59% of non-users responded with "none of them", showing that it would be difficult to attract them to use Mobile Payment.

In Germany, only 8% of respondents think new payment methods are more secure than conventional ones.

59% of German respondents think conventional payment methods are the safest, 33% think conventional and new payment methods offer the same level of the security, and only 8% favour new payment methods. Younger people find new payment methods more secure than older people, planners and non-users.

55% of German respondents use digital products and services offered by the technology companies Google, Amazon, Facebook and Apple (GAFA). 48% mention that they would like these companies to develop new payment methods to make it easier and quicker to make payments.

Young people and male respondents are willing to use payment offers from GAFA more than older people and female respondents. 63% of under 40s mention that they expect a new payment method from these tech giants, while only 38% of over 60s have this expectation. On the other hand, rates according to gender are 54% for men and 43% for women.

Germans with higher incomes prefer using digital products from major technology companies. In fact, 66% of people with a net monthly household income of more than €4,000 say they use digital products and services offered by GAFA, but this rate decreases to 50% for those who have a net monthly household income lower than €2,000.

Users, planners and non-users also have different thoughts and tendencies related to alternative methods. 56% of users find banks' payment methods too slow and too complicated, while the rates are 37% and 17% for planners and non-users, respectively. Similarly, 80% of Mobile Payment users are also users of GAFA's products and services, but the rate of use of those products and services decreases to 62% among planners and 34% for non-users.

Data shows that German respondents are the least open to new ideas, solutions and methods for payment.

74% of German participants think banks and savings banks should continue to concentrate on their traditional core business of products for investments, pensions, finance, and payment transactions. 64% of respondents mention that they want to be able to pay for products they purchase online directly on the online store's web page via their local bank and not via other service providers like PayPal. 63% think banks and savings banks in particular should provide digital services such as Mobile Payment, so that they are not dependent on services from FinTechs (companies that offer innovative, technology-based enhanced financial services) and technology companies. Of the six countries surveyed, Germany has the lowest share regarding these two questions. Furthermore, 54% of Germans answered that they would like banks to cooperate with FinTechs to make it easier to combine different apps and services.

More than two thirds of under 50s want digital services to be offered by banks and savings banks. However, older respondents have less interest in digital services offered by banks and savings banks. Male respondents and university graduates would like to use digital offerings from banks and savings banks more frequently than female respondents and people with lower levels of education.

In Germany, around three quarters (73%) of Mobile Payment users want to be independent from payment service providers. This rate decreases to 68% in planners and 55% in non-users.

PayPal, Amazon, Facebook and FinTechs are more well-known in Germany than in the other countries surveyed. Recognition levels for Google and Apple were the second highest of the six countries examined.

In Germany, 94% of respondents know PayPal (at least by name/concept), 92% know Amazon, 88% know Google, 87% know Facebook, and 80% know Apple. Although only 21% of respondents know FinTechs, FinTechs have the largest popularity in Germany compared to the other five countries. In conclusion, data shows that GAFA, PayPal and FinTechs are more popular in Germany than they are in Switzerland, Austria, the Netherlands, Belgium and Turkey.

Although the recognition rates for these platforms are high in Germany, their usage rates are comparatively low. PayPal has a 56% usage rate and is the most popular platform. The usage rate for Amazon is 24%, Google has a rate of 11%, Facebook has 4%, Apple has 7% and FinTechs have 8%. Banks or savings banks are used by 52% of respondents.

Older people tend not to use alternative payment services. 21% of all respondents use none of these providers. 9% of people between the ages 18 and 29 use none of these platforms, while this rate increases to 31% for people who are over 60 years old.

Mobile Payment users are willing to use alternative payment services more than planners and non-users. In general, users and planners indicated a similar level of willingness, but non-users were far behind these levels.

In Germany, local banks and FinTechs are more trusted and liked than GAFA and PayPal.

In Germany, 54% of respondents find Google innovative and progressive, and 52% find Google competent. Germany has the second highest scores for these aspects, after Turkey, which has 68% and 64%, respectively. However, even younger Germans question Google when it comes to guaranteeing data protection and security.

50% of respondents think Apple is innovative and progressive, while 44% of them find Apple competent. German respondents give the second lowest points to Apple, after Belgians. Just under four out of ten Germans who are under 40 years old and who are familiar with Apple think the company is reliable and credible.

German participants have relatively positive views about Amazon. 60% of German respondents think Amazon is innovative, progressive and competent. However, they have some concerns about Amazon when it comes to security and data protection: Just one quarter of those familiar with the company in Germany think their personal data is secure with Amazon.

The last member of GAFA, Facebook, is significantly less trusted and appreciated than Amazon, Apple and Google. Facebook has scores of 24% for both innovation/progressiveness and competency. People also have some concerns about the trustworthiness and credibility of Facebook: Just under three out of ten respondents aged 30 to 39 think Facebook is trustworthy and credible.

PayPal is the most appreciated and trusted brand in Germany, where it received the highest scores across the six countries surveyed. 46% of respondents think PayPal is innovative and progressive, and 71% of them

find it competent. However, just a third of Germans who are familiar with PayPal think the company is secure against hacking.

Local banks are favoured in terms of reputation and reliability. 94% of respondents find local banks reputable and 93% find these banks reliable. Among the six countries surveyed, Germany is the country where local banks are found most reliable and reputable. In addition, older Germans are particularly convinced that local banks are innovative.

87% of German respondents think FinTechs are innovative and progressive. 82% of respondents think FinTechs are competent. In both of these dimensions, Germany ranks second, behind Turkey. The data shows that FinTechs have a very positive image if people are familiar with them. But concerns about hacking are more common in Germany.

German people tend to trust banks and savings banks significantly more than PayPal, FinTechs and GAFA.

78% of respondents said they would share extensive personal information with banks and savings banks. 65% would share this information with PayPal, and 51% with Amazon. These two organisations are considered secure by more respondents in Germany than in the other five countries. Respondents find FinTechs, Google, Apple and Facebook less secure: 45% of respondents indicate that they would share extensive personal information with FinTechs, 35% would share it with Google, 29% with Apple and 16% with Facebook.

Germans under 40 are not surprisingly far more likely to be willing to share personal data. Older people tend to share less of their personal data.

2 Austria

32% use Mobile Payment

48% of people under the age of 30 use Mobile Payment systems

98% believe that cash will still be used in 5 years' time

7 out of **10** Austrians under the age of 40 intend to use Mobile Payment in the next five years

21% have sent money to other people from a mobile device systems

39% are concerned about protection of data

36% of men use Mobile Payment

29% of women use Mobile Payment



Mobile Payment is most popular when shopping for



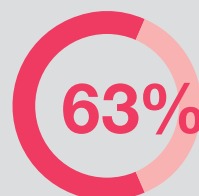
22% Clothes, shoes, and accessories

20% Transferring money to other people



19% Hotels, train tickets, electronic entertainment devices

Advantages of Mobile Payment



makes buying and paying less complicated



being able to check movements of money on my mobile



no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

77% worried their mobile might be stolen and misused to make Mobile Payments

71% worried about identity theft

73% worried that using Mobile Payments encourages you to buy more quickly

With 32%, Austria has the second lowest rate of respondents who use Mobile Payment via smartphone or tablet (after Germany).

The penetration of Mobile Payment is relatively low in Austria. Based on the answers of 500 respondents, PwC estimates the penetration rate of Mobile Payment (via smartphone/tablet) in Austria to be 32%. In other words, one out of three Austrians makes payments using a smartphone or tablet. Among the six countries surveyed, Austria is the country where cash and giro card/EC card penetration is the highest (99% and 97% respectively).

As in Germany, Mobile Payment is likely to complement rather than replace traditional methods in Austria.

The penetration of Mobile Payment is expected to double in Austria. 64% of Austrian participants said they would like to use Mobile Payment via smartphone or tablet in the next five years. With a Mobile Payment penetration rate of 64%, Austria is expected to surpass Switzerland and become the country with the fourth highest rate of Mobile Payment use.

When we compare changes in the penetration levels for different payment methods, it becomes clear that Mobile Payment via smartphone or tablet is growing the fastest. However, almost every payment method is becoming more popular and increasing its level of penetration. For this reason, Mobile Payment is expected to emerge as a complementary alternative that is significantly less popular than cash, giro card/EC card, online payment methods, SEPA transfer etc.

In Austria, the most common use of Mobile Payment via smartphone or tablet is for buying clothes, shoes and accessories.

In Austria, the share of users who use Mobile Payment ranges from 22% to 11% across 16 categories of goods and services. Taxi journeys are the category where Mobile Payment is used least frequently (11%), while Mobile Payment is most popular when buying clothes, shoes and accessories (22%). Clothes, shoes and accessories are followed by transferring money to other individuals (20%), hotels (19%), train tickets (19%), and electronic entertainment devices (19%). When we look at the general trends, we see that respondents from our three German-speaking countries (Germany, Austria and Switzerland) have similar preferences in terms of paying via mobile device.

When respondents are asked about their preferences five years into the future, it becomes clear that Mobile Payment via smartphone or tablet is becoming more popular for each of the 16 categories. In 2023, the share of Mobile Payment for these categories is expected to be between 49% and 36%. The rankings of the categories is also expected to change: Train tickets (49%), eating and drinking in restaurants, bars or hotels (47%) and hotel payments (47%) are estimated to be the categories in which Mobile Payment will be most popular. At the very bottom of the list, buying newspapers or periodicals (36%) is expected to be surpassed by taxi journeys.

Austrians who have a negative view of Mobile Payment are often people who have never made this type of payment.

41% of Austrian respondents mention that they have never made a Mobile Payment. In this respect, Austria has the largest share compared to the other five countries. In addition, 39% of the target group have concerns about data protection and 36% say they don't need Mobile Payment and they prefer paying cash.

77% of Austrians have worries about having their mobile phone stolen and misused to make Mobile Payments. 71% have concerns about Mobile Payments giving away too much personal information, which may lead to identity theft.

On the other hand, the majority of Austrians are aware of the advantages of Mobile Payment systems. For example, 73% of respondents think using Mobile Payment enables them to buy more quickly. This means Austrian respondents had the second highest rate of valuing this practical element of Mobile Payment (73%), behind Turkish respondents (86%). 63% of the Austrian target group think Mobile Payment makes buying and paying less complicated. In this respect, data shows that Austrians do not have significantly negative views or prejudices about Mobile Payment; but the penetration of Mobile Payment is still low.

Guaranteed security and no hidden fees are the most important prerequisites for Austrians to use Mobile Payment methods (or use them even more frequently).

59% of Austrian respondents mention that they would require guaranteed security when paying and would also not want to pay any hidden fees in order to become a Mobile Payment user. 53% of the target group wants to be able to block payment services that are stored on their mobile phone after losing their phone. More than 50% of respondents have concerns about security and privacy.

Among the six countries surveyed, Austria is the country where people are least likely to think new payment methods are more secure than conventional methods.

PwC estimates that 55% of Austrians think conventional payment methods are the most secure. 39% think both conventional and new payment methods offer the same levels of security, while only 6% favour new payment methods in terms of security and data protection. New payment methods have the lowest score in Austria.

52% of Austrians use digital products and services offered by GAFA. 44% would like these companies to develop new payment methods to make it easier and quicker to make payments.

52% of Austrian respondents like using digital products and services from companies such as Google, Apple, Facebook or Amazon, because they are innovative and user-friendly. 58% of respondents don't think providers of alternative payment methods (eg, PayPal, paydirekt, Sofort) or GAFA are an alternative to well-established banks.

Only 47% of the Austrian group think new payment methods will be more important for them in future. Austria ranks sixth among six countries in terms of the estimated importance of Mobile Payment for the future. Again, only 44% would like technology companies (like GAFA) to develop new payment methods to make it easier and quicker to make payments. Austria ranks last in terms of people's expectations from technology companies.

65% of Austrian participants think banks and savings banks should continue to concentrate on their traditional core business with products for investments, pensions, finance and payment transactions. In contrast to previous findings, Austria has the smallest share for this statement. Belgium ranks first with a share of

80%. 74% of respondents mention that they want to be able to pay for products they purchase online directly on the online store's web page via their local bank and not via other service providers like PayPal. 69% think banks and savings banks should provide digital services such as Mobile Payment, so they are not dependent on services from FinTechs and technology companies. 60% of Austrian respondents would like banks to cooperate with FinTechs to make it easier for them to combine different apps and services.

PayPal, Amazon and FinTechs have the second largest recognition rates in Austria, after Germany.

In Austria, 93% of respondents know PayPal (at least by name/concept), 89% know Amazon, 83% know Google, 80% know Facebook, and 75% know Apple. Although only 18% of respondents know FinTechs, FinTechs have the second largest popularity in Austria, behind Germany and ahead of Turkey.

Banks and savings banks have a potential usage rate of 57%, and they are the most popular payment solution in Austria. The next most popular solution is PayPal, with a 47% usage rate. The usage rate for Amazon is 24%, Google has 10%, Facebook has 4%, Apple has 9% and FinTechs have 7%. This makes it clear that there is a huge discrepancy between the recognition and usage rates of GAFA companies.

In Austria, Google is mainly viewed as a skilled innovator.

In Austria, 54% of respondents find Google innovative and progressive, while 51% find it competent. However, the majority of Austrians have concerns about Google's security and privacy policies. Only 11% of respondents think their data is secure with the company, while only 16% believe Google's services are secure against hacking.

52% of respondents think Apple is innovative and progressive, while 47% find Apple competent. As with Google, Austrians also have concerns about Apple's privacy. In terms of security and protection against hacking, Apple has the lowest scores in Austria.

Compared to other GAFA companies, Amazon has relatively high scores in Austria. 55% of respondents think Amazon is innovative and progressive, and 57% of them find Amazon competent. Amazon also has comparatively high scores in Austria in terms of security and privacy issues. This shows that Amazon has a much better image in Germany and Austria than in the other countries surveyed.

Another similarity with Germany can be seen in the figures for Facebook. The organisation is significantly less trusted and appreciated than Amazon, Apple and Google. Facebook has scores of 24% for its innovation, progressiveness and competency in Austria – the same score it received in Germany. On the other hand, Facebook is 4% trusted in terms of data security and security against hacking. In this respect, Facebook is trusted the least in Austria, compared to the Netherlands, Germany, Belgium, Turkey and Switzerland.

In Austria, only 32% of respondents think PayPal is innovative and progressive and 65% find it competent. In terms of competence, PayPal has its second best scores in Austria, after Germany (71%). Compared to GAFA, PayPal has significantly higher scores in terms of security and privacy concerns: 36% of respondents think their data is secure with the company and 26% think PayPal's services are secure against hacking.

Local banks are favoured for their reputation, reliability and competence. 92% of respondents find local banks reputable, reliable and competent. In terms of security issues, almost 8 out of 10 customers think their local bank is secure enough.

The last group, FinTechs, have a score of 82% in terms of innovation and progressiveness. 80% of participants find FinTechs competent. They rank second after local banks in terms of security and privacy issues: 53% of Austrian respondents believe their data is secure with FinTechs and 51% do not have fear of hacking when working with FinTechs.

Austrians tend to trust banks and savings banks the most. Facebook has to change its image in the eyes of Austrians by demonstrating that data protection and privacy are a priority.

77% of respondents would share extensive personal information with banks and savings banks. 54% would share this information with PayPal and 48% with FinTechs. Respondents find GAFA less secure: 44% of respondents would share extensive personal information with Amazon, 33% are ready to share it with Google, 30% with Apple and 16% with Facebook. Facebook does not enjoy the reputation it would hope for among the Austrian public.

Local banks are favoured for their reputation, reliability and competence. 92% of respondents find local banks reputable, reliable and competent.

3 Switzerland

35% use Mobile Payment

52% of people under the age of 30 use Mobile Payment systems

97% believe that cash will still be used in 5 years' time

7 out of **10** Swiss under the age of 40 intend to use Mobile Payment in the next five years

42% have sent money to other people from a mobile device systems

37% are concerned about protection of data

44% of men use Mobile Payment

26% of women use Mobile Payment



Mobile Payment is most popular when shopping for



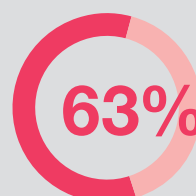
23% Clothes, shoes, and accessories

22% Transferring money to other people

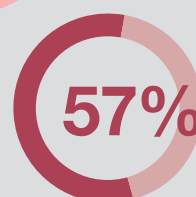


21% Hotels and Accommodation

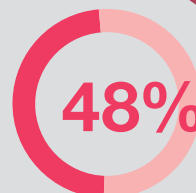
Advantages of Mobile Payment



makes buying and paying less complicated



being able to check movements of money on my mobile



no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

74% worried their mobile might be stolen and misused to make Mobile Payments

71% worried about identity theft

64% worried that using Mobile Payments encourages you to buy more quickly



With 35%, Switzerland has the largest rate of Mobile Payment penetration among the three German-speaking countries (Germany, Austria, Switzerland).

Based on the answers of 500 respondents in Switzerland, PwC estimates the penetration rate of Mobile Payment via smartphone and tablet in Switzerland to be 35%. This puts Switzerland in fourth place, just ahead of Germany and Austria. Among the six target countries, Switzerland is the country where the penetration of SEPA transfers is the highest (92%).

In five years, Switzerland is expected to be surpassed by Austria in terms of Mobile Payment.

The penetration of Mobile Payment is expected to reach 59% in 2023. This means the number of Swiss Mobile Payment users is expected to increase by almost 70% over the next five years. Mobile Payment is the second fastest growing payment method in Switzerland, after instant payment. However, as in Germany and Austria, Mobile Payment is likely to complement rather than replace traditional methods. On the other hand, Switzerland is expected to continue to be the leader in terms of SEPA transfers in five years.

In Switzerland, the most common use of Mobile Payment via smartphone or tablet is to buy train tickets.

In Switzerland, the share of Mobile Payment across 16 categories of goods and services ranges from 11% to 23%. Taxi journeys are again the category where Mobile Payment is used least frequently, with a share of 11% (in common with the figures for Germany and Austria). Mobile Payment is most popular for buying train tickets (23%), clothes, shoes and accessories (22%), making hotel payments (21%), transferring money to other individuals (20%) and within the context of electronic entertainment devices (20%).

When it comes to respondents' preferences and orientation towards Mobile Payment over the next five years, it is clear that Mobile Payment via smartphone or tablet is expected to become more popular for each of the 16 categories. In 2023, the share of Mobile Payment for these categories is expected to be between 48% and 33%. Train tickets are expected to continue to lead with a share of 48%, followed by hotel payments (46%) and buying clothes, shoes and accessories (44%).

Like Austrians, Swiss respondents who do not use Mobile Payment are often people who have never made this type of payment.

39% of Swiss respondents have never made a Mobile Payment. In this respect, Switzerland has the second largest share, after Austria. Concerns about protecting data are the second reason why Swiss respondents refrain from using Mobile Payment systems (37%). 36% of respondents indicated fear of hackers and said that using cash prohibits the need for mobile payments.

74% of Swiss participants have worries about their mobile phone being stolen and misused to make Mobile Payments. 71% have concerns about Mobile Payment giving away too much personal information, which could lead to identity theft.

However, a sufficient number of Swiss participants are also aware of the benefits of Mobile Payment. In fact, 64% of respondents think using Mobile Payment enables them to buy more quickly. 63% of the Swiss target group think Mobile Payment makes buying and paying less complicated. In this regard, it is

clear that more Swiss people could be persuaded to use Mobile Payment if appropriate measures were taken – such as promoting the advantages more widely.

As in Austria, guaranteed security when paying and no hidden fees are the two most important requirements Swiss participants named that would encourage them to use Mobile Payment (or use it even more frequently).

59% of Swiss respondents mention that they would require guaranteed security when paying and 56% state that they do not want to pay any hidden fees to use Mobile Payment. 52% of the target group wants to be able to block payment services stored on their mobile phone after their phone is lost.

PwC estimates that 56% of the Swiss population thinks conventional payment methods are the most secure. 36% of Swiss people think conventional and new payment methods offer the same level of security, while only 8% favour new payment methods in terms of security and data protection.

44% of the Swiss target group uses digital products and services offered by GAFA because they are innovative and easy to use, and they would like these companies to develop new payment methods to make it easier and quicker to make payments.

44% of Swiss respondents use GAFA services because they find GAFA innovative and user-friendly. 57% of respondents don't think providers of alternative payment methods (eg, PayPal, paydirekt, Sofort) or GAFA are an alternative to well-established banks.

48% of the Swiss target group think new payment methods will be more important for them in future. Typically for a German-speaking country, only around 50% of respondents believe new and modern payment methods will be important for them in future. Again, only 44% would like technology companies (like GAFA) to develop new payment methods to make it easier and quicker to make payments. Switzerland ranks joint last (with Austria) in terms of people's expectations from technology companies.

71% of Swiss participants think banks and savings banks should continue to concentrate on their traditional core business of products for investments, pensions, finance and payment transactions, and want to be able to pay for products they purchase online directly on the online store's web page via their local bank and not via other service providers like PayPal. 63% think banks and savings banks in particular should provide digital services such as Mobile Payment so they are not dependent on services from FinTechs and technology companies. 53% of Swiss respondents would like banks to cooperate with FinTechs to make it easier for them to combine different apps and services.

Google and Apple have the highest recognition rates of the GAFA organisations in Switzerland.

In Switzerland, 89% of respondents know PayPal (at least by name/concept), 80% know Amazon, 89% know Google, while 83% know Facebook and Apple. On the other hand, only 7% of respondents know FinTechs, which is the second lowest rate, only ahead of Belgians.

PayPal has a usage rate of 49% and is the most popular payment solution in Switzerland. Then come banks/savings banks with a 44% usage rate. The usage rates for both Amazon and Google are 7%. Facebook has 3%, Apple has 12% and FinTechs have 3%. As in Germany, there is a huge difference in the usage rates of the most popular institutions (PayPal and banks/savings banks) and GAFA.

More than a fifth of Swiss respondents would use alternative payment services from Twint. It is noteworthy that although Twint has a lower recognition rate than GAFA, it is more popular than GAFA's alternative services in terms of usage rate. In fact, two thirds of participants know Twint (67%) and one fifth of them are (potential) users (22%) of its services.

In Switzerland, Google, Amazon, Facebook and PayPal have slightly lower scores than the two other German-speaking countries in terms of innovation, progressiveness and competence.

In Switzerland, 49% of respondents find Google innovative and progressive, while 50% find Google competent. As in Germany and Austria, the majority of Swiss respondents have concerns about Google's security

and privacy procedures. Only 12% of respondents think their data is secure with the company, while only 11% believe Google's services are secure against hacking.

52% of respondents think Apple is innovative and progressive, while 50% find Apple competent. Similar to Google, only 16% of the target group think their data is secure with Apple. In addition, approximately one in ten Swiss respondents (13%) thinks Apple's services are secure against hacking.

In contrast to Germany and Austria, Amazon has relatively low scores compared to other GAFA organisations in Switzerland. 34% of respondents think Amazon is innovative and progressive, and 37% find Amazon competent. Amazon is less trusted in Switzerland than in other countries.

In common with other German-speaking countries, Facebook is significantly less trusted and appreciated than Amazon, Apple and Google in Switzerland. 21% of respondents find Facebook innovative and progressive, while 23% find it competent. On the other hand, Facebook is 7% trusted in terms of data security and 6% in terms of security against hacking.

In Switzerland, only 33% of respondents think PayPal is innovative and progressive, while 59% find it competent. Compared to GAFA, PayPal has significantly higher scores in terms of security and privacy concerns in Switzerland as well: 34% of the respondents think their data is secure with the company and 24% think PayPal's services are secure against hacking.

The vast majority (92%) of Swiss participants find local banks reputable, reliable and competent. Switzerland and Austria have the same scores regarding these topics. In terms of security issues, almost 9 out of 10 customers think their local bank is secure enough.

The last group, FinTechs, have a score of 83% in terms of innovation and progressiveness. 74% of participants find FinTechs competent. 54% of Swiss respondents believe their data is secure with FinTechs and 46% do not have fear of hacking when working with FinTechs.

Germans and Austrians stated PayPal was the second most trustworthy institution that they would share their personal data with, after banks and savings banks, while Swiss respondents would trust FinTechs.

80% of respondents would share extensive personal information with banks and savings banks. 47% of them would share it with PayPal and 60% with FinTechs. FinTechs are the second most trusted institution in Switzerland. Respondents find GAFA less secure: 22% of respondents indicate they would share extensive personal information with Amazon, 32% indicate it with Google, 30% with Apple and 17% with Facebook. In Switzerland, Amazon has significantly lower scores than in Germany and Austria in terms of trust.

4 The Netherlands

51% use Mobile Payment

67% of people under the age of 30 use Mobile Payment systems

94% believe that cash will still be used in 5 years' time

8 out of 10 Dutch under the age of 40 intend to use Mobile Payment in the next five years

49% have sent money to other people from a mobile device systems

23% are concerned about protection of data

54% of men use Mobile Payment

48% of women use Mobile Payment



Mobile Payment is most popular when shopping for



28% Clothes, shoes, and accessories

35% Transferring money to other people



24% Hotels and Accommodation

Advantages of Mobile Payment

68% makes buying and paying less complicated

63% being able to check movements of money on my mobile

58% no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

77% worried their mobile might be stolen and misused to make Mobile Payments

60% worried about identity theft

52% worried that using Mobile Payments encourages you to buy more quickly

Mobile Payment is used frequently in the Netherlands, with a 51% usage rate, and is expected to increase to 66% in the next five years.

According to data gathered from 1000 people, it is estimated that 51% of Dutch respondents use Mobile Payment via smartphone or tablet. In the Netherlands, the most popular payment method is cash with 97%. However, girocard/EC card and online payment methods are almost as popular as cash, with a 94% preference rate among respondents. Mobile Payment is likely to reach a 66% usage rate in five years as a complementary service rather than by replacing traditional methods. However, since people remain sceptical about biometric and automated methods, the preference rates for cash, EC card/ girocard and online payment methods will still be over 90%.

In the Netherlands, Mobile Payment is most popular for transferring money to other individuals (35%) and shopping for clothes, shoes and accessories (28%).

Mobile Payment is used across 16 categories of products and services. In the Netherlands, the share of Mobile Payment for these categories ranges from 17% to 35%. The categories in which Mobile Payment is used least frequently is for taxi journeys (9%). The most frequent category is transferring money to other individuals (35%). However, this list may change over the next five years. The use of Mobile Payment is expected to significantly increase for paying for taxi journeys (38%) and newspapers or periodicals (36%). From a usage standpoint, Mobile Payment penetration is expected to increase in all categories of products and services over the next five years in the Netherlands.

The greatest concerns in the Netherlands are related to trust. However, if these concerns are addressed, it is expected that the use of Mobile Payment in the Netherlands will increase.

228 respondents from the Netherlands stated that they are non-users of Mobile Payment. 30% have concerns about trusting the technology, which could be the reason why of 24% of Dutch respondents still prefer paying with cash. In addition to trust concerns, they are concerned about protecting personal data and are worried about hackers. Moreover, the Netherlands has the highest share of respondents who do not have a smartphone or tablet compared to the other five countries (21%).

Mobile Payment is seen as risky by the majority of people in the Netherlands. 77% of the public are concerned that their mobile phone could be stolen and misused to make Mobile Payments, or that they could have their identity stolen. The same share of respondents feel that Mobile Payment will enable them to make more rapid purchases. Just over a third are confident that the method is secure against hacking.

Respondents stated that they will only use Mobile Payment in the future if the payment method is secure and accepted everywhere. Despite trust and security concerns, 68% of Dutch respondents stated that Mobile Payment makes buying and paying less complicated. At least 80% of respondents in the Netherlands also recognised the benefits of Mobile Payment: easy payment, immediate monitoring of money movements on your mobile phone and no need to carry cash. From this, we can conclude that use of Mobile Payment would rise if users were able to check the movements of money on a mobile phone and were convinced that Mobile Payment was secure.

Secure payments, transparent fees and the option to block payment services following loss of a mobile phone are the main requirements respondents in the Netherlands named that would persuade them to use or increase their use of Mobile Payment.

Without any doubt, security is the main issue. However, 51% of Dutch respondents also see transparent fees as a prerequisite for increasing their use of Mobile Payment services. 48% of the 1000 participants from the Netherlands also wanted the ability to block payment services on their mobile phone in the event of losing a device – similar to the processes for lost credit cards. The availability of charging units for prepaid credit is the least important requirement, as it was mentioned by just 9% of Dutch respondents.

58% of the people surveyed in the Netherlands find conventional payment methods more secure than new payment methods. 32% believe conventional and new payment methods are equally secure. Dutch people do not think providers of alternative payment methods (eg, PayPal, paydirekt, Sofort) as alternative to established banks (63%). Half of respondents stated that new payment methods (such as Mobile Payment using smartphones or tablets) will be more important in the future. Half also stated that technology companies (eg, Google, Apple, Facebook, Amazon etc) are an alternative to well-established banks and that they want technology companies to develop new payment methods to make it easier and quicker to make payments. Developing technology and rapid change would increase the tendency for young people to make Mobile Payments in the future.

People like to see new services and payment methods, but not at the expense of their traditional core business.

75% of Dutch respondents want to be able to pay for products they purchase online directly on the online store's web page via their local bank and not via other service providers like PayPal. 72% think banks and savings banks in particular should provide digital services such as Mobile Payment, so they are not dependent on services from FinTechs and technology companies. 72% support the idea that banks and savings banks should continue to concentrate on their traditional core business of products for investments, pensions, finance and payment transactions. 55% of Dutch people surveyed would like banks to cooperate with FinTechs to make it easier for them to combine different apps and services.

Apart from PayPal, the major technology companies are less well-known in the Netherlands than in the other countries surveyed.

In the Netherlands, 86% of respondents know PayPal (at least by name/concept), 66% know Facebook, 53% know Google and only 42% know Amazon. However, only 10% of respondents know FinTechs. Half of Dutch respondents would use alternative payment services over iDeal. The recognition rate of iDeal is 94% and the use rate is 50%. Other companies are behind iDeal in the following order: PayPal, Facebook, Google, Apple, Amazon, FinTechs, AliPay and MyOrder. These companies are providers that Dutch respondents would be more likely to use for alternative payment services (such as Mobile Payment using a smartphone or tablet). The GAFAs are less well-known in the Netherlands than in the other countries that were surveyed. In the Netherlands, iDeal dominates the list of the most well-known companies.

In the Netherlands, Google is considered mainly as a skilled innovator. 44% of Dutch respondents stated that the company develops new products and innovations. They also think it is a reputable, credible and competent company. Dutch respondents like using Google's products and services, with a 35% rate among 264 respondents. They have similar thoughts about Apple, however, only 10% of them like using Amazon's products and services, even though they think the company develops new products and innovations. Approximately 60% of Dutch respondents find PayPal reputable, credible and competent, which is a higher rate than other technology companies.

In the Netherlands, local banks are more trusted and liked than FinTechs.

In the Netherlands, more than nine out of ten customers think their local bank is reputable, reliable and competent. 82% of Dutch respondents agree that their local bank develops new products and innovations. More than 80% also trust their local bank. These results help to understand why Dutch people are frequently against using Mobile Payment methods and other payment methods. Given the good image of banks, people would be most likely to share personal information with them (between two thirds and three quarters). For those familiar with the companies, PayPal comes in second, with FinTechs more or less on par in the Netherlands.

51 respondents shared their views about FinTechs. 78% agree that FinTechs develop new products and innovations. This rate is above the rate in Belgium, but below the rates in Germany, Switzerland, Turkey and Austria.

5 Belgium

47% use Mobile Payment

63% of people under the age of 30 use Mobile Payment systems

95% believe that cash will still be used in 5 years' time

8 out of **10** Belgians under the age of 40 intend to use Mobile Payment in the next five years

35% have sent money to other people from a mobile device systems

30% are concerned about protection of data

49% of men use Mobile Payment

45% of women use Mobile Payment



Mobile Payment is most popular when shopping for



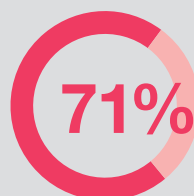
28% Clothes, shoes, and accessories

35% Transferring money to other people

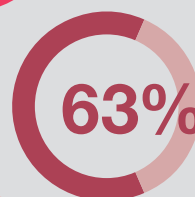


28% Entertainment electronics

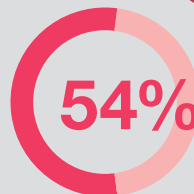
Advantages of Mobile Payment



makes buying and paying less complicated



being able to check movements of money on my mobile



no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

80% worried their mobile might be stolen and misused to make Mobile Payments

68% worried about identity theft

47% worried that using Mobile Payments encourages you to buy more quickly

Mobile Payment is used frequently in Belgium, with a 47% usage rate, and is expected to increase by 68% over the next five years.

The survey reveals that 47% of Belgians use Mobile Payment via smartphone or tablet. In Belgium, the most popular payment method is cash, with 98%. Online payment is in second place, with an 83% preference rate among respondents. In five years' time, Mobile Payment is likely to reach a complementary position by attaining a 68% usage rate, rather than replacing traditional methods. The survey shows that the preference for cash and EC card/girocard payment methods is still expected to be over 90%. It can be concluded that people in Belgium remain sceptical about biometric and automated payment methods.

In Belgium, Mobile Payment is most popular when used to transfer money to other individuals (35%) and shop for clothes, shoes and accessories (28%).

To understand the current situation regarding Mobile Payment in Belgium deeply, respondents stated their frequency of using Mobile Payment methods for purchasing 16 different categories of product or service. The share of Mobile Payment for these 16 categories ranges from 12% to 34%. The category in which Mobile Payment is used least frequently is taxi journeys (12%). The category in which Mobile Payment is used most frequently is transferring money to other individuals (34%, nearly the same as the Netherlands). The numbers show that this situation may change over the next five years. The use of Mobile Payment is expected to significantly increase for paying for taxi journeys (37%) and buying newspapers or periodicals (39%). In addition, with developing technology and increasing adoption, the penetration of Mobile Payment usage will increase in every category. In conclusion, it is expected that Mobile Payment methods will be prioritised across all types of products or services in Belgium in five years' time.

The greatest concerns in Belgium are related to trust, protecting personal data, and fear of hackers. However, if these fears are addressed, Belgians have a tendency to increase their use of Mobile Payment.

249 respondents from Belgium stated that they are non-users of Mobile Payment. 35% do not trust the technology, while 33% of Belgians who have never used Mobile Payment have fear of hackers and 30% have concerns about data protection. Moreover, Belgium had the second-highest rate of respondents who do not have a smartphone or tablet among the six countries surveyed (28%). Another important point is that only 1% of respondents don't know any company that offers Mobile Payment option. This shows that people are conscious about new technological developments.

As in other central European countries, Mobile Payment is seen as risky by the majority of people in Belgium. 80% of respondents are concerned that their mobile phone could be stolen and misused to make Mobile Payments, that they could have their identity stolen or that Mobile Payment will encourage them to make more rapid purchases. 73% of respondents stated that they will only use Mobile Payment in the future if the payment method is secure and accepted everywhere.

Despite trust and security concerns, 71% of Belgians claim that Mobile Payment makes buying and paying less complicated. At least 80% of respondents in Belgium recognise the benefits of Mobile Payment: easy payment, immediate monitoring of money movements on your mobile phone, and no need to carry cash. It can be concluded that people in Belgium would be more likely to use Mobile Payment services if they were able to check movements of money on their mobile phone and if their concerns about security were addressed.

Secure payments, transparent fees and the option to block payment services following the loss of a mobile phone are the main requirements that would persuade Belgian respondents to use Mobile Payment methods.

Without any doubt, security is the main issue. 61% of respondents named this as their key concern, however, 51% stated that transparency about fees was their main requirement. 48% of the 1000 participants would be more likely to use Mobile Payment (or use it more frequently) if they were able to block payment services that are stored on their mobile phone after losing the mobile – as is the case for lost credit cards. 10% of respondents would like charging units for prepaid credit to be available in shops.

59% find conventional payment methods more secure than new payment methods. 33% believe both payment methods are equally secure, while only 8% of respondents think new payment methods are more secure than traditional payment methods.

The level of willingness to use alternative payment methods is higher in Belgium (58%) than in other countries. Many agree with the statement that technology companies such as Google, Apple, Facebook or Amazon should develop new payment methods to make it easier and quicker to make payments, and enjoy using digital products and services from these companies because they are innovative and easy to use. Nevertheless, the majority of Belgian respondents (63%) do not think providers of alternative payment methods (eg, PayPal, paydirekt, Sofort) or technology companies (eg, Google, Apple, Facebook, Amazon etc) are an alternative to well-established banks. This can be seen as an explanation of the high rate of use of conventional payment methods.

People are interested in new services and payment methods, however, they expect banks to continue to concentrate on their traditional core business.

80% of Belgian respondents believe banks and savings banks should continue to concentrate on their traditional core business of products for investments, pensions, finance and payment transactions. This is the highest rate of the six countries surveyed. Belgians are advocates of banks ahead of Fintechs and technology companies.

Paypal has the highest rate of recognition apart from banks, but the usage rate for Bancontact Mr Cash (Débit) is the highest in Belgium.

As well as banks/savings banks and PayPal, almost four out of ten Belgians would use the services of Bancontact Mr Cash. PayPal is in the leading position, ahead of technology companies like Google, Facebook and Amazon.

In Belgium, 86% of respondents know PayPal (at least by name/concept) and 37% of people prefer PayPal. It can be said that the most powerful alternative payment service apart from banks and savings banks is PayPal. 77% of respondents know Google, 76% know Facebook, and 68% know Amazon. Only 5% of respondents know FinTechs and none of them prefer these payment services.

32% of Belgian respondents use Bancontact Mr Cash (Débit). The recognition rate of Bancontact Mr Cash (Débit) is 82%. Other companies then enjoy recognition in the following order: Google, Facebook, Apple, Amazon, Payconiq, Samsung Pay, FinTechs and Wirecard.

When we look at technology companies in more detail, Belgians are most critical of Apple (35%). Apple is most likely to be seen in all countries as highly innovative and competent, and in some countries as reputable. 45% of Belgians think the company develops new products and innovations. More than 40% of people perceive Google as a competent, reputable and credible company. Amazon is viewed as a reputable company but not seen as strong in terms of security. Only 12% of Belgians believe their data is secure with Amazon.

24% of 328 respondents like using Facebook's products and services.

In Belgium, local banks are considered to be more reputable, reliable and competent than other payment services.

In Belgium, more than nine out of ten customers think their local bank is reputable, reliable and competent. 88% of people like using their local banks' products and services. 67% also trust their local bank.

When it comes to customers' willingness to share extensive personal information, PayPal and Fintechs are behind banks, with 44%. These results help understand why some Belgians do not use Mobile Payment methods or other alternative payment methods. Security is the key issue for determining payment preferences.

In summary, reasons for not using Mobile Payment methods among the European countries are similar in countries that are culturally and geographically close together.

6 Turkey

65% use Mobile Payment

67% of people under the age of 30 use Mobile Payment systems

97% believe that cash will still be used in 5 years' time

9 out of **10** Turks under the age of 40 intend to use Mobile Payment in the next five years

49% have sent money to other people from a mobile device systems

33% are concerned about protection of data

43% of men use Mobile Payment

68% of women use Mobile Payment



Mobile Payment is most popular when shopping for



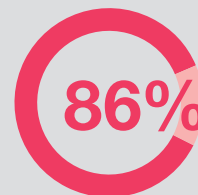
47% Clothes, shoes, and accessories

49% Transferring money to other people

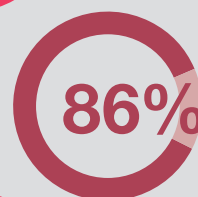


45% Food and drinks in restaurants

Advantages of Mobile Payment



makes buying and paying less complicated



being able to check movements of money on my mobile



no longer having to check whether I have enough cash

Disadvantages of Mobile Payment

80% worried their mobile might be stolen and misused to make Mobile Payments

80% worried about identity theft

86% worried that using Mobile Payments encourages you to buy more quickly

Turkey has the highest share (65%) of Mobile Payment use among the six countries surveyed and is expected to increase to 82% over the next five years.

The Mobile Payment survey was conducted among 500 respondents in Turkey. It showed that Mobile Payment is used frequently in Turkey, with a usage rate of 65%. This huge market size can be explained by high overall adoption rates and a dominant rate among the younger population. It is estimated that 82% of Turkish respondents intend to make Mobile Payments in future. Mobile Payment is likely to complement rather than replace traditional methods because traditional payment methods are still expected to be highly popular in five years' time.

Mobile Payment via smartphone or tablet is more often used by men and more highly educated people.

The survey shows that 30% of men and 21% of women prefer Mobile Payment. The usage rate is increasing in line with rising levels of education.

Despite the high rate of using Mobile Payment, Mobile Payment is seen as risky by the majority of people in Turkey. Approximately 66% of Turkish respondents are concerned that their mobile phone could be stolen and misused to make Mobile Payments, that they might have their identity stolen or that Mobile Payment will encourage them to make more rapid purchases. Just over a third are confident that the method is secure against hacking. These concerns are also shared in the Netherlands and Belgium. 24% of Turkish respondents think traditional payment methods are definitely more secure than new ones.

The most used payment method was Cash (97%), followed by Girocard/EC card. 37% of Turkish respondents think new methods are more secure. They expect Mobile Payment services to provide secure payment and the option to block payment services following the loss of a mobile phone.

Turkish respondents are more willing to share their data with large technology companies, especially Google and Apple.

The benefits of Mobile Payment are also recognised by 80% of respondents from Turkey: easy payment, immediate monitoring of money movements on your mobile phone, and no need to carry cash. Almost 90% can imagine using Mobile Payment exclusively in the future, provided the method is secure and accepted everywhere. The highest levels of willingness to use alternative payment methods and offers from major technology companies are found in Turkey. The country also showed the highest rates of use of Mobile Payment for various product groups and services (ranging from 18% to 49%). However, it is clear that providers of alternative payment methods or technology companies are not seen as an alternative to banks, despite criticism of banks. In fact, the respondents want banks to offer new services and payment methods, but not at the expense of their traditional core business.

Apple and Amazon have good reputations in the Netherlands, Belgium and Turkey. Facebook is criticised everywhere, however, its image is slightly better in Turkey than in the other countries surveyed. In Turkey, the company is still most likely

to be liked. The preferred alternative payment services would be offered by a bank or savings bank, or by PayPal. In Turkey, there are many niche providers that are used by parts of the population. Between one in five and one in seven central Europeans, however, would not make use of these services from any provider.

Given the good image of banks, people would be most likely to share personal information with them (between two thirds and more than three quarters). Turkish respondents are more willing to share their data with large technology companies, especially Google and Apple.

Just under six out of ten respondents outside Turkey think conventional payment methods are definitely the most secure method.

84% of Turkish respondents stated that new payment methods (such as Mobile Payment via smartphone or tablet) will be more important for them in the future. Only 62% of Turkish respondents did not believe providers of alternative payment methods (eg, PayPal, paydirekt, Sofort) or technology companies (eg, Google, Apple, Facebook, Amazon etc) are an alternative to well-established banks.

People like to see new services and payment methods, but not at the expense of their traditional core business for banks and savings banks.

85% of Turkish respondents stated that banks and savings banks in particular should provide digital services such as Mobile Payment so customers are not dependent on services from FinTechs and technology companies. Moreover, 83% of participants prefer banks to cooperate with FinTechs to make it easier to combine different apps and services. 75% of Turkish respondents want to be able to pay for products online, directly on the online store's web page via their local bank and not via other service providers like PayPal. The major technology companies Google, Amazon, Facebook, Apple (GAFAs) and PayPal already offer a variety of alternative payment methods.

Turkcell Mobil Ödeme is among the top three alternative providers in terms of image and attractiveness. For those familiar with it, Google has the best image in Turkey. Respondents from Turkey know Google very well (82%). 79% know Facebook and 76% know Apple. These companies could be accepted as an alternative provider of payment services instead of banks and savings banks in Turkey. However, the results emphasise that banks and savings banks dominate the alternative payment service market, along with numerous niche providers in Turkey, because of security and trust issues. 80% of Turkish respondents would prefer to share their personal information with banks and saving banks because they believe banks are reputable, reliable, competent and secure against hacking.

88% of Turkish respondents could imagine only using Mobile Payment in the future, as long as the methods are secure and accepted everywhere.

86% of Turkish respondents believe that using Mobile Payment encourages you to buy more quickly and makes the paying process less complicated. It can be said that these are the important reasons why Mobile Payment is most widespread in Turkey. In addition, checking movements of money on mobile phones is very important among Turkish respondents. The common concern about using Mobile Payment is security. 80% of people worry that their mobile phone might be stolen and misused to make Mobile Payments. They also worry about sharing too much of their personal information in case this is accessed by identity thieves.

Secure payments, transparent fees and the option to block payment services following loss of a mobile phone are the main requirements that would persuade Turkish respondents to use Mobile Payment more frequently.

78% of Turkish respondents stated that guaranteed security when making payments would increase their use of these services. The ability to block payment services stored on the mobile after losing the device – like with lost credit cards – is also an important factor in the likelihood of increasing use of Mobile Payment. In addition to security and trust issues, the penetration of Mobile Payment would be expected to increase if there were no hidden fees and if coupons/ vouchers/discounts were available for customers using Mobile Payment. Incentives would be effective to persuade customers to switch from traditional payment to Mobile Payment.

“It is likely that Mobile Payment is much more commonly used in Turkey due to a higher digital affinity, higher credit card penetration, and the fact that more than 40% of the Turkish population is under 25.”

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