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Smartphone: the center of life

A study on Nordic mobile
consumer behaviour

Deloitte Global Mobile Consumer
Survey 2019: The Nordic cut

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Introduction

Welcome to our third annual edition of **Global Mobile Consumer Survey – The Nordic Cut**: the report where Deloitte's Nordic TMT experts zoom in on the digital trends of mobile consumers in Sweden, Norway, Denmark and Finland. This year's report is based on responses from 5001 respondents across the Nordics. As a start we would like to provide a sneak peek of the interesting findings that await the reader...

As in previous years, the smartphone is an indispensable part of people's lives, with 92 per cent of Nordic consumers having access to a smartphone in 2019. They prefer to use their smartphone to check bank balances, to make video calls and to watch short videos on the go. And as the video cameras in smartphones become extremely high quality – some of the best on the market – it is no surprise that the Nordic consumers also prefer to use their smartphones to take pictures and record videos.

This year's report also dives into the booming trend of gaming - a market which generated somewhere close to €126.3 billion in revenue last year. This number is predicted to increase by about 10 per cent in 2019, and every year until at least 2022. More and more people in the Nordics are mobile gaming daily, and games like 'Subway Surfers', 'Pokémon Go' and 'Candy Crush' have become household names. But is it a social thing? Or merely a time-waster that has caught our attention? You may find the answer in section two.

Speaking of social, the smartphone is of course still making it possible for Nordic consumers to stay in touch with friends and family 24/7. When predicting the SoMe trends of the future, one must look to the younger smartphone users. This year's report shows that the young generation is gradually abandoning Facebook. Trending now are personal blogs on Snapchat and YouTube, and Instagram is still a highly preferred media for keeping the social network up to date with instant moments from daily life.

In other words: the smartphone makes it possible for Nordic consumers to stay connected and stay updated, and few people question a smartphone's usefulness. However, this 24/7 accessibility comes with a price. More than half of the respondents in our survey report experiencing negative side effects from using their smartphone. This debate about digital well-being puts the tech industry in a special situation; they are being asked to help customers detach from their phones, though their business model relies on the customers doing the opposite...

We hope that you find the insights interesting. Please do not hesitate to reach out to us for further conversations based on the content.

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Section 1

How much do Nordic consumers use their smartphones?
And what do they use them for?

The Smartphone universe

The smartphone penetration is nearly complete, which means fertile ground for the growth of complementary markets such as Internet of Things devices and smartphone accessories.

With smartphone penetration of 92 per cent in 2019, it is fair to say that there is a smartphone in every Nordic consumer's pocket (Figure 1). However, previous years' annual growth of smartphone sales seem to have peaked and are likely to slow down in the years to come, limited by phone replacement rates.

Please welcome the Internet of Things

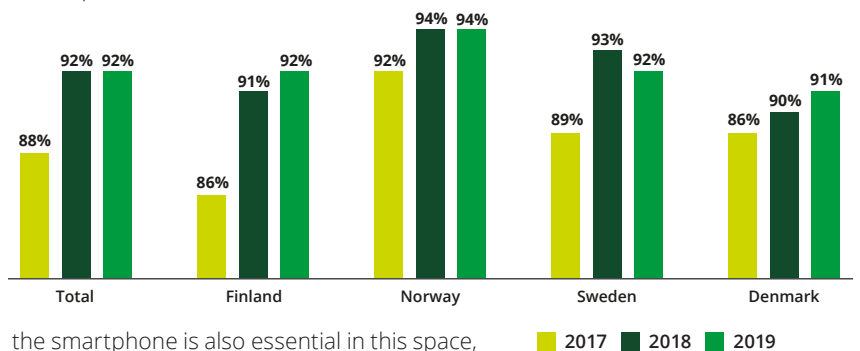
Let us begin by underlining that Nordic consumers are still some of the first in line to buy a new smartphone from the shelves. More than half of Nordic consumers have a smartphone that is less than two years old, and the market is still expected to be quite substantial in the future.

This high penetration of smartphones enables a wide range of new complementary markets. We are seeing this in the Internet of Things (IoT) segment as well as in the accessories market where gadgets and add-on utilities are becoming a bigger part of our everyday life. Three out of four consumers have at least one connected IoT device. In general, Norwegians own more connected devices than the other countries at 84 per cent¹. Not surprisingly, men tend to own more connected devices than women (81 % vs. 74 %). In fact, men report higher ownership than women for all connected devices listed in the survey.

'IoT' includes connected devices that can be controlled or accessed through smartphones. Although highly dependent on connectivity (more on this in section 2 on 5G connectivity),

Figure 1. Smartphone penetration

Which, if any, of the following devices do you own or have ready access to?
- Smartphone



the smartphone is also essential in this space, acting as a key to controlling and monitoring many of these devices. Let us have a look at what IoT has to offer:

Entertain me

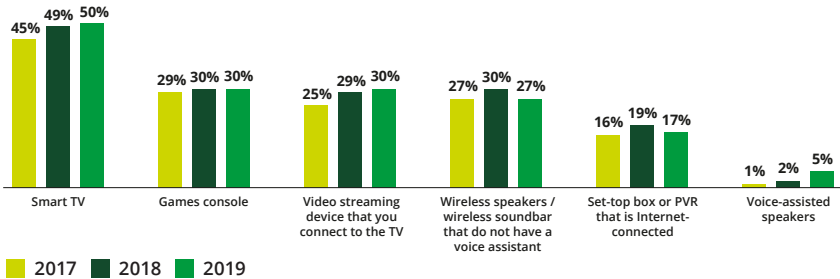
Firstly, IoT includes entertainment devices, where the smartphone acts the same way a remote control does, and as a mobile display pad. This is most commonly found for smart speakers but is increasingly used for controlling a TV, cable box or PVR.

Over half of Nordic consumers have a smart TV (Figure 2 & 3) and ownership of video streaming devices, such as Chromecast, is growing. There is still a low ownership rate of voice-assisted speakers (5 %), but this is still five times higher than in 2017. This is likely due to the hard marketing launch of such devices by electronic retailers in the Nordics as well as new partnerships forming, with Ikea and Sonos as examples.

Base for 2019: All adults 18-75 in Sweden (1864), Norway (976), Denmark (1095), Finland (1066). Base for 2018: Sweden (1868), Norway (977), Denmark (1097), Finland (1068). Base for 2017: Sweden (1769), Norway (947), Denmark (1028) and Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017.

Figure 2. Ownership of IoT devices

Which, if any, of the following connected devices do you own or have ready access to?



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Growth in voice-assisted devices may partly challenge the dominance of smartphones as the preferred control pad. However, we believe the phone is likely to persist since it is also a mobile display device - something smart speakers cannot match.

Make my home smarter

Another IoT use area is smart home functionality. This means connecting your daily utilities to Wi-Fi so that they can be controlled and monitored online. Along with Wi-Fi connection, smartphones enable off-site monitoring and an easy-access control pad.

Most smart-home devices are showing annual growth. Other than connected car systems, the devices with highest ownership levels are smart-home-monitoring-systems, smart plugs and smart lighting (7 %, 6 % and 6 % ownership respectively) (Figure 3). In practice, ownership levels for pet monitoring systems are around this level as well, given that around only 30-50 per cent of Nordic households actually have pets.

Why are there still so few Nordic consumers who own smart-home devices? Although the technology is well known and well invested in, the devices have not yet become mass-market products in the Nordics. This may be because the products are not simple enough for the average consumer. Large retailers may influence this through innovating on standard, well-adopted products. An example is IKEA creating smart blinds. The product almost sold out in the Nordics immediately after its launch.

It seems likely that the growing focus on sustainability and the environment in the Nordic countries will lead to increased ownership levels of smart-home devices. They reduce energy consumption and provide more effective monitoring of foods and beverages to minimize food waste.

A part of daily life

Use level statistics reveal that smart TVs and set-top boxes are the most frequently used connected entertainment devices at 89 per cent and 85 per cent weekly usage respectively (Figure 4). A similar trend is seen on a daily basis, where smart TV usage is as high as 69 per cent. Even though wireless speakers and voice-assisted speakers have almost the same weekly usage, voice-assisted speakers rate higher when looking at the daily use. This is likely because there are relatively few smart speaker owners, but they are the early adopters and the biggest fans of the product - so they use it often. Gaming consoles are the least

Figure 3. Ownership of IoT devices

Which, if any, of the following connected devices do you own or have ready access to?

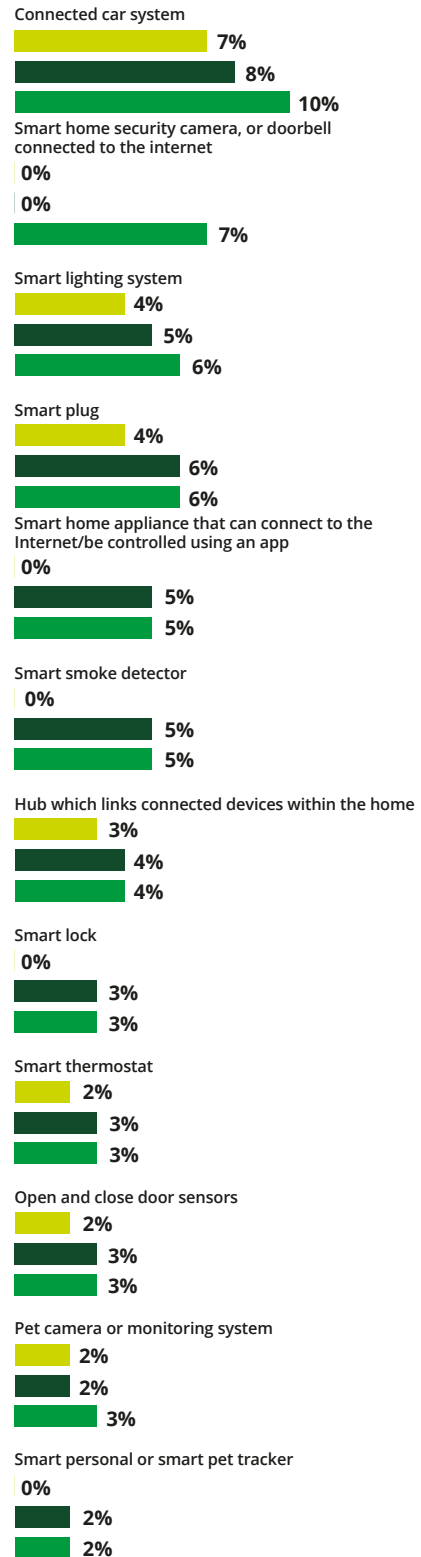
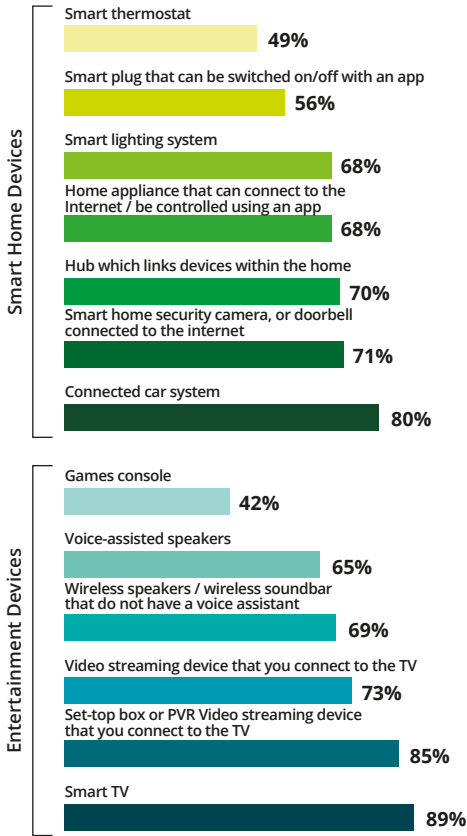


Figure 4. Weekly usage of IoT devices
 When was the last time you used each device.
 Was it within the...?



Base for 2019: All adults 18-75 in Sweden, Norway, Denmark & Finland who own or have ready access to each device - and has access to smartphone. Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

frequently used devices, which indicates that they are less of a necessity for consumers' daily life, and more of an occasional fun thing to do once a month or so.

Although smart-home devices are a little less likely than connected entertainment devices to be used on a weekly basis (around 70 %) it is worth noting that well over half of all people in the Nordics who own smart-home devices use them weekly: although ownership rates are low, those who own them seem to be integrating them into their regular lives. Use of thermostats is a little lower than the other smart-home device categories. It makes sense that people change their house temperature less frequently than they turn their appliances or lights on or off.

Relative to last year's weekly rates of use, wireless speakers fell five points from 74 per cent weekly use to 69 per cent weekly use from 2018 to 2019. Although not drastic, from a commercial point of view it is concerning that use rates have not increased when these devices are becoming more powerful. Do we have too many devices? Is the value add accessed through the speakers not attractive enough? Or were smart speakers a bit of a fad, and usage is falling as some of the novelty wears off?

Dressing up your smartphone

With the widespread adoption of the smartphone comes widespread adoption of smartphone accessories. What may seem to be "just accessories" is actually an expected \$75 billion market in 2020². The phone is obviously the centre of attention, but the phone and its value is boosted further when consumers use accessories.

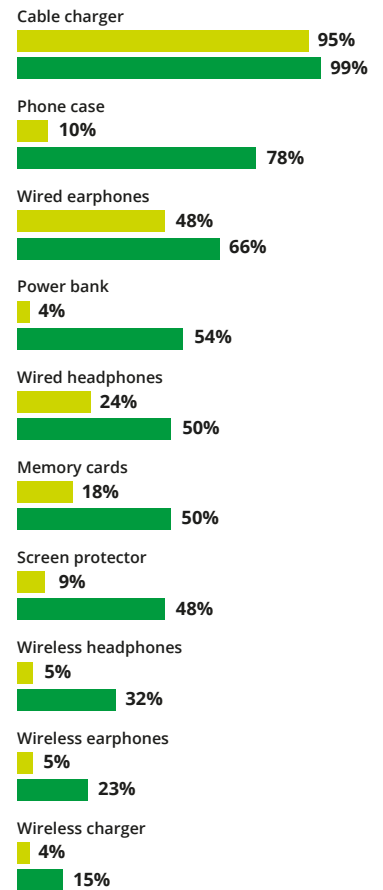
Accessories allow consumers to enhance and personalize their user experience as well as improve their smartphone's resilience. This is a market with high potential where consumers still have not maxed out their ownership levels. The most popular accessories are currently cable chargers, phone cases and wired earphones. Most people receive cable chargers and wired earphones with their phones, yet many also buy them separately. This illustrates that the products are perceived as "necessities" and upgrades to the bundled product at time of initial phone purchase. For the wireless headphones, wireless earphones and wireless chargers, consumers have 15-32 per cent ownership (Figure 5). Few phones are bundled with these products and the relatively high price points for these accessories explain why they are less common.

Still market potential for cable chargers?

Most smartphone users have experienced that panicky feeling when their smartphone suddenly is out of battery. For many, this experience might even feel like a loss of personal health (as section 3 indicates) which needs to be addressed immediately. Thus, chargers, and especially cable chargers, are a necessity in most people's homes or everyday bags. Because the smartphone is so dependent on this accessory, it should come as no surprise that ownership is close to 100 per cent. Most

Figure 5. Accessories ownership

Which of these accessories/ services for your phone do you own?



■ Came with the phone
 ■ Total ownership

Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

people report their cable charger came with their phone (95 %). Still, 13 per cent report having purchased theirs separately, indicating that they own several or are replacing a lost one. With the recent introduction of wireless chargers, consumers are not solely dependent on cable chargers anymore, although ownership is relatively rare, with fewer than one in ten smartphone owners purchasing a wireless charger separately, which is nearly as many as for cable chargers. This might indicate a change in the market for cable chargers entering the new wireless world.

Phone cases and power banks are very popular and are usually purchased separately. These are accessories necessary to prevent damage and to increase battery time. Basically, people love their smartphones and are using them more and valuing them more highly: accessories that make the phones sturdier and able to be used for longer are seen as useful things.

Are we cutting the wire?

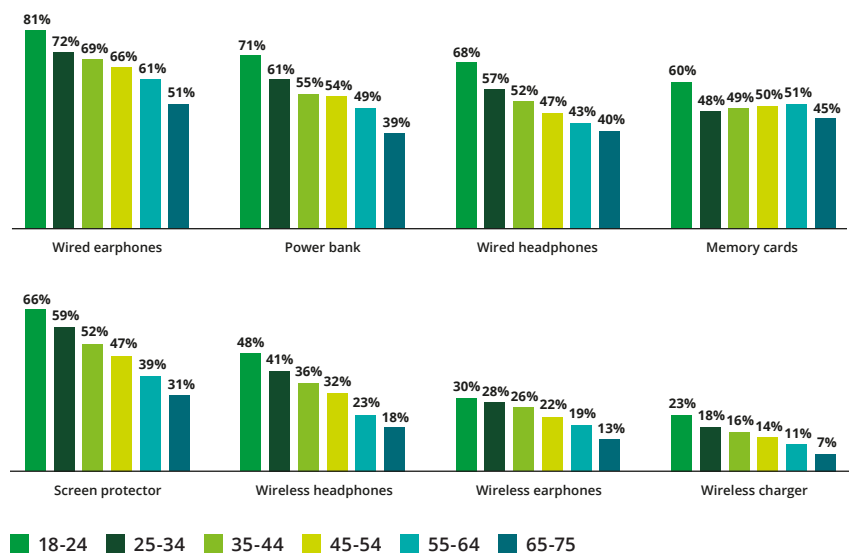
Ownership of wireless earphones and headphones is still low compared to wired alternatives, even though wireless devices have been available for years. Wireless Bluetooth headphones hit the market in 2004 and became viable alternatives for traditional wired headphones in 2010³. When Apple AirPods launched in 2016 at the same time as the headphone jack were removed from iPhones, many were “forced” to switch to wireless alternatives⁴. Given the rate at which new technology is normally picked up by consumers, why are ownership levels of wireless devices not higher in 2019? It might be that consumers do not think that going wireless really adds enough value to support the price difference.

Are accessories for everyone?

Accessory ownership is clearly correlated to age. Younger smartphone owners have more accessories, and ownership decreases as age goes up (Figure 6). This is not surprising as we see the same trend for use frequency. Younger segments are heavier users of their phones. For instance, we see that for all apps listed in the survey, respondents aged 18-24 report higher hourly use than older respondents. Heavier use is likely to induce consumers to protect their phones, extend battery life and generally have a better experience.

Figure 6. Accessories ownership across generations

Which of these accessories/services for your phone do you own? - Total ownership



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Men tend to be quicker to buy and use new smartphone accessories than women. They also own more smartphone “gadgets” such as wireless accessories, power banks and memory cards, while women own more safety accessories such as phone cases and screen protectors.

Smartphone: the centre of attention

The market for IoT devices and for smartphone accessories can be considered as an ecosystem, with the smartphone at the centre. In many ways the smartphone is the key to the consumers’ connected IoT devices, as it acts as a remote or a mobile display pad. Similarly, the phone is the centre of attention for all the accessories and gadgets that enhance the customer experience. This all turns into a positive upward spiral for the future of the smartphone: the complementary markets are reinforcing the importance of the smartphone and boosting its future value and growing the overall ecosystem. This goes for online shopping as well – which we will investigate in the next section.

The smartphone – a retail top shelf

What started as online versions of physical stores are now a complex ecosystem where it is sometimes hard to differentiate between communication apps and classic online shopping services.

The modern smartphone has evolved over the last decade from new technology to an essential modern-day-multi-tool, both in the professional and private life of the consumer. Over the course of the last three years, the technology has evolved, as has the market. The transition from traditional means of acquiring and delivering products and services to digital means accessible through mobile phones has begun to be the new normal.

The mobile phone inching ever closer to the retail top spot

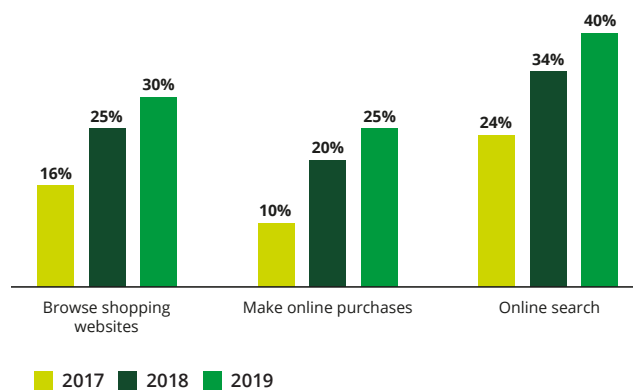
The smartphone continues to grab market share as the preferred device for online retail activities. The increase from 2018-2019 was not as large as the change in 2017-2018, yet was still very noticeable in all the areas as displayed in *Figure 7*. Most impressive is the change in making online purchases, which has increased by 150 per cent over the course of two years. This can partly be attributed by the increase in supply of service and shopping apps⁵. That said, the smartphone is still more likely to be used for searching or browsing rather than the actual purchase.

Purchasing products and services in a mobile world

Over the course of the last three years more people across all the age segments have purchased a product online using their mobile phone (*Figure 8*). It is hardly any surprise that mobile online shopping is getting more common⁶. However, it is worth noting that

Figure 7. The evolution of the smartphone preference

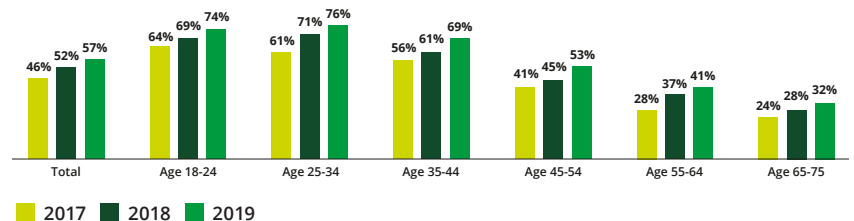
Which, if any, is your preferred device for each of the following activities?



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Base for 2018: Sweden (1719), Norway (900), Denmark (1010), Finland (983). Base for 2017: Sweden (1650), Norway (864), Denmark (970), Finland (943). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 8. All ages are using the mobile phone more for retail

Activities use mobile phone for - Purchase a product online

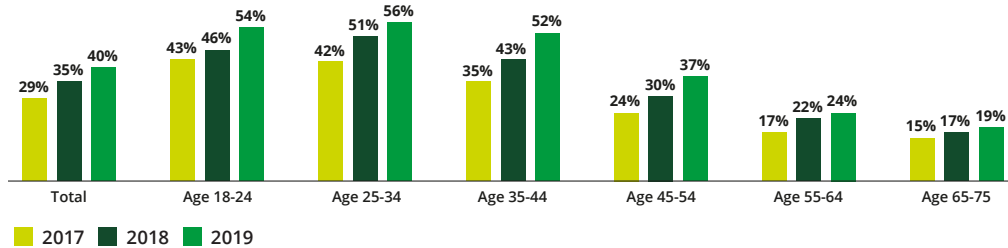


Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Base for 2018: Sweden (1719), Norway (900), Denmark (1010), Finland (983). Base for 2017: Sweden (1650), Norway (864), Denmark (970), Finland (943). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017



Figure 9. Services are moving into the phone for consumers

Activities use mobile phone for - Purchase a service online



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Base for 2018: Sweden (1719), Norway (900), Denmark (1010), Finland (983). Base for 2017: Sweden (1650), Norway (864), Denmark (970), Finland (943). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

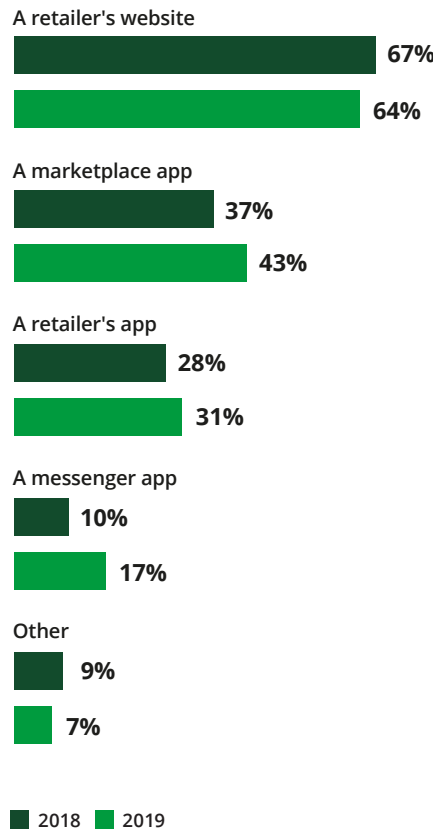
the increase is apparent in all age segments, highlighting that a smartphone is becoming an increasingly useful device for us all. The online purchasing of services has increased as well (Figure 9), though not as much as for products of course, as the supply and accessibility of services are not as high as for products. It might also appear more complex or diffuse to buy a service online compared to a physical product. In recent years the supply of services has become more diverse as healthcare services, logistic solutions and household services have found their way into our homes and made our everyday life easier.

The modern marketplace is changing

Retailer websites are still the preferred purchase sites in the eyes of the consumer. It might be too early to tell, but according to Figure 10, a shift in marketplaces could be under way. Retailer websites had a decline of three percentage points compared to 2018, while the three app categories all had an increase: six and seven points for marketplace and messenger apps. The preference for retailer websites could be connected to the increased preference for using mobile phones for online shopping. The consumers still prefer the computer to the phone for making online purchases and with this might come the high base value of the retailer’s website, because consumers are used to accessing the site this way, even when they use their phones⁷. In a broad sense, large retailer websites are most often optimised for computers, and merely adequate for phone usage. The apps on the other hand are specifically tailored for the use of mobile phones. In a world were

Figure 10. Preferred purchase sites when purchasing products/services online using a smartphone

You mentioned that you purchased a product/service online, using your smartphone. Which of the following do you normally use when purchasing products/services online using your smartphone?



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (458), Norway (239), Denmark (274), Finland (269). Base for 2018: Sweden (1031), Norway (530), Denmark (525), Finland (477). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019 & 2018

digital design is critical for branding and general impressions, better and more apps could be a driver towards apps being preferred more frequently as the place of purchase.

It is remarkable that messenger apps have had a 70 per cent increase in preference. Messenger apps are known in retail as an avenue for marketing. The increased spotlight would not be surprising to boost sales, but as a preferred purchase site it is a bit of a wildcard. Consumers are shown a product or service that is targeted towards them and does not have to be a product that they browsed for, even though this is likely with consumer data derived from web history. It narrows the consumer's focus to a product from what could have been a much larger genre.

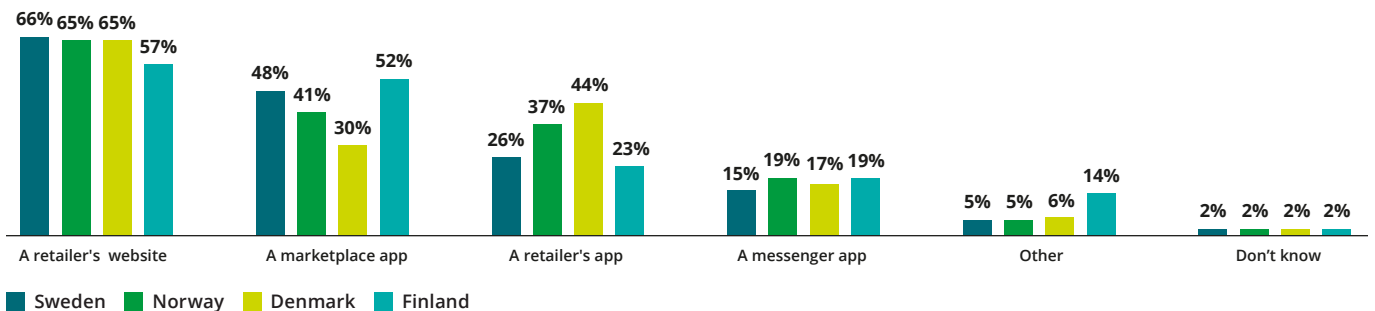
Marketplace apps have experienced a greater increase than retailer's apps, with six and three percentage points respectively. As previous reasoning states, it might be that these apps are more targeted towards mobile use, but another thought would be that these Marketplace apps come with another unique selling point in order to gain market share. Such a selling point could be discounts targeting a certain segment or product category. Thus, these would not compete in the same sense that the retailer's apps and websites compete against each other.

There are some differences between the countries regarding preferred purchase sites (Figure 11). Danish respondents prefer retailer apps more than other Nordics (44%), while Finnish respondents prefer a marketplace app (52%). In general, it could be noted that the main national difference is between marketplace apps and retailer apps, while the retailer's website remains consistently preferred by half to two-thirds of those surveyed. It may be that market shares and focus on retail apps of different major retail players in each country cause these differences.

Over the last few years the supply of services has increased in the household as healthcare services, logistic solutions and household services have found their way into our homes and made our everyday lives easier.

Figure 11. Preferred purchase sites when purchasing products/services online using a smartphone

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Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (458), Norway (239), Denmark (274), Finland (269). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

Industry Spotlight: Retail

Time to rethink retail

The retail industry is in transition due to tension in the global economy and a wave of emerging technologies.

In a market of constant disruption, a focus on ecommerce and mobile solutions is essential in order for retail businesses to thrive. The Nordic ecommerce market has reached a value of 46 billion euro in 2019⁸. Concurrently, the use of mobile phones for shopping is growing, now representing a little more than a third of Nordic ecommerce spending.

The Global Mobile Consumer Survey 2019 data confirm the rise of the mobile phone as an important part of shopping, both as a means of purchasing and as a tool for navigating and researching the retail universe.

Five highlights from the retail industry:

1. Although the computer is still the preferred device for searching and browsing, the preference for mobile devices for 18-44-year-olds is growing so fast that smartphones will likely be the number one device for searching in 2020, and the top choice for browsing by 2023 or so.
2. Across all age groups, one out of four prefers the mobile phone for making online purchases, up from one out of 10 in 2017.
3. 57 per cent have used their mobile phone to purchase a product online, while 45 per cent have purchased a service.
4. 58 per cent of the respondents have used their phone for making an in-store purchase, up from 45 per cent in 2018.
5. 74 per cent have used their mobile phone to read reviews about a product or service.

Deloitte expert take

The mobile phone is becoming a vital part of many shopping experiences. Customers browse products and services, read reviews and compare prices easily on their mobile phones. Additionally, consumers can receive notifications about discounts and store pick-ups, initiate orders and even complete purchases on their mobile phones. The broad use areas of the mobile phone in the retail world will make the phone central to both physical and digital purchases, especially for younger shoppers.

“The smartphone will become consumers’ loyal shopping companion, both for physical sales and ecommerce”

– Joakim Torbjörn, Nordic Retail Industry Lead

How to approach this market according to our analysis

It is essential for retailers to investigate how mobile solutions can improve the customer journey of shopping – from browsing, to purchasing, to delivery, creating convenient and personalised shopping experiences.

Offering user-friendly payment solutions is key to making checkouts and purchases hassle-free. Moving forward, this will be enabled by cross-country collaboration and commercialisation of technologies such as QR and NFC⁹.

Retailers should seek new opportunities in combining physical stores and digital platforms. Currently, we see examples of *Phygital offerings* popping up, such as consumers buying products online for store pick-up, receiving offers and assistance on their mobile phone in physical stores or trying on items ordered online in a physical fitting room location for quick return.

Retailers should also be aware of large global tech giants like Amazon and WeChat entering the Nordic retail market with sophisticated mobile solutions. This poses a threat to traditional retailers who will need to respond by making the mobile phone increasingly central to their business strategy.







Section 2

Today, fast internet connectivity makes it possible for Nordic consumers to be online all the time, both on social media and when gaming. However, this 24/7 accessibility comes with a price ...

4G, 5G - as long as we are connected, do we even care?

The Nordic countries are above the OECD average in terms of the percentage of the population with mobile broadband subscriptions and high mobile data usage, but do we understand the benefits that 5G will bring to the table?

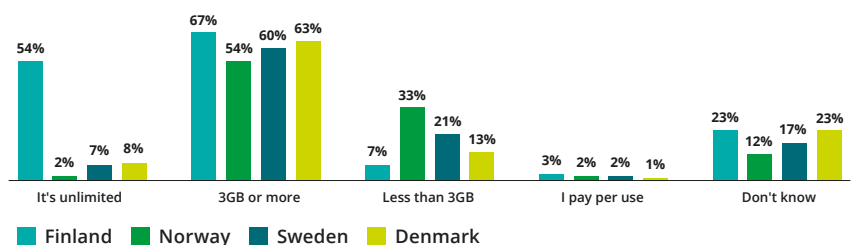
Although we can see an increase in the mobile use of data intensive video streaming services such as Netflix and HBO Nordic, the quality and coverage of network when accessing the Internet or services that use data is perceived as less important than previously. Furthermore, anticipation for 5G has decreased even as we get closer to the Nordic rollouts. Have we reached a tipping point in perceived network quality?

We are the connected people

Today, there are over 100 mobile broadband subscriptions for the same number of inhabitants in the Nordic countries¹⁰. In fact, compared to other OECD countries, only Japan is ahead of Finland in the number of mobile broadband connections per 100 inhabitants and, with the exception of Norway, the Nordic countries rank well above OECD averages in this category.

Generally, we are also heavy mobile data consumers, as all Nordic countries rank above the OECD average in terms of mobile data usage¹¹. While we all seem to want mobile data, Finland stands out when it comes to actually getting it, as Finland tops the OECD statistics for mobile data usage at over 19 GB per month in 2018, with four times the mobile

Figure 12. Monthly data allowance in the Nordics
What is your monthly data allowance on your smartphone?



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (458), Norway (239), Denmark (274), Finland (269). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

data usage of Norway. This is likely due to more than half (54 %) of Finns having unlimited data (see Figure 12). Generally, this unlimited data comes with a speed cap, instead of a data cap (the norm in the rest of the region). Things are not bad in the other Nordic countries either as nearly two-thirds of Nordic adults have a monthly data allowance on their smartphone of 3GB or more. Since Finland operates with unlimited data, many households use their mobile connection as a hotspot; therefore, the country has the lowest percentage of fixed broadband connections among the Nordic countries (although still more than the OECD average)¹².

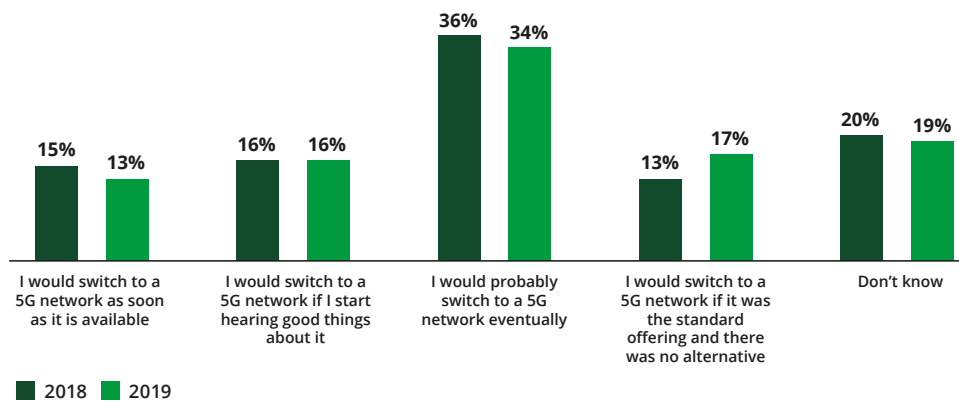
5G for consumers – is it just a faster 4G or something much more?

There has been a lot of discussion around 5G and what kind of new opportunities it offers for businesses. However, we suspect that the benefits which 5G brings to the end consumers are not as clear. For one, the trend for consumers' anticipations of 5G has actually decreased slightly between 2018 and 2019 (see Figure 13). In 2018, 15 per cent of Nordic adults owning a phone or a smartphone would have switched to a 5G network as soon as possible, whereas the comparable percentage in 2019

has dropped to 13 per cent. Furthermore, from 2018 to 2019, there was an increase of four percentage points in the number of respondents stating they would only switch to 5G when it becomes a standard offering and there is no alternative. Interestingly, it seems that Norwegian consumers are more interested in 5G than consumers in other Nordic countries (see Figure 14). Furthermore, there is a higher interest in switching to 5G as soon as possible for Nordic consumers who own the latest smartphones, compared to switching in general (see Figure 15).

Figure 13. Consumer anticipation of 5G

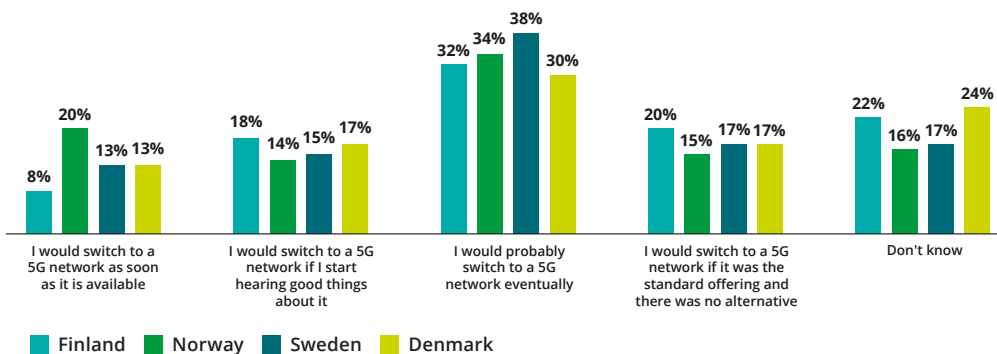
Which of the following best describes your attitude towards 5G networks?



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Base for 2018: Sweden (1798), Norway (947), Denmark (1051), Finland (1050). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019 & 2018.

Figure 14. The anticipation of 5G in the Nordic countries in 2019

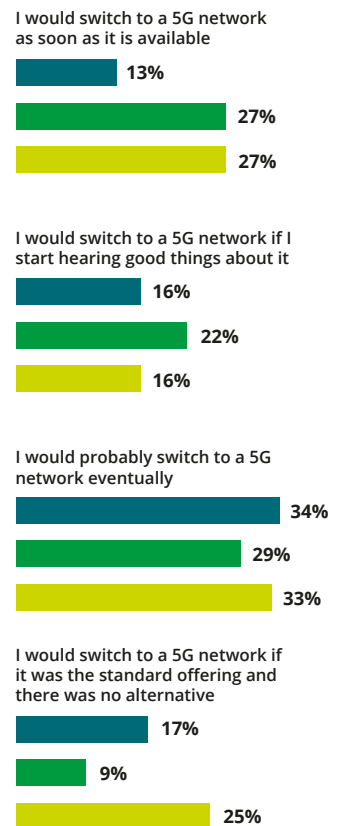
Which of the following best describes your attitude towards 5G networks?



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

Figure 15. The anticipation of 5G among people interested in the latest technology in 2019

Which of the following best describes your attitude towards 5G networks?



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

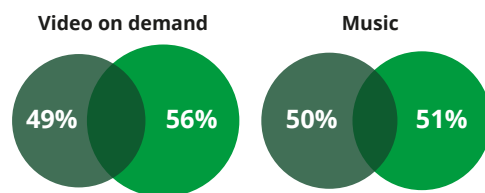


When 4G was introduced, it changed the way consumers could use their smartphones: 4G networks were simply much faster than 3G, enabling consumers to listen to music and watch series and movies on their smartphones online almost anywhere with high quality, which was not possible with 3G. Furthermore, when thinking about what changing from 3G to 4G meant for consumers, it is only logical that a common belief about what 5G will provide consumers is that it will be just like 4G, only faster – in fact, for consumers (as opposed to enterprises) that is the single biggest difference between 5G and 4G. Hence, it is interesting to

analyse whether there have been any changes in the ways in which consumers use their smartphones for activities requiring a high quality network, such as using data intensive streaming services like Netflix and HBO. **Figure 16** shows that as of 2019 over half of Nordic consumers subscribe to services that require a high quality network, such as music and video streaming services, with video growing nearly seven percentage points in the last year. Furthermore, there has been a five-point increase in the number of Nordic consumers watching videos on their smartphones in the last year (see **Figure 17**).

Figure 16. Subscriptions to streaming services requiring high quality data connection

Which, if any, of the following subscription services do you have access to?

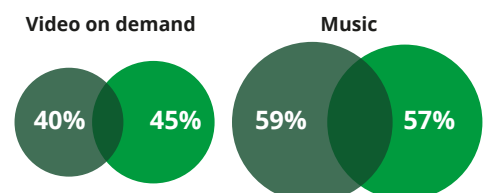


■ 2018 ■ 2019

Base for 2019: All adults 18-75 in Sweden (1864), Norway (976), Denmark (1095), Finland (1066). Base for 2018: Sweden (1868), Norway (977), Denmark (1097), Finland (1068). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, Deloitte Global Mobile Consumer Survey, 2018.

Figure 17. The use of smartphones for streaming services

Which, if any, of the following do you access on your smartphone?



Base for 2019: All adults 18-75 who have a smartphone and have access to a subscription service in Sweden (1421), Norway (803), Denmark (806), Finland (771). Base for 2018: Sweden (1357), Norway (745), Denmark (801), Finland (720). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019 & 2018.



Overall, consumers have increased their smartphone use for activities which require a high-quality network and there is no question that 5G will allow even better connectivity and faster speeds. However, as noted before, this does not seem to correlate with the consumer's interest in 5G at launch and the perceived importance of the quality of the network. This raises the question: have we reached a point where we feel that the network quality is already good enough? If so, it will be interesting to see how the Nordic operators will be able to convince all of their customers that the investments into 5G networks are worth paying more for, including acquiring (usually more expensive) 5G capable mobile devices.

Consumers, this is your 5G

The fact is that 5G is much more than just a faster 4G. 5G is a completely new network system with lots of benefits and opportunities for some consumers. The usual benefits associated with 5G are the following:

- 1 Higher speed
- 2 Significantly higher density
- 3 Lower latency
- 4 Network slicing.¹³

But what do these actually mean for consumers? As expected, one of 5G's key advantages is that it will be a lot faster than 4G. With 5G, HD movies can be introduced to mobile data subscribers in a completely new

light as 5G allows us to download HD movies in five to 10 seconds, compared to 10 minutes for 4G⁴ - although it is worth noting that most services for video rely on streaming, rather than downloading, and 5G's speed advantages are less meaningful there. However, higher speed is not the only advantage of 5G for consumers.

If you have ever attended a festival, a big concert or any other event with many people, you might be familiar with the following scenario: you look at your phone and notice that you have suddenly lost signal and all connectivity to the outside world, meaning that you are not able to share your experience with your friends on social media and have no chance of ordering a taxi or using a ridesharing app. The reason behind this is that 4G networks do not have the ability to connect tens of thousands of devices in a small area at the same time. 5G can handle 10 times higher device density than 4G⁴. In other words, 5G will allow more devices to be connected in the same network at the same time. This is a good thing, but one might question how frequently this advantage might be relevant to the average phone subscriber in a given year.

Furthermore, 5G has a latency of about one millisecond, which will improve the quality of online gaming - although there are few examples outside of gaming where ultra-low latency will matter. In the future, low latency enabled by 5G may be used for self-guided cars to be able to work more reliably^{14,15}. In addition, 5G will work remarkably better in rapidly moving vehicles, so we might finally get the opportunity to say goodbye to lagging mobile network connections on trains and aircraft.

Network slicing allows one common network to contain multiple virtual networks. For consumers, this means that different devices connected to the internet can have their own tailored "lanes" depending on what kind of features these devices require to work optimally. For example, IoT applications do not necessarily need a high data throughput but they might need very low latency, whereas online video gaming requires a low latency and a high data throughput¹⁶. With 5G, it will be possible for consumers to experience high quality connections with all their connected devices as the "lanes" can be tailored to meet the special requirements of each device.

Industry Spotlight: Telco

Mobile contracts – a real bargain?

Consumers demand quality service at a low price, and they're getting it - with one operator or another.

Telecom operators in the Nordics face challenges from regulation, high customer expectations and heavy competition. The need to invest in both next-generation radio access networks (5G) and the fibre optic backbone to support the radio access networks is paramount to remaining relevant to customers. Operators' attempt to diversify the revenue base and differentiate themselves towards customers have included bundling devices and other services with the mobile contracts. What is the impact of these efforts on customer perception and behaviour?

Five highlights from the telco industry:

1. Over 70 per cent of Nordic consumers have a post-paid mobile contract; 30 per cent have a phone on the contract as well.
2. Predictable, low-cost network quality is very important to more than half of all mobile users.
3. One quarter of the respondents switched mobile operators within the last year and a half; a fifth have never done so.
4. Bundling services from mobile operators is decreasing in popularity, although home broadband tops the list.
5. Finns want unlimited data plans, while Swedes bundle contracts and phones and have lower churn.

Deloitte expert take

Continued investment in 4G and 5G networks, as well as the fibre optic backhaul, is critical in satisfying the ever-increasing demand for data on-the-go. The issue is not so much in peak speed, but rather overall network capacity. While most consumers care little about how or what technology is used to deliver, they demand a smooth user experience for their data-based services and apps.

“Consumer acceptance of poor quality and unsatisfactory user experience is continuously declining which strains operators.”

– Jonas Malmund, Nordic TMT Industry Lead

Consumers want ease-of-use and low prices

The majority of Nordic consumers have a post-paid contract for their mobile phone. Norwegians and Swedes are more likely to have their phone included on the contract than their Finnish and Danish peers, although the share of Finns who have the phone on the same contract has been gradually increasing.

All characteristics or services offered by mobile operators that are important or very important to more than four-fifths of consumers are related to the price of the contract, the quality and availability of the network and customer service. The availability of additional services, such as streaming music or video, is important or very important to less than half of consumers, depending on the service in question. Interest in bundling other services from the mobile operators has - after previous growth - declined since last year. Customers, particularly Finns and Norwegians, will readily switch operators for better networks, service or just a lower price.





Social Media – Mind the gap

Daily use rates and social media preferences reveal a gap across generations. But will these differences persist, or will social media behaviour converge in the future?

The use and frequency of social media apps continues to increase, particularly on a day-to-day basis (Figure 18). Usage and mobile phone access to social media continues to grow with the ever-present nature of smartphones and other devices that make user engagement with social media apps immediate and more frequent. Data compiled from this year's survey shows that the use of social media apps by all adults, particularly when accessed through a smartphone, has increased by eight percentage points over the past two years.

Keeping up with the Gen Zs

More than ever, social media underpins the heavy use of smartphones. The advent of the smartphone has made social media immediate and instantly accessible. As expected, pre-teens (although not included in our survey) and young adults are at the forefront of social media trends, forming certain preferences, behaviours and connections to social media. Although older age groups often pick up these trends after a while, generation gaps will persist.

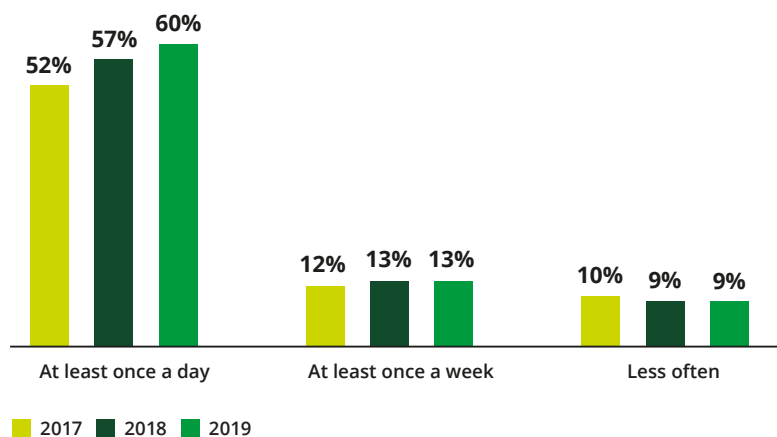
Millennials lead the way

For years, millennials (1981-1996) and Gen Zs (1997 and after) have led the way in the adoption of social media. This adage holds true - but does not tell the full story.

Social media allow people to stay in touch and access information, but they can also be used with malice, to spread propaganda and even

Figure 18. Usage of social networks on mobile phone

How often if at all, do you use each of these on your mobile phone? - Social Networks

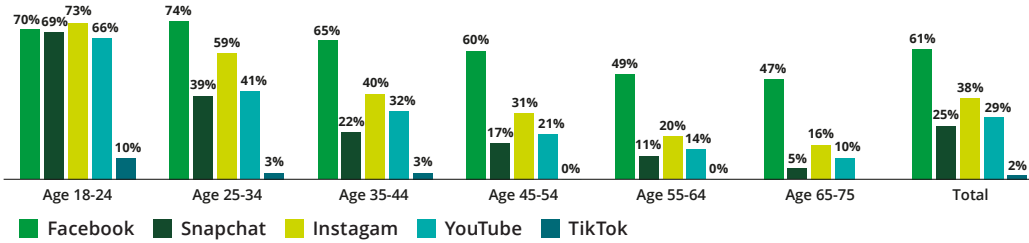


Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Base for 2018: Sweden (1798), Norway (947), Denmark (1051), Finland (1050). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

livestream heinous crimes. Therefore, it would be no surprise if most youngsters have a love/hate relationship with their digital devices. However, according to the 2019 Deloitte Millennials Survey, 71 per cent of millennials feel positive about their personal use of digital devices and social media. Nevertheless, nearly two-thirds (64 %) said they would be physically healthier if they reduced the time spent on social media, and six in 10 said it would make them happier¹⁷.

Figure 19. Daily usage of social networks based on age groups

Which, if any, is your preferred device for each of the following activities? - Check social networks



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Across all age groups, there are no trends which indicate differences in the general use of social media. The proportion of respondents that use at least one social media app was similar across all age groups. Different patterns begin to emerge when the frequency of app usage is considered. The 18-24-year-olds use the major social media apps such as Facebook, Instagram, Snapchat or YouTube on a daily basis more consistently than other age groups (Figure 19). Facebook is the most used on a daily basis while other apps that are built on the premise of messaging and connectivity also score high on daily use.

One thing is frequency of use, but our data also suggests that other perceived differences in the way different generations use and interact with social media are true. It appears that some behavioural patterns present in younger age groups are being passed on to older ones, but often after some time has passed. This is apparent in social media adoption, where the data shows that the proportion of millennials who use social media has been consistent over the past years while the share among older groups has increased year after year. Similarly, we see that daily use of Facebook is becoming

more common among older age groups while this was true for younger age groups a few years back (Figure 20). With this in mind, we may consider it a general trend that older generations pick up the younger generations' behaviour, and that their usage tends to follow in the footsteps of the youngsters over subsequent years. On the other hand, this is not always true: some technologies, such as eReaders and smart watches, were more popular with older demographics first, and only over time migrated to younger generations.

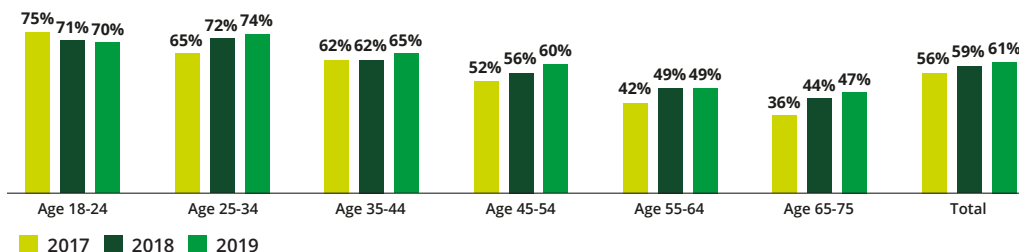
It is worth noting that the reasons for engagement on specific social media platforms differ greatly across generations. Older generations may form distinct social media preferences and habits once they start using more social media apps.

Will the Facebook wave die out?

While the total daily use of Facebook on smartphones has increased from 2017 to 2019 for the 25-75 years old age group by between three and 11 percentage points, young adults (18-24) are bucking that trend: daily Facebook users have declined from 75 per cent to 70 per cent (Figure 20).

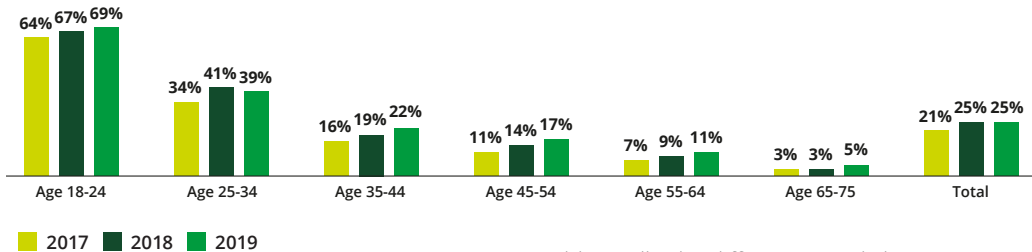
Figure 20. Facebook Daily Usage

Apps used on mobile phone - Facebook



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 21. Snapchat Daily Usage
Apps used on mobile phone - Snapchat



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Although the proportion of Facebook users remains relatively lower among older generations, they are the age groups with the fastest annual growth rates¹⁸. This may be a consequence of the adaptive, easy to use, connective nature of the app and its function as a tool for services beyond entertainment or self-promotion which other apps rely on. Across the four Nordic countries, average Facebook use across devices has been stable over the past years, which indicates that the growth is mainly due to a preference for the mobile platform.

Nevertheless, the declining use amongst younger age groups raises questions about the future of Facebook. Is the app simply well-suited to the needs of older generations, and will the networking effect make these consumers stick to Facebook? Or will the older generations also start exploring a broader range of social media platforms? Indications of slower growth in Facebook use amongst consumers between 25-34, 55-64 and 65-75 years old from 2018-2019 means that it might be hitting its peak in terms of numbers of users in that age group.

Daily Facebook usage is decreasing for 18-24-year-olds but increasing for all other age groups.

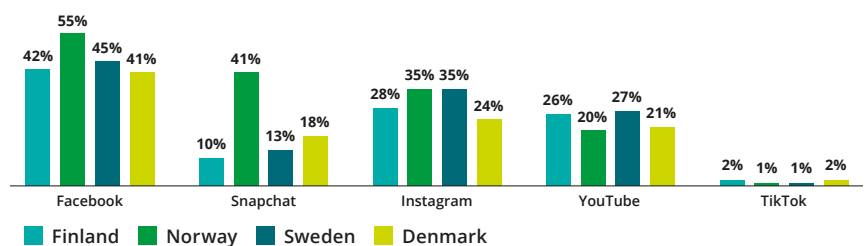
Oh Snap! A yawning generation gap!

The popularity of Snapchat is not as even across all age groups as Facebook is. The daily engagement has increased in all age groups except for the 25-34-year-olds, down slightly from 2018 (Figure 21).

Additionally, the differences in daily use among age groups is greater than for other apps compared in this report. The latest survey showed that 69 per cent of 18-24-year-olds used Snapchat daily, compared to 17 per cent for the 45-54-year-olds and just five per cent for consumers aged 65-75. The disparity is likely due to the inherently ephemeral nature of snaps: perhaps young people are more worried about photos that stay up forever than 60-year-olds are?

Although the survey shows clear differences in the use frequency, the ways of interacting on Snapchat creates another gap between age groups. While older age groups mostly use basic features, younger age groups have their own trends and obsessions. Trending now are personal blogs on Snapchat, as well as externally produced entertainment and news. A 2018 Deloitte Norway Media Survey showed that three in four Gen Z respondents used social media to consume and read the news¹⁹. Interestingly, Norwegians of all ages have much higher daily use rates for Snapchat than the other Nordic countries (Figure 22). About 40 per cent indicated daily use - more than twice the level of Denmark, which had the second highest use rate. Additionally, Norwegian

Figure 22. Nordic Social Media Daily Usage
Apps used on mobile phone - Snapchat



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

participants used social media apps more frequently than their Nordic contemporaries.

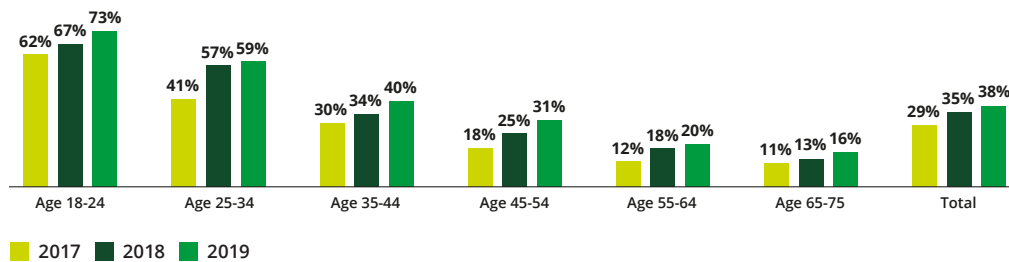
Instagram on the rise

Among the widely popular apps, Instagram stands out as the only one increasing in daily use across all generations, with the highest occurrence within the 18-24 age group (Figure 23). The 45-54-year-olds have the highest rate of increase of 13 percentage points in daily Instagram use. Older generations also report much higher usage on Instagram than on Snapchat, both generally and on a daily basis. This might be a result of the ease of use of the app and contemporary audience.

Instagram follows a similar functionality in that it allows users to follow family members, media personalities or businesses via an image-sharing platform. If social media rests on the idea of gamification built into self-worth, then Instagram represents its distillation. It incorporates elements of Snapchat (short videos, self-promotion) and Facebook (interaction, metrics) that appeal across all age groups. With that in mind, it might mirror the ascendancy of Facebook as a primary platform for social interaction that culminates in follows from parents and grandparents.

Figure 23. Instagram Daily Usage

Apps used on mobile phone - Instagram



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017





Young adults “tube” more frequently

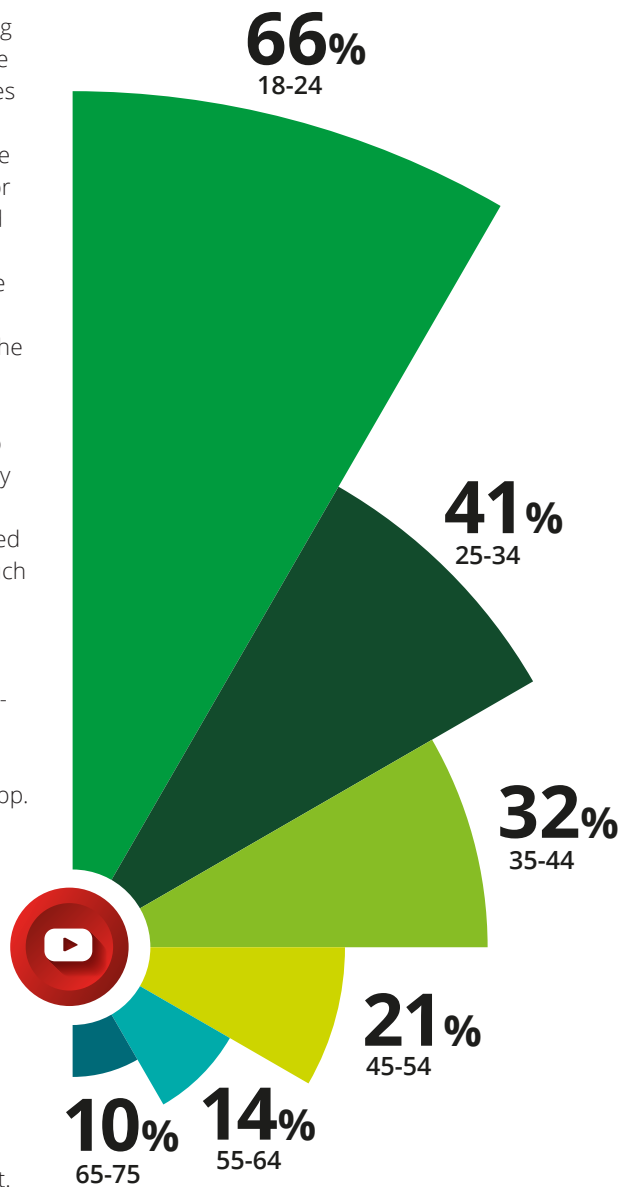
While most (84 percent) Nordic respondents across generations have used the YouTube app on their smartphone at least once, young adults (18-24) stand out with the greatest use frequency (Figure 24). Around one in five uses YouTube at least once every hour, and seven in 10 report daily usage. In comparison, these numbers are five per cent and 29 per cent for all generations. Unsurprisingly, the preferred method of access for short videos (YouTube falls under this category) is the mobile phone (Figure 25). Over the last three years the smartphone has increased in popularity as the preferred choice for watching short videos, while all of the other devices have seen a steady decline. Gender disparities relating to use of the app are more pronounced for daily use than for hourly use. 33 per cent of male respondents reported using it daily, compared to 25 per cent of women. Hourly use was much lower among both groups (around 5 %).

Too old to TikTok?

Are you familiar with TikTok, an app for short-form mobile videos that originated in China? Our survey reveals large disparities between age groups in the use of this relatively new app. 10 per cent of young adults reported using TikTok daily, while only six per cent of all respondents reported ever using the app. This is in contrast to the increasing popularity the app has gained worldwide in the past year. Reportedly, it had 500 million monthly users globally as of June 2018, an increase of 50 per cent from the start of 2018²⁰. This places TikTok ninth among social network sites in terms of monthly active users – but apparently it has not found its way into the Nordic markets yet.

This growth is not reflected in the use statistics, and the explanation might be that the app is more popular with an age bracket (under 18) that was not included in the survey. In Norway, research reveals that one-third of all 10-year-olds use TikTok at least once a week²¹. The recent breakthrough of the app in terms of downloads and daily use means that it is hard to predict whether the low to non-existent use rate among the older age groups will change significantly. While TikTok has 500 million active users globally, (worth an estimated \$75 billion, based on the last round of financing²²), history

Figure 24. YouTube Daily Usage
Apps used on mobile phone - YouTube



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

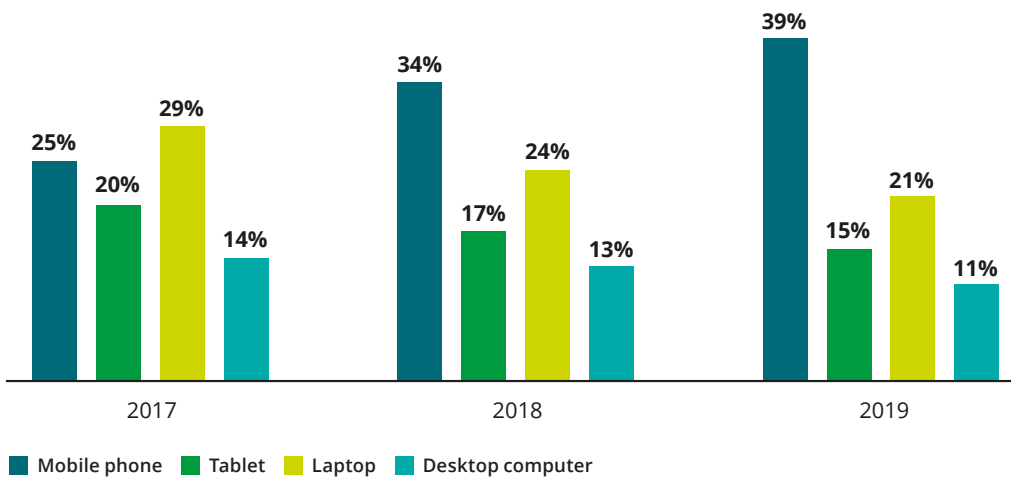
suggests that some apps become mainstays and grow their audiences over time (Facebook, Instagram, YouTube). Others become wildly popular and plateau, start declining or even collapse (Yik Yak, Vine).

Although TikTok has an uncertain future, its adoption indicates a generation gap with the introduction of new apps adopted by younger age groups, but not the older age groups.



Figure 25. Preferred device for short video access

Which, if any, is your preferred device for each of the following activities? - Watch short videos



Base for 2019: All adults 18-75 who have a phone or smartphone in Sweden (1775), Norway (942), Denmark (1042), Finland (1035). Base for 2018: Sweden (1798), Norway (947), Denmark (1051), Finland (1050). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

We have now looked at the numbers of one of the main time-stealers among Nordic consumers. Now it is time to look at another one – gaming – which has become very popular among Nordic consumers.

The game is on!

Gaming is everywhere, and the gaming industry shows no signs of slowing down. In the Nordics, the phone is now the most popular device for gaming and more and more people play games on their phones daily.

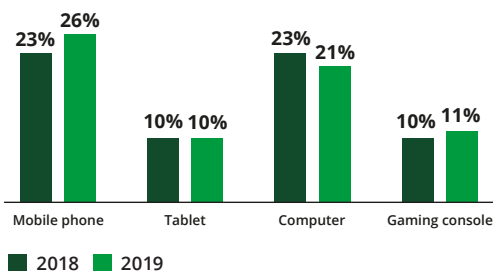
Is it even possible to stroll around town or commute on public transportation without running into someone gaming on the go? More and more people in the Nordics are mobile gaming daily, and games like 'Subway Surfers', 'Pokémon Go' and 'Candy Crush' have become household names. Women prefer their mobile or tablet for gaming - two devices especially suitable for single-player games - while computers and consoles rank highly for men, who also play more multiplayer games.

How about a game?

This year's survey shows that the mobile phone took over from the computer as the preferred device for gaming in the Nordics in 2019. In addition, according to [Figure 26](#), the mobile phone has cemented its status by getting even more popular this year compared to last. At this rate of growth it will be the dominant platform within a few years.

Figure 26. Preferred device to play games on

Which, if any, is your preferred device for each of the following activities? - Play games



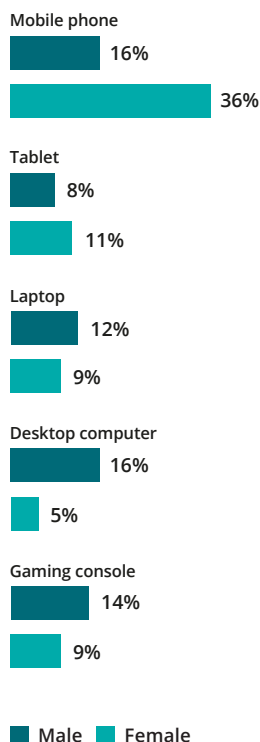
■ 2018 ■ 2019

Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

When taking a closer look at the gender divide, it is clear from [Figure 27](#) that while men prefer playing on their mobile phone, desktop and gaming console just about equally, women are overwhelmingly mobile gamers.

Figure 27. Preferred device to play games on based on gender

Which, if any, is your preferred device for each of the following activities? - Play games



■ Male ■ Female

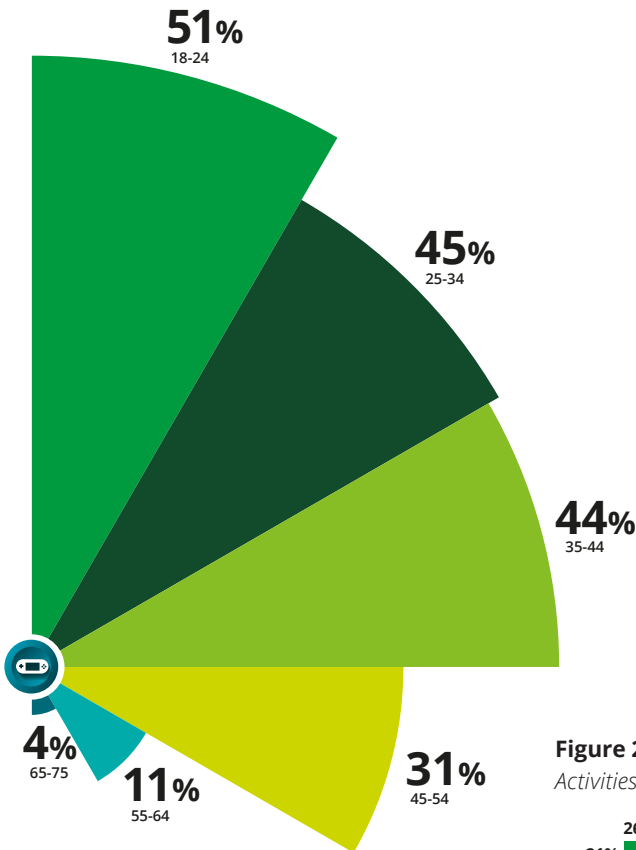
Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.





Figure 28. Ready access to games console based on age groups

Which, if any, of the following connected devices do you own or have ready access to? – Games console



Base for 2019: All adults 18-75 in Sweden (1864), Norway (976), Denmark (1095), Finland (1066). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

When it comes to gaming consoles, **Figure 28** shows that nearly half of all 18-44-year-olds either own or have ready access to one. After that we see a big drop-off in ownership with only a single digit percentage of those above 55 years old having a gaming console. Across every age group and country our survey shows an increase in daily mobile gaming over 2018 levels, with particularly large annual growth for 18-24-year-olds and every country except Finland (**Figure 29 & 30**).

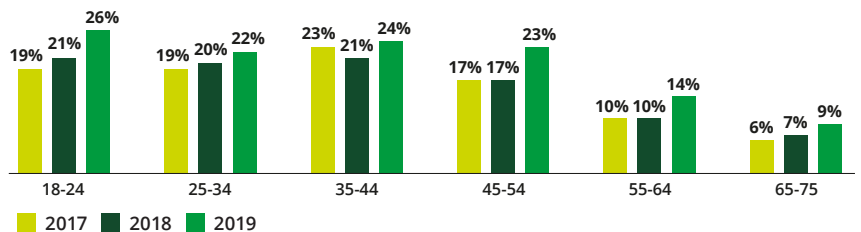
Just chilling with a quick game

The gaming primarily occurs when relaxing at home. However, according to **Figure 31**, people also turn to their phone for gaming purposes around bed time, when commuting or while watching TV.



Figure 29. Daily mobile gaming

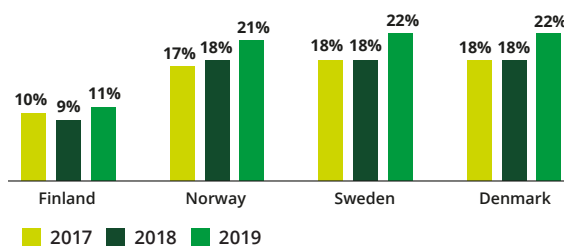
Activities use mobile phone to do - Play games



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1671), Norway (902), Denmark (940), Finland (913). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 30. Daily mobile gaming based on countries

Activities use mobile phone to do - Play games



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1671), Norway (902), Denmark (940), Finland (913). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

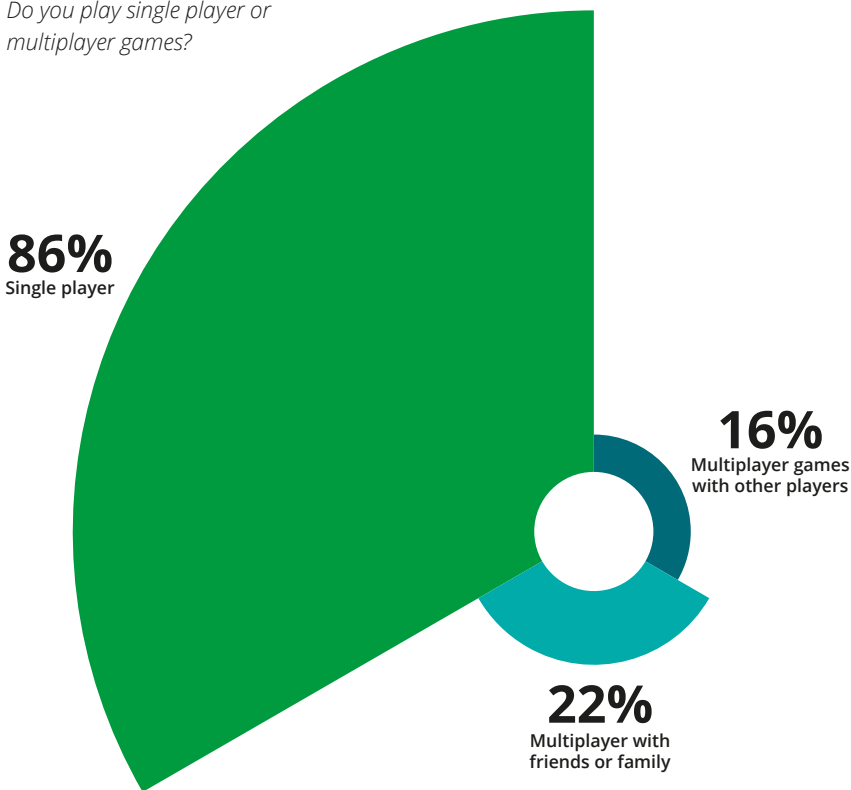
Some research has surveyed people playing games on their phones about how they feel while playing. "Relaxed" was by far the most common response, followed by "interested", "focused", "engaged" and "happy"²³.

It is interesting that just over a quarter play mobile games while watching TV. The data indicates that the TV screen alone is not enough to grab and maintain our complete attention and that many try to get the most out of their spare time by multitasking. Secondly, double screening - as it is called - is a growing trend, with some even saying that it is the new norm²⁴; marketeers around the world are looking to get on top of the trend by embracing a cross-device approach when running campaigns. The idea is to target the audience on multiple screens simultaneously to reinforce a given message or drive an action²⁵.

Although some research states that the social aspects of a game are the most important factor for many gamers²⁶, this does not seem to be the case when looking at mobile gaming in the Nordics. Our survey shows that single-player games are clearly more popular than multiplayer games (Figure 32). One could argue that many multiplayer games are too complex to play on a small mobile screen and that mobile gaming for the most part is a few minutes of passing the time here and there, while multiplayer functions tend to be more common on computer or console games.

Figure 32.
Single player or multiplayer

Do you play single player or multiplayer games?



Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Figure 31. When to play games on mobile phone

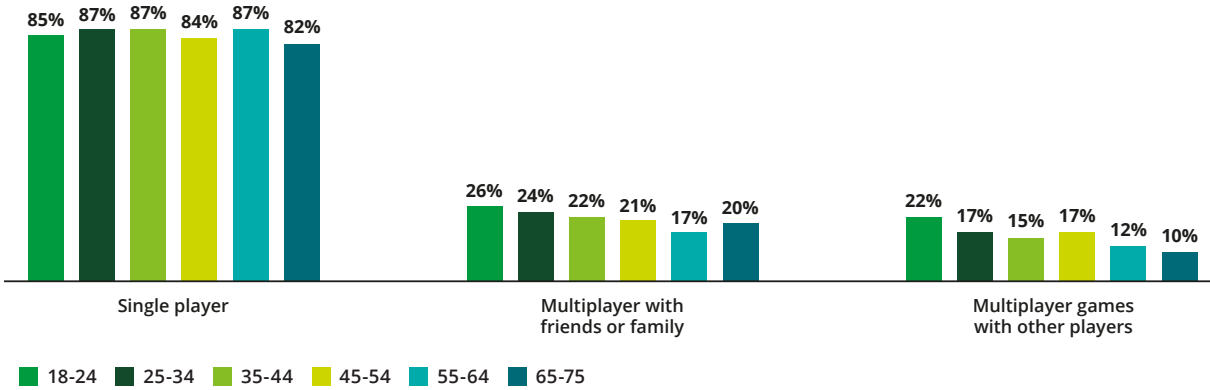
When do you tend to play games on your mobile phone?



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1671), Norway (902), Denmark (940), Finland (913). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 33. Single player or multiplayer based on age groups

Do you play single player or multiplayer games?



Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

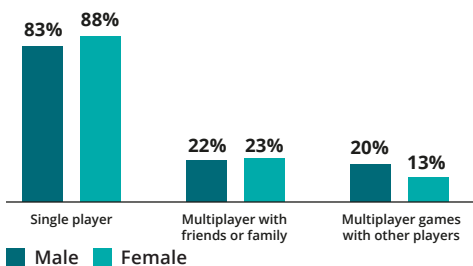
Diving deeper into the data, *Figure 33* shows that multiplayer gaming rises in popularity the younger you are: 18-24s are twice as likely as 65-75s to play multiplayer mobile games. This correlates with the massive popularity of 'Fortnite', which is especially popular with kids and teenagers²⁷. Our data shows that more women than men play single-player games, whereas more men than women play multiplayer games with players other than their family and friends (*Figure 34*). Nevertheless, mobile gaming and socialising can be combined without a game necessarily being multiplayer: it was not unusual to see people outside locating, capturing, battling and training Pokémons together when 'Pokémon Go' swept across the globe.

Gaming is big business

The global gaming market generated somewhere close to €126.3 billion in revenue last year. That number is predicted to increase by about 10 per cent in 2019 and every year until at least 2022²⁸. Looking at the predictions by different gaming platforms, it is interesting that the largest segment, 36 per cent, will be smartphone games. Similarly, while there were almost 1.82 billion video gamers globally in 2014, researchers expect to see over 2.7 billion gamers by 2021²⁹, with most of the growth coming from mobile gamers.

Figure 34. Single player or multiplayer based on gender

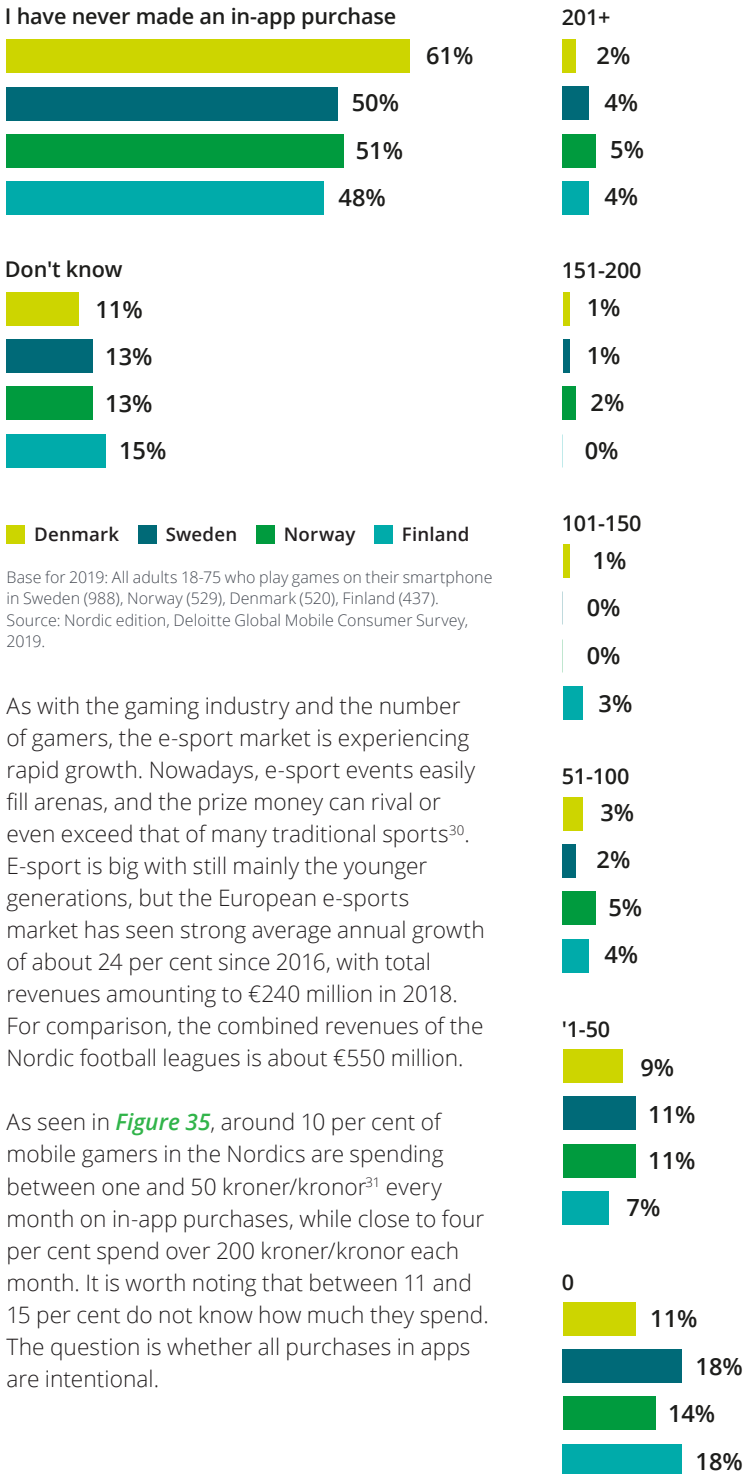
Do you play single player or multiplayer games?



Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Figure 35. Amount spend on in-app purchases

Typically how much, if anything, do you spend on in-app purchases for mobile games each month? (DKK, NOK and SEK. Euro is converted to DKK.)



Legend: Denmark (yellow), Sweden (dark blue), Norway (green), Finland (teal).
 Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437).
 Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

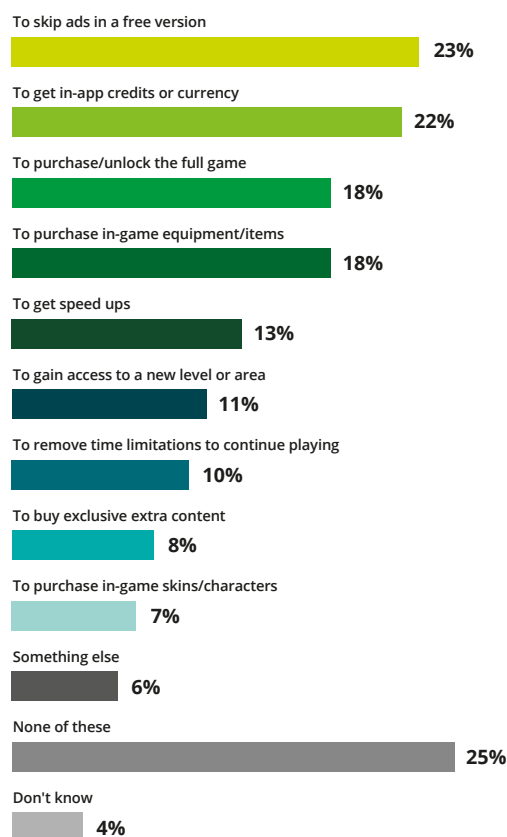
As with the gaming industry and the number of gamers, the e-sport market is experiencing rapid growth. Nowadays, e-sport events easily fill arenas, and the prize money can rival or even exceed that of many traditional sports³⁰. E-sport is big with still mainly the younger generations, but the European e-sports market has seen strong average annual growth of about 24 per cent since 2016, with total revenues amounting to €240 million in 2018. For comparison, the combined revenues of the Nordic football leagues is about €550 million.

As seen in *Figure 35*, around 10 per cent of mobile gamers in the Nordics are spending between one and 50 kroner/kronor³¹ every month on in-app purchases, while close to four per cent spend over 200 kroner/kronor each month. It is worth noting that between 11 and 15 per cent do not know how much they spend. The question is whether all purchases in apps are intentional.



Figure 36. In-app gaming purchases

You mentioned that you have made an in-app gaming purchase(s). Which, if any, of the following have you purchased?



Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Oops, I bought a new game

This question has been widely debated in the last years. In February 2019, 17 children's advocacy groups filed a complaint with the Federal Trade Commission against Facebook for deceiving children into racking up fees from games on its social network³¹ and both US Senators and British MPs have called for a tighter regulation on this topic and even a complete ban of loot boxes in videogames^{33, 34}.

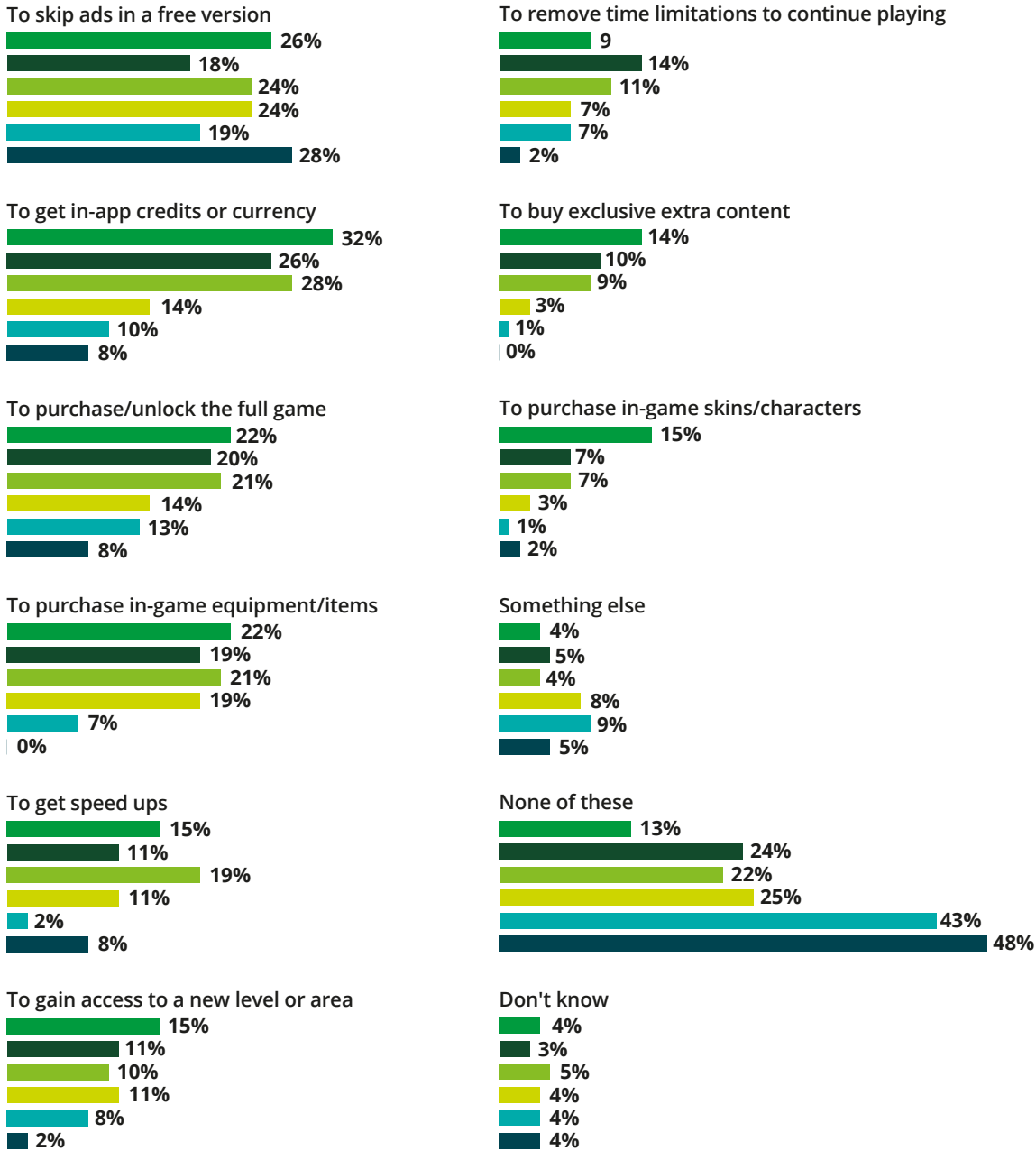
Our survey shows that mobile gamers are mainly conducting in-app purchases to skip ads or get in-app credits, followed by unlocking the full game or to get in-game equipment (Figure 36). Looking at the data segmented by age (Figure 37) the oldest gamers are mostly interested in skipping adds so they can play undisturbed, whereas the younger players are more likely to buy credits, items and extra gaming content so they can play more, play faster and experience as much of the game as possible.

Both social media and gaming enables Nordic consumers to connect with friends and family – and as the results have shown, many are online all day long. They would not like to miss out on anything, of course. However, this online presence has massive effects on our digital well-being...

In every age group from 2018 to 2019 our survey shows an increase in people who are gaming on their mobile phone on a daily basis. Figure 29.

Figure 37. In-app gaming purchases based on age groups

You mentioned that you have made an in-app gaming purchase(s). Which, if any, of the following have you purchased?



■ 18-24 ■ 25-34 ■ 35-44 ■ 45-54 ■ 55-64 ■ 65-75

Base for 2019: All adults 18-75 who play games on their smartphone in Sweden (988), Norway (529), Denmark (520), Finland (437).
Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

My smartphone gives me a headache

It can be a pain to miss out on the latest news from friends and family. However, spending all day on a smartphone leads to actual physical problems for many Nordic consumers.

Few people question a smartphone's usefulness or its world-changing power, but many are concerned about whether the device's ability to grab our attention may be causing more harm than good. A growing body of research suggests that spending too much time with a mobile device may shorten our attention spans and lead to severe side effects such as stress and physical pain. This year's Global Mobile Consumer Survey – the Nordic Cut provides further evidence to these findings.

Being online comes with a price

In 2019, nine out of 10 of the Nordic consumers surveyed have daily access to a smartphone. They use the device many times during a day to socialize, check their bank accounts or for work - and it is rarely out of sight for a very long time. But what's wrong with spending all day on a smartphone?

This 24/7 availability comes with a price. More than half of the respondents in our survey report experiencing negative side effects of using their smartphone. Some experience increased levels of distraction when trying to complete a task, while others have a fear of missing out on things when they are not checking their smartphone. As **Figure 38** shows, more severe effects include physical pains such as headaches or sore fingers, problems with eyesight and cases of anxiety or stress.

Figure 38. Negative side effects of smartphone addiction

Which of the following, if any, do you experience as a result of using your smartphone (too much)?



■ 2018 ■ 2019
 Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019 & 2018

Effects like these are also present in much of the recent research done in the field of digital wellbeing. For instance, a study³⁵ from the Center for Behavioural Intervention Technologies at Northwestern University Feinberg School of Medicine found that the more time people spend on their phones, the more likely they are to be depressed. The researchers also found that data about the amount of time spent alone in the home could predict whether someone had symptoms of depression. Depressed people spent an average of 68 minutes using their phones each day, while people without depression only spent about 17 minutes with a smartphone in hand.

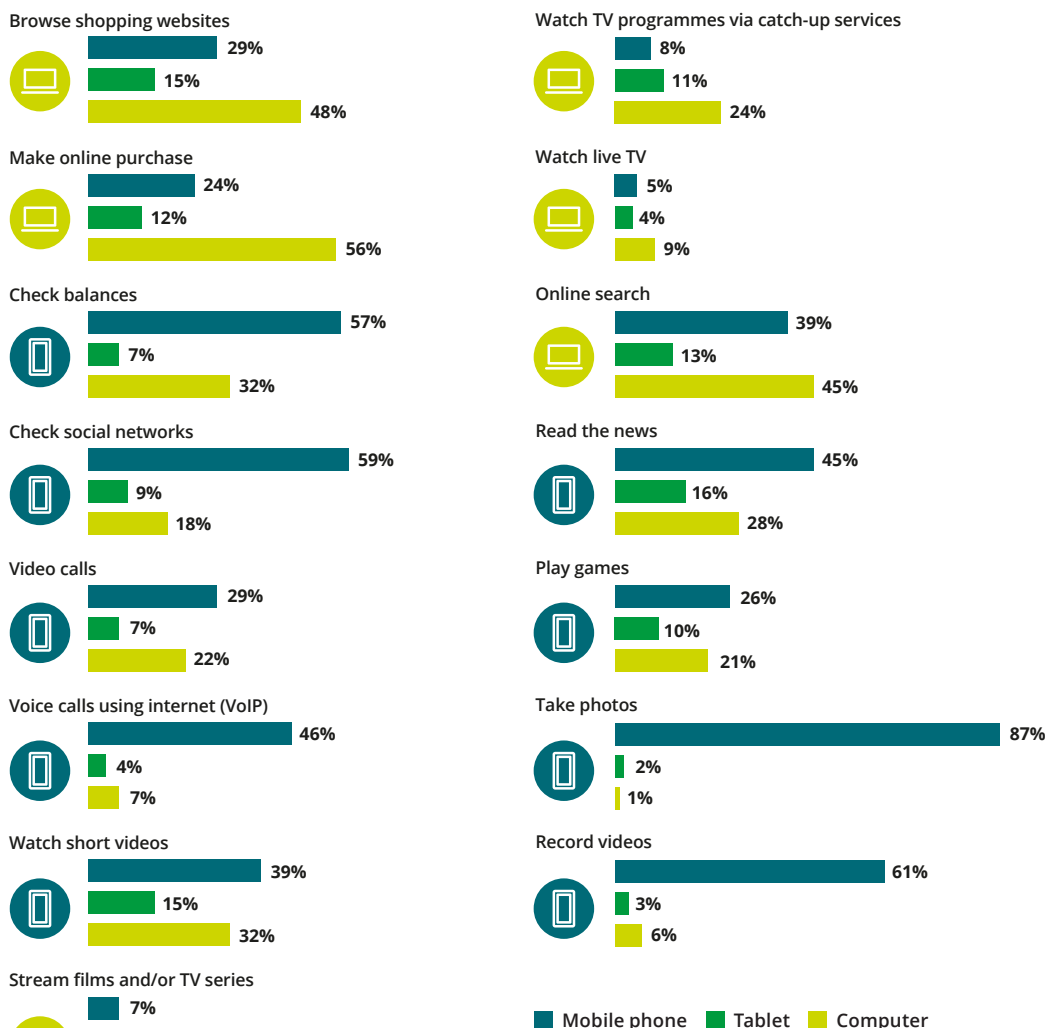
Another study³⁶ found that when a smartphone is present in a room – for instance lying on a table – while its owner is having a conversation with friends or family, its physical presence is enough to provide a distraction and reduce the enjoyment of spending time together.

How did it get this far?

There is no straightforward answer to this question, but our survey provides useful insights that may present part of the answer. Firstly, our survey shows that the number of Nordic consumers with access to a smartphone has increased steadily over the years. In 2019, it is even the preferred device among the elder generation aged 65-75 years old.

Figure 39. Preferred device for different activities

Which, if any, is your preferred device for each of the following activities?



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

Secondly, the number of activities for which the mobile phone is the preferred device has grown. Nordic consumers prefer to use their smartphone to take photos, record videos, read the news and check social networks (see Figure 39). They also prefer to use it when playing games and checking their bank balances, although the screen is rather small. They still prefer to watch TV series or live TV on a bigger device. However, as Figure 40 shows, in 2019 we generally use our smartphone much more for all the activities mentioned in the survey compared to two years ago. This indicates that smartphones are gradually taking over more and more of the tasks that we previously used other devices to perform.

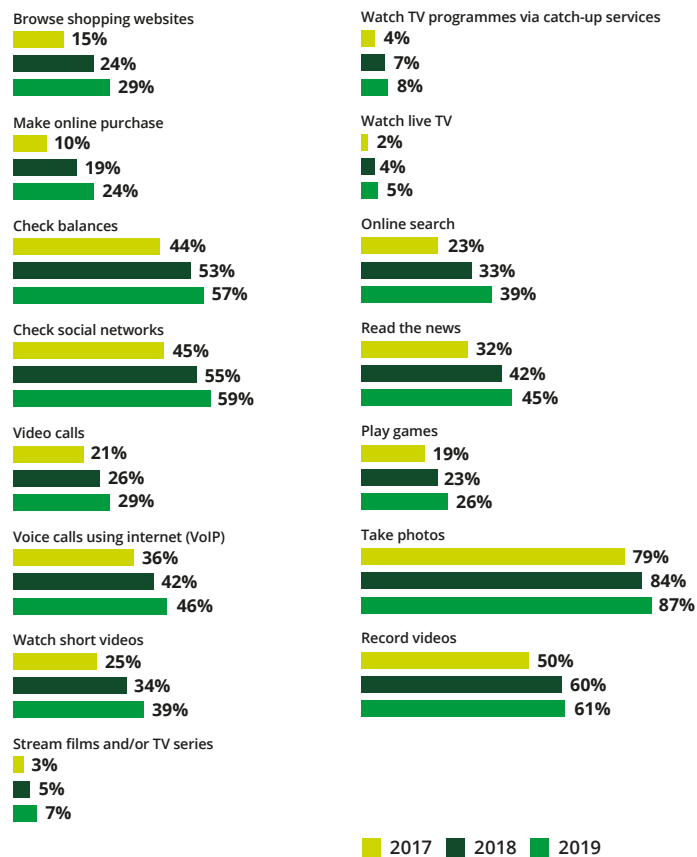
Finally, the smartphone is also a vital working tool for Nordic consumers. Two years ago, 73 per cent reported using their smartphone for work-related activities; this number has increased to 80 per cent in 2019. Men especially use their phone at work, and the most common work-related tasks include making phone calls, checking emails and managing the calendar. Men are also more likely to use their phone for personal matters during work hours compared to women. In this regard, the survey also shows regional differences: while Finns are prone to using their smartphone at work, Danes are less likely to do so.

Ready to break up with your smartphone?

Looking at smartphone use and its effect on physical health, the survey reveals another interesting finding: in 2019, fewer young adults aged 18-24 years old have access to a smartphone compared to almost all other age groups. Across all four Nordic countries, 87 per cent of 18-24s had a smartphone – nearly 10 points lower than 35-44s in the same countries (Figure 41).

This tendency is also reflected in much of the latest media reports of young people ‘breaking up with their smartphone’. For instance, a young Danish female consumer told a reporter³⁷ that she dumped her smartphone in favour of an old Nokia 3310 because the smartphone made her feel stressful, reminding her of a never-ending to-do list of social happenings.

Figure 40. Activities for which the mobile phone is the preferred device
Which, if any, is your preferred device for each of the following activities?



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Base for 2018: Sweden (1736), Norway (916), Denmark (988), Finland (967). Base for 2017: Sweden (1769), Norway (947), Denmark (1028), Finland (1038). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 41. Device penetration among Nordic adults based on age groups

Which, if any, of the following devices do you own or have ready access to?



Base for 2019: All adults 18-75 in Sweden (1864), Norway (976), Denmark (1095), Finland (1066). Base for 2018: Sweden (1868), Norway (977), Denmark (1097), Finland (1068). Base for 2017: Sweden (1769), Norway (947), Denmark (1028) and Finland (1038). Base for 2016: Sweden (2007), Norway (1009) and Finland (1000). 2016 data for Denmark is not available. Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018, 2017 & 2016.

What is interesting about this tendency is that even though the 18-24-year-olds seem to say 'goodbye' to their smartphone, this consumer group is also the one reporting the most negative side effects from smartphone use. Nearly half report that they do not go to bed at the intended time because of smartphone distraction, and four out of 10 are distracted by their smartphone when they try to complete a task. If they are unable to check their smartphones, 29 per cent fear they are missing out on things, and almost two out of 10 experience anxiousness or physical pains due to their smartphone use. We can only speculate as to why this is the case: perhaps they are more sensitive? Or simply more flexible and able to change because of their young age?

Managing the addiction is hard

In our survey, we asked the respondents which methods they take to manage their smartphone use. Some say they turn data connectivity off or turn the 'do not disturb-mode' on, while others turn off notifications or simply turn off the phone.

However, just under one-third of the respondents report that they do not do anything at all to limit their smartphone use and 30 per cent of those are also the ones reporting negative side effects of smartphone addiction.

Corporate responsibility

These results show that Nordic consumers use their smartphones increasingly. And, in a worse-case scenario, spending all day on a smartphone can cause physical problems and generally erode our well-being. But where does this leave the tech sector?

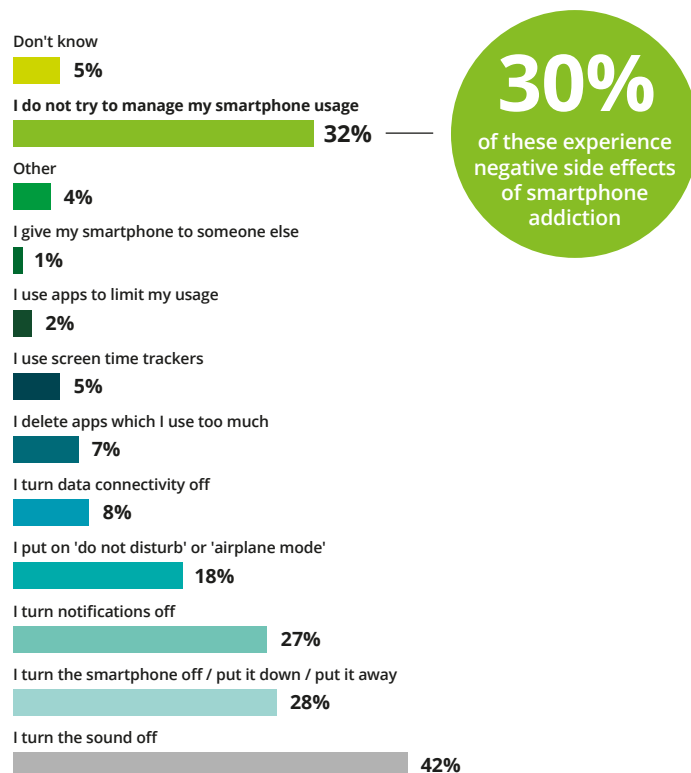
There is no doubt that the debate about digital well-being puts the tech industry in a special situation; they are being asked to help customers detach from their phones, though their business model relies on the customers doing the opposite. Some of the large tech companies have started to look at this field. Apple has introduced the digital tool called 'Screen Time' and Google has introduced 'Digital Wellbeing', which allows both iPhone and Android users to see how much time they spend on various apps and how often they pick up their smartphones.

In Finland, only 15 per cent use an iPhone, while in the other three Nordics an average of 43 per cent have the Apple device.

Norwegian consumers experience the most negative side effects of smartphone use (56 %), while Danish consumers report the fewest negative side effects (43 %).

Figure 42. Methods to manage smartphone usage

How, if at all, do you try to manage your smartphone usage?



Base for 2019: All adults 18-75 who have a smartphone in Sweden (1719), Norway (917), Denmark (994), Finland (978). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019.

The question is: are initiatives like these making a difference? We asked the respondents about their view on screen time trackers, and 79 per cent of those who use them find them useful. However, when taking a closer look at the findings, **Figure 42** reveals that only five per cent of the respondents actually use them. There is definitely great potential for companies to look further into this field, as the solution does not seem to be right around the corner.



Section 3

Nordic consumers use the smartphone to shop online, for entertainment and to stay connected – but what about other more serious activities such as banking and interacting with government?

Industry Spotlight: Public

Smartphone fails in citizen test

Nordic consumers use their smartphone to handle almost every digital task – except for public services. There seem to be unutilised potential here.

The Nordic countries are known for being some of the world's most digitalised countries. We can handle almost any request online, whether it is applying for a visa or booking a doctor's appointment. This survey has shown that the smartphone is our preferred device, and therefore it would be reasonable to assume that citizens would use the smartphone for all these public-related tasks as well – but this is not the case. Interestingly, our survey finds that half of Nordic consumers never apply for government services through the smartphone.

Five highlights from the public industry:

1. Half of Nordic consumers (49 %) never use the smartphone to apply for public services.
2. Danes are the least likely to apply for services through the smartphone (59 % never do so).
3. Only one-fifth of Nordic consumers use the smartphone to search for information on a governmental website.
4. Females fill out forms via the smartphone more often than men.
5. Young adults aged 18-24 are the group most active in interacting with government employees.

Deloitte expert take

These results underline the great, unutilised potential that digital transformation holds for the public sector. Today, online content is often modified for a PC screen as standard, and forms which the citizen has filled out online may even be printed and handed over to a governmental employee for approval. Obviously, this is an outdated process and governmental institutions miss out on many possibilities for reusing citizen data more effectively.

“A lot is happening right now in the public sector in terms of digitalisation, but there is still a lot of work to do with regard to optimising the user experience.”

– Carsten Jørgensen, Nordic Public Industry Lead.

Utilising the smartphone potential

Instead, public institutions would benefit from a mobile-first-thinking, where information and services are developed for the mobile phone. This requires space for creativity and agile, user-centric methods in the digital development process. It could be useful to collect insights into citizens' digital behaviour and insights into the larger digital ecosystem where the citizens are already present.

From here, a natural next step is to develop an end-to-end user journey: distributed or co-created services across the public sector as well as integrated it-systems make it easy for users to move from one public platform to another. That would make public digital services truly attractive.

Finally, it is crucial to create awareness about the new digital possibilities. Too often, organisations forget this step after implementing a new it-system. However, without active users, digital platforms have no true value.



“I accept” ... but what does this mean?

The dust has settled after the implementation of GDPR. Despite the increased visibility and transparency of how companies handle data, there is still room to improve Nordic consumers’ general awareness of data privacy.

The European Union General Data Protection Regulation (GDPR) came into effect on May 25, 2018. GDPR regulates how companies operating in the EU process personal data relating to individuals and it is set up to benefit both consumers and companies³⁸. It was a major step in the journey towards more comprehensive data protection. The change required several actions from companies, but how are consumers affected by it and has their knowledge of data privacy increased?

Is this private?

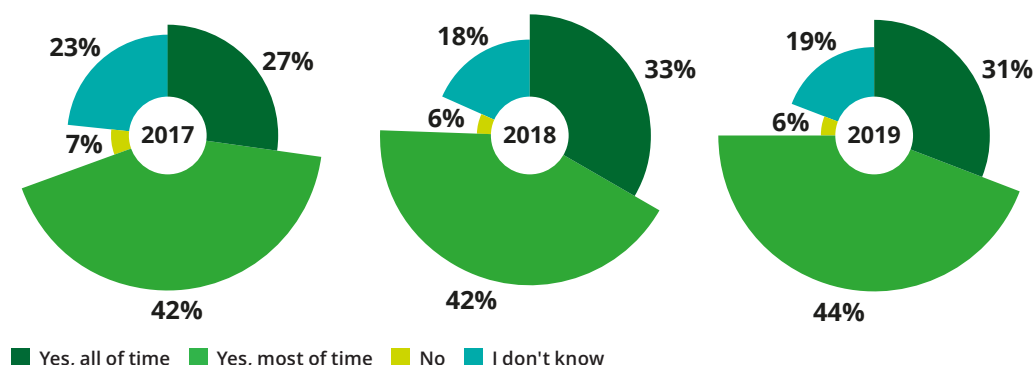
Headlines are proclaiming major data breaches and, while browsing online, it is extremely likely that Internet users will run into companies’ and service providers’ privacy notices and terms

and conditions. It is safe to say that information about data privacy is out there and widely available. However, the number of Nordic consumers who believe companies use their data, or share it with third parties, has hardly increased from last year. This year 75 per cent of Nordic consumers believe that companies they interact with online use their personal data; this is the same percentage as in 2018 (see Figure 43). Only six per cent believe that companies are not using their data and almost one-fifth do not know whether they use it or not.

Even though young people are generally more tech-savvy and use social media channels more frequently, as stated in section 2, they are the

Figure 43. Use of personal data

Do you believe that the companies you interact with online use your personal data?



Base for 2019: All adults 18-75 who have a phone or smartphone in Finland (1035), Norway (942), Sweden (1775) and Denmark (1042). Base for 2018: Finland (1050), Norway (947), Sweden (1798) and Denmark (1051). Base for 2017: Finland (1038), Norway (947), Sweden (1769) and Denmark (1028). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

least likely to think that companies are using their personal data. There is also a gender difference, as women do not believe that companies use their personal data as much as men. Among the Nordic women in the survey, 70 per cent think their personal data is used by companies, whereas among men the respective number is 10 percentage points higher. Generally, women also seem to be lacking knowledge of data privacy as 23 per cent 'do not know' whether companies are using their personal data, and among men only 15 per cent stated that they do not know.

Furthermore, as people believe companies are using their personal data, they also believe the data is shared with third parties. From Nordic consumers, 23 per cent think that companies they interact with online share their personal data with third parties all the time, and an additional 42 per cent believe this happens most of the time. However, regardless of the increased discussion about and visibility of GDPR and data privacy issues, the topic of data sharing still seems to be unclear to consumers as up to one-quarter do not know whether companies are sharing their personal data with third parties.

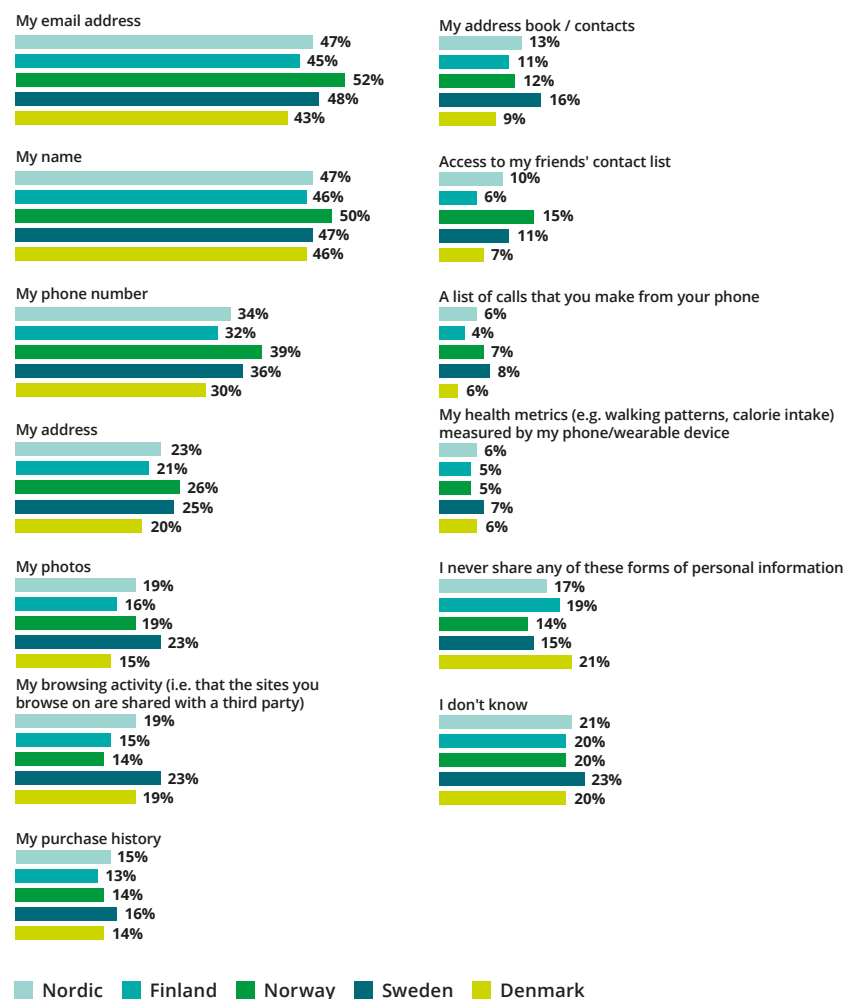
My data is your data

'Personal data' encompasses any information that relates to an identified or identifiable living individual - for example name, email, address, location or health information³⁹. As it includes a wide range of information, people are not always aware of what kind of personal information they share with companies while interacting with them online. As presented in **Figure 44**, almost half (47 %) of Nordic consumers are aware that they share their name and email address - the basic information that is often needed, for instance, to sign up to services. Even though online shopping has become more common, only 15 per cent recognize sharing their purchase history. Some variations between Nordic countries exist, as Norwegians seem to be slightly more aware of the information types they share, especially in the case of basic information such as name, address, email and phone number.

As stated previously, it is still somewhat unclear for consumers what kind of information they share online. Despite the

Figure 44. Types of information shared with companies online

Thinking about companies which you may interact with online, as far of you are aware, which, if any, of the following types of information do you already share with them?



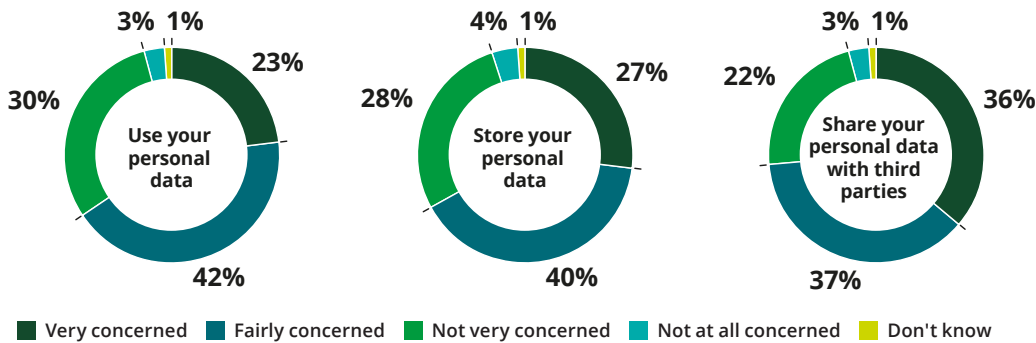
Base for 2019: All adults 18-75 who have a phone or smartphone in Finland (1035), Norway (942), Sweden (1775) and Denmark (1042). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

increased transparency, up to 21 per cent of Nordic consumers do not know what type of information they share; this has decreased by only two percentage points since 2017. Even though companies are now obligated to follow the new data privacy regulations, the privacy notices do not seem to serve the consumers as intended.

Previously we found that younger people are the least likely to think that companies use their personal data. However, they are very much aware of which kind of data they are sharing. For example, people aged 18-24 are more aware of sharing their email, name,

Figure 45. Concerns about how companies use, store and share personal data

To what extent, if at all, would you say you are concerned about how companies you interact with online...?



Base: All adults 18-75 who think companies use or share their personal data in Finland (784), Norway (756), Sweden (1421) and Denmark (820). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

phone number and address than the older age groups. In the older age groups, people are either less aware of the information types they share, or they just hold a stronger grip on their personal information and have chosen not to share it. A significant number of people (26 % in age group 55-64 and 30 % in age group 65-75) state they never share any of the enquired type of information with companies.

To worry or not to worry?

GDPR has resulted in more specific rules for companies to handle customer data, and this has naturally increased the visibility and transparency towards consumers. Perhaps due to this, people are nowadays slightly less concerned about how companies use, store and share their personal information. Mostly, people are still concerned about how companies share their personal data with third parties, as seen in **Figure 45**. From the people who believe companies use their personal data, 37 per cent are fairly concerned and another 36 per cent very concerned about how companies share their data with third parties. However, the number of very concerned consumers is descending as the amount is eight percentage points lower than last year.

Even though there are still concerns about how companies handle personal data, it is not yet reflected in the behaviour of Nordic consumers. As presented in **Figure 46**, half of the respondents 'always' or 'almost always' accept terms and conditions without reading them, and a total of 77 per cent do so at least sometimes. Only a small portion (7 %) says they never accept terms and conditions without

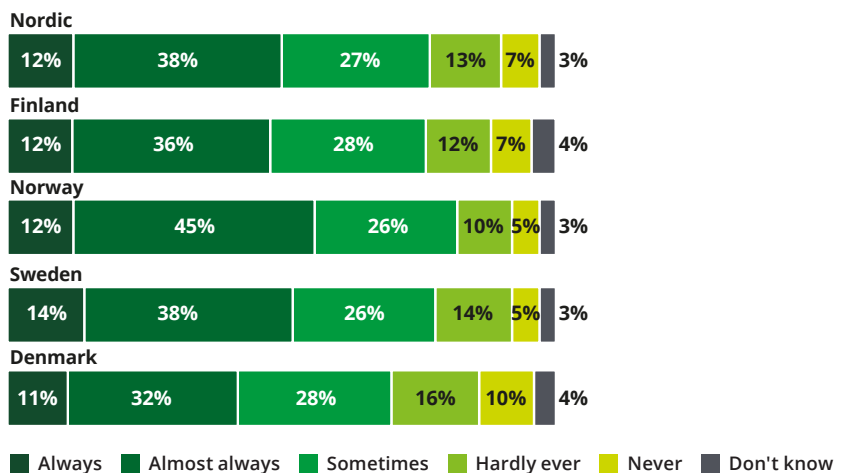
Nordic consumers' awareness of how companies use and share their personal data has not really improved, even though GDPR should have created more transparency.

reading them. The differences between Nordic countries are minor, but Norwegians seem to be the most eager to click 'accept' without diving deeper into the terms and conditions.

The older age groups seem to be more conscious about privacy, whereas young people are more open and careless. In the age group 55-64 only four per cent say they always accept terms and conditions without reading them, while almost one-quarter of the youngest people aged 18-24 do so.

Figure 46. Accepting terms and conditions without reading them

How often, if at all, do you accept terms and conditions without reading them?



Base: All adults 18-75 who have a smartphone in Finland (978), Norway (917), Sweden (1719) and Denmark (994). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

Say 'welcome' to your virtual wallet

Although debit and credit cards still dominate both in-store and online shopping, virtual payment services are on the rise. Today, most consumers have used a mobile payment solution.

Not even the classic pocket wallet is escaping digitalisation. Debit and credit cards are still the preferred choice for paying both in-store and online, although virtual alternatives are becoming increasingly popular. A clear difference can be seen between the grouping of Sweden, Denmark and Norway, which have a relatively higher utilisation of online payments, and Finland, which is clearly lagging behind its Nordic peers.

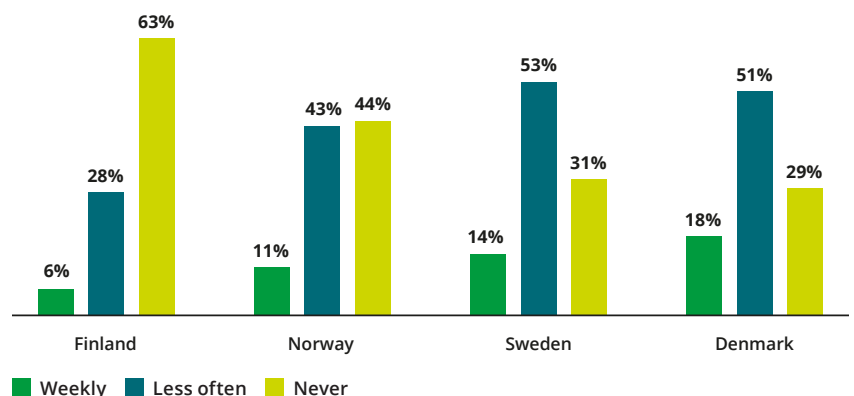
In-store use of mobile payment solutions via smartphones

In the Nordic countries, payment solutions like Swish (Sweden), Vipps (Norway) and MobilePay (Denmark and Finland) can be used to send money between individuals, to pay online or in physical stores that support these services, and for invoicing. In Sweden for instance, a lot of businesses that have historically been cash oriented - like fairs and hot dog stands - are now becoming more and more cashless thanks to Swish. The perks are clear for the business: lower risk and administration with easy and common mobile payment solutions instead of traditional cash.

Denmark has the most frequent users of mobile payment solutions using smartphones; the country has three times the weekly users of Finland - 18 per cent compared to six per cent (Figure 47). Furthermore, Finland is the only country where a majority of the population has never used a smartphone to pay for products or services in-store.

Figure 47. Pay for a product/service in-store in the Nordics

Activities use mobile phone for - Pay for a product/service in-store



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

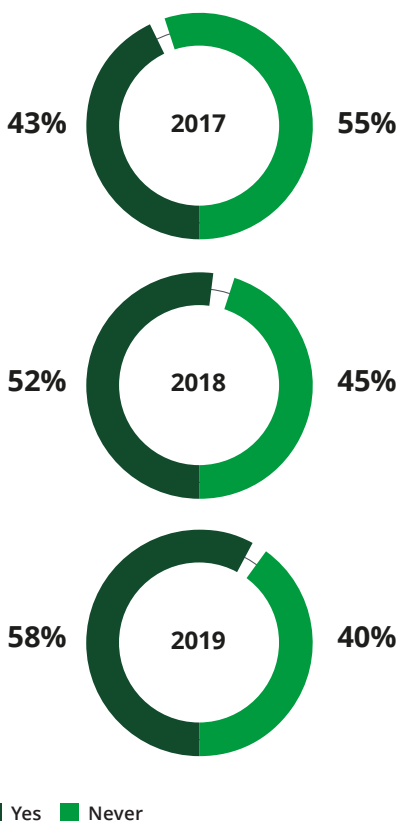
A major difference between Denmark and the other Nordic countries is that 72 per cent of the payment solutions that Danes use to pay in-store with their smartphones are tap-and-pay solutions offered by their banks. The corresponding number for this kind of solution in the other Nordic countries is between 21 and 30 per cent.

From 2017 to 2019 there has been a decrease by 15 percentage points of people who have never used a mobile payment solution via their smartphone (Figure 48). This shows that the market for mobile payment solutions in smartphones is getting more mature and that the payment solutions are getting more and more traction.



Figure 48. Have you ever paid for something in-store using your phone?

Activities use mobile phone for - Pay for a product/service in-store



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Base for 2018: Sweden (1719), Norway (900), Denmark (1010), Finland (983). Base for 2017: Sweden (1650), Norway (864), Denmark (970), Finland (943). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Across the different age segments the distribution of the 'weekly', 'less frequent' and 'never' use of mobile payment solutions in smartphones remains similarly distributed. The youngest segment is the segment where most respondents say that they have used this kind of payment solution. However, a large increase can be seen in the rest of the age segments, with an overall increased use of 15-18 per cent.

From magnetic strip to a chip - a winning improvement for the credit cards

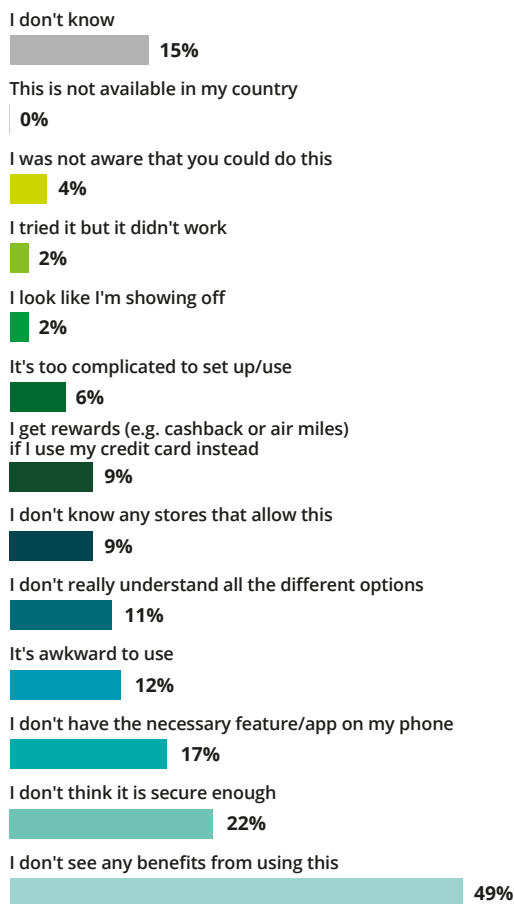
Why are mobile payment solutions using smartphones not used in-store by everyone and with higher frequency? In this year's survey, 49 per cent of the respondents answered that they do not see the benefit of using the smartphone to make payments in-store (*Figure 49*). This is an increase of six per cent compared to last year. More than 20 per cent say that they do not think it is secure enough and 15 per cent do not know why they do not use their phone to make in-store payments.

The amount of trust in security has increased marginally over the last two years by about two percentage points, and the number of unsure consumers has remained constant. So, why is it so hard to see the benefit of payment solutions using smartphones?

The modern debit and credit card have gone from magnetic strip to chip by near-field communication (NFC) and now the contactless NFC feature is becoming more common. Both

Figure 49. Main reasons for not making in-store payments

What are the main reasons why you don't use your phone to make payments in-store?



wallet and smartphone are most likely equally accessible to the consumer. Some smartphone payment solutions might require further steps, such as opening an app on the phone. The credit/debit cards with the NFC feature have a very short payment process, especially on smaller transactions when the PIN code is not required. Additionally, card payment is well established into the habits of the modern-day consumer, which makes it hard to compete against on the market without additional selling points. Basically, although paying with a phone is easy, so is paying with a modern credit card.

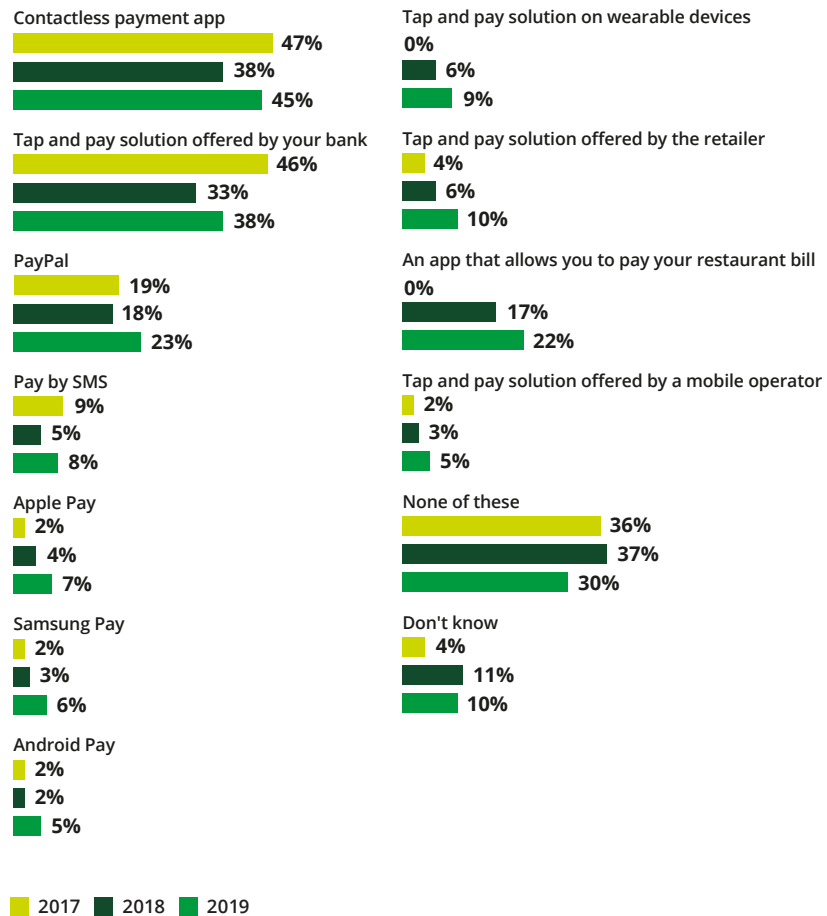
The major payment solutions on smartphones that are used in the Nordics are Apple/Android/Samsung Pay and Contactless (NFC) payment apps, as illustrated in [Figure 50](#). Another major player is PayPal (23 %).





Figure 50. Usage of in-store mobile payment solutions

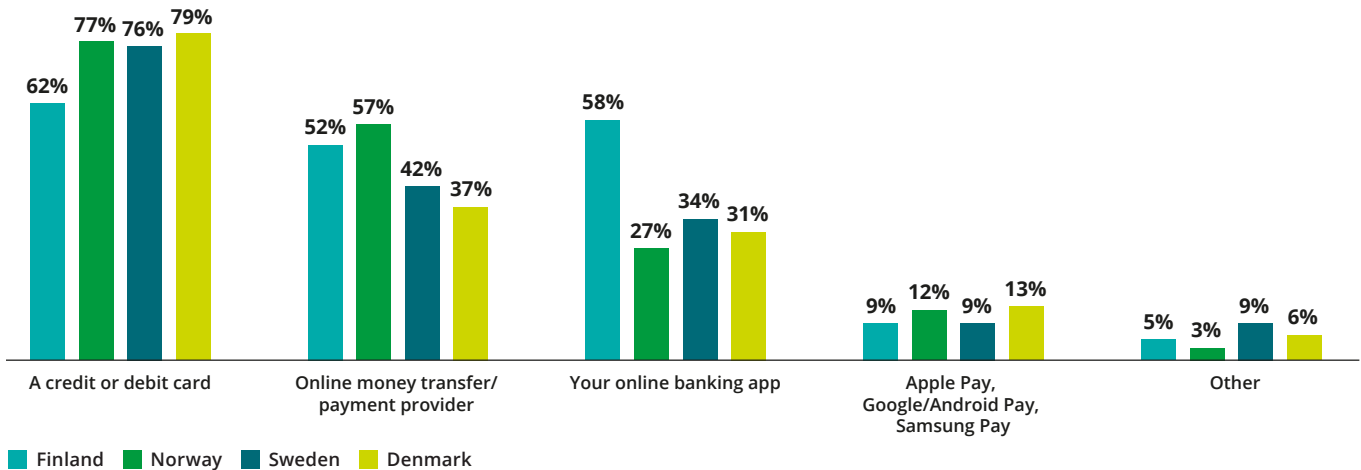
Which of the following mobile payment solutions have you used on your smartphone for each of the following? - Pay for a product/service in-store



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (633), Norway (259), Denmark (363), Finland (139). Base for 2018: Sweden (1082), Norway (454), Denmark (671), Finland (209). Base for 2017: Sweden (943), Norway (194), Denmark (616), Finland (138). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017

Figure 51. How do you pay online in the Nordics?

Which of the following methods of payment do you normally use when purchasing products / services online using your smartphone?



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (458), Norway (239), Denmark (274), Finland (269). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

As previously mentioned, Denmark is the country with the most frequent users of contactless payment apps. Since 2017 the development of these different kinds of payment solutions have varied. Contactless payment apps have actually decreased since 2017 (47 %), while Apple/Android/Samsung Pay have increased significantly.

Digital payment solutions are on the rise

According to the survey, Nordic consumers continue to trust their credit cards. All countries show a nearly 80 per cent use penetration of credit cards when buying a product or service online through the smartphone (see Figure 51). Finland, however, shows a lower result than the other countries and the Finns continue to show a higher use of online banking apps when purchasing a product online.

As GMCS – The Nordic Cut 2018 described, mobile wallets such as Apple Pay and Samsung Pay were launched in the Nordic markets during 2017 and 2018. Last year’s data showed a low penetration rate for this form of payment solution in the Nordic market and this year’s data confirms this low rate. Even though the usage has increased by almost four percentage points, Nordic consumers seem to stay true to their credit cards. Today many web pages and online shops allow the consumer to save the credit card details for future purchases and, as we seem to trust our credit card details being

stored, we can perform quick check-outs when returning as a customer. Some smartphones also offer the possibility of storing card details on your phone, which enables quick check-out when filling out the payment details and thus competes with alternative means of payment.

Rapid check-out is trending for online shoppers

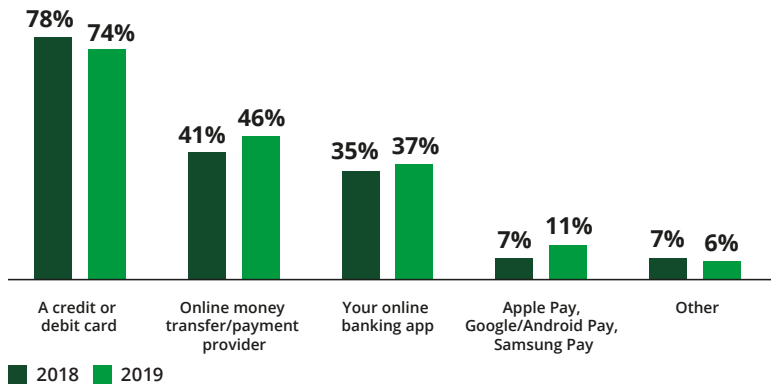
Even though the credit card has been the preferred payment solution among Nordic consumers historically when purchasing a product online through the smartphone, there seems to be a shift away from it. Compared to 2018, the use of credit card payment through the smartphone has decreased by four percentage points (see Figure 52).

So, how do we check-out a shopping cart online in 2019? By increasingly using an online money transfer/payment provider, of course. Over the last year, this solution has increased in popularity by 10 points in Finland, and by nine points in Norway. Swedes and Danes - with a relatively low use of this solution in 2018 - seem to still prefer the credit card connected to their phones. In fact, almost all numbers are unchanged for Sweden and Denmark, despite the launch of new payment solutions.

We also see some solutions that enable a quick and easy check-out for consumers gaining market share. Klarna and Dibs are

Figure 52. Change in online payments since last year

Which of the following methods of payment do you normally use when purchasing products / services online using your smartphone?



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (458), Norway (239), Denmark (274), Finland (269). Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019

two examples of companies providing online payments for mobile consumers. As online shopping increases in all Nordic countries, banks and other payment providers need to continue developing their solutions to satisfy the consumer. Today, payment solutions are not only enabling seamless check-outs for consumers, but are seen as crucial for the customer experience.

Bye bye, coins and bills

Cash still exists in all Nordic countries but the digital trend for payments seems to continue and increase. According to an interview survey provided bi-annually by the Central Bank of Sweden⁴⁰, mobile payment solutions such as Swish are increasing rapidly, while cash as a payment solution is decreasing. Our survey confirms this digital trend, illustrating that consumers use their phone for several activities connected to financial and payment solutions, as described in the Industry Spotlight for both the retail and banking industry. This being said, focus has shifted from maintaining ATM machines to further developing the check-out experience online. We are not quite cashless yet, but the prospect is certainly within sight.

transfer/payment providers (up 13 points, from 35 % in 2018 to 48 % in 2019). Not only does this show that Nordic consumers are digital (this goes for all age groups) when it comes to payment solutions, but it also shows that all Nordic consumers actually perform online payments of products and services. The overall increased use (but in particular among the older generations) could be due to increased simplicity in using online money transfer/payment providers. If a card is not ready at hand or stored in the smartphone, the pure convenience of simple alternative payment solutions could be a root cause of increased use.

And yes, the more senior consumers use mobile payment solutions as well! In fact, the age group 65-75 shows the highest use of credit card payments online (85 % in 2019), and has by far the largest increase of online money

Industry Spotlight: Financial Services

Investing in the young

The mobile phone is rapidly changing the financial services industry, with customers demanding ever more elegant and efficient customer experiences.

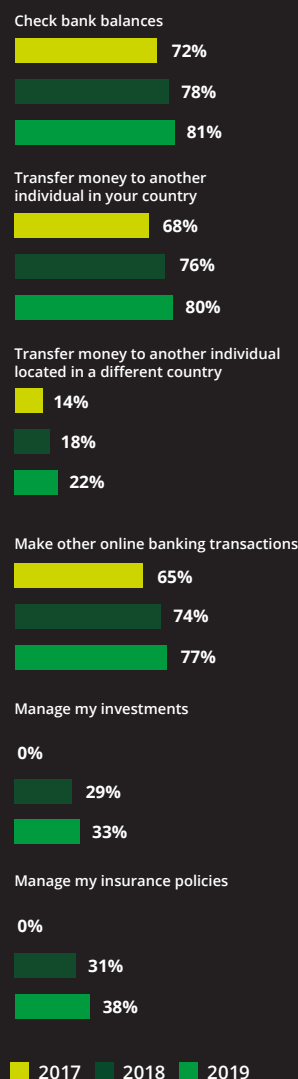
The smartphone provides new possibilities for how customers can interact with their banks and insurance companies. Everything from conducting daily banking tasks to managing personal finances is now very different from before the arrival of the smartphone. Are consumers and financial services firms properly leveraging these opportunities enabled by the connected society of today? In this spotlight we shine some light on consumer behaviour in the banking, investment and insurance industries.

Five highlights from the financial services industry:

1. Consumers are managing financial services more on smartphones in 2019: every category measured is up, and by three to seven percentage points.
2. Checking bank balances and transferring money are the most common activities, with roughly four out of five Nordic consumers having done these on their phones at least once.
3. Although growing, investment management and insurance policy management activities are still far behind other activities at 30-40 per cent.
4. Millennials are the most likely users of insurance and investment management services on their smartphones.
5. The mobile phone is the preferred device for checking bank balances, with 57 per cent of respondents choosing the mobile phone over other devices.

Banking and insurance activities used on smartphones

Activities use mobile phone for



Base for 2019: All adults 18-75 who own or have ready access to smartphone in Sweden (1720), Norway (900), Denmark (1011), Finland (983). Base for 2018: Sweden (1719), Norway (900), Denmark (1010), Finland (983). Base for 2017: Sweden (1650), Norway (864), Denmark (970), Finland (943). Data for 2017 "Manage my investments" and "Manage my insurance policies" not available. Source: Nordic edition, Deloitte Global Mobile Consumer Survey, 2019, 2018 & 2017



Deloitte expert take

Technological and digital trends have significantly disrupted the landscape in financial services. Fintech companies and data analytics technologies are creating a significant shift in the provision of financial services. Businesses need to work proactively and not simply react to market trends.

“Leveraging these new technologies in market strategies and business models is essential, not only to remain competitive but also to adapt to the ever changing customer demands.”

– Steven Payne, Nordic Financial Services Industry Lead.

Which segment should you count on?

It is apparent that there is a large discrepancy in adaption between the different mobile banking services. Checking your bank balance and transferring money to your friends and family via your smartphone has become a frequent activity for

most Nordic consumers. However, the majority still do not use their phones for activities such as managing their investments and insurance policies.

It may not come as a surprise that consumers are not managing their insurance policies or trading their investment portfolio each week. It is, however, notable that these are the activities that increase the most, especially among millennials. While Nordic payment services are dominated by national collaborations such as Swish and Vipps and new actors like Klarna, the large banks and trading platforms like Nordnet and Avanza have so far not made the mobile phone the preferred trading device.

Although it is encouraging that millennials are willing to use their smartphones to manage insurance and investments, that is more of a long-term benefit; in the short term, the larger profit opportunity will be in the older generations. And they are not (yet) willing to use their smartphones for these services – less than a quarter of those 55-75 years of age are doing so.



Endnotes

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About the research & contacts

The Nordic data cut is part of Deloitte's Global Mobile Consumer Survey, a multi-country study of mobile phone users around the world. The 2019 study comprises 44,150 respondents across 28 countries and six continents.

Data cited in this report are based on a nationally representative sample of consumers aged 18-75 in Sweden (1864), Norway (976), Denmark (1095) and Finland (1066). The sample follows a country specific quota on age, gender, region and socio-economic status. Fieldwork took place during July 2019 and was carried

out online by Ipsos MORI, an independent research firm, based on a question set provided by Deloitte.

This brief report provides a snapshot of some of the insights that the survey has revealed. Additional analyses such as: Use of mobile phones at work, virtual reality, wearables/fitness tracking, smartphone brands and secondhand phone market are available upon request.

Results for other countries are also available on request.

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