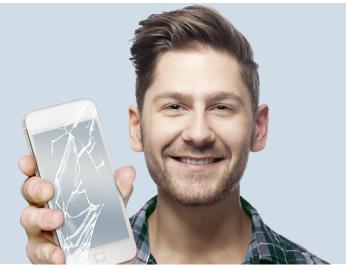
## Smartphone Repair Study 2019















### DEAR READERS,

For consumers it is important to have a functioning and reliable smartphone. At the same time, there are growing social demands for sustainability. More than a third of all smartphones suffer a defect in the course of their service life. In this study, we found that only 15.4 per cent of owners have the damage to their smartphone repaired. If we compare these two figures, the proportion of smartphone repairs is far too low.

clickrepair, WERTGARANTIE's repair marketplace with its Repair Check and corresponding Repair Study,\* provides comprehensive information on the susceptibility to damage of selected smartphones and brands. Moreover, we present user-based findings on damage prevention, repurchase probability and the user behaviour of different age groups.

We hope you enjoy reading this study!

Marco Brandt

**Division Manager Digital Business** 

\*The basis of this study is a representative survey of 5,126 participants aged 18 years and over conducted in cooperation with Statista. The survey period was between 18 April - 14 May 2019. The results of the survey and the smartphones insured by WERTGARANTIE provided the data on which the Repair Check is based.

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#### Repair Check:

## The smartphone ranking

Sony comes top of the class in all the assessment criteria – the particular strength of their smartphones is the low need for repairs. The young smartphone manufacturer Huawei is neck and neck with the established manufacturer Samsung in the overall evaluation.

Apple's very high repair costs pull the overall grade of the Repair Check down. Particularly the iPhone X stands out, taking last place in the repair cost rating and showing a very high repair frequency in the Repair Check for the month of October. The iPhone XR, on the other hand, proves to be especially robust and takes first place regarding repair frequency.

clickrepair's Repair Check assesses the susceptibility to damage of various technical devices and the repair costs that have arisen in the case of damage. For this smartphone ranking, scores from 1.0 (best) to 4.0 (worst) are awarded monthly. This is based on the devices insured by WERTGARANTIE and a recent survey among more than 5,000 users aged 18 years and over. The ranking is updated each month, so the figures online always represent the latest ones.

as per: 10/2019

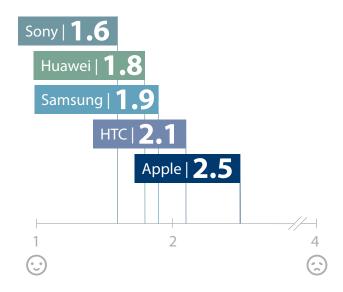
> smartphones from 2016 to 2018

### Overall score of selected manufacturers Sony in pole position

With an overall score of 1.6, Sony leaves its competitors well behind – the average score of all manufacturers is 2.0. Bitter result: Apple has to settle for 2.5.

Overall score on average:

Ø 2.0

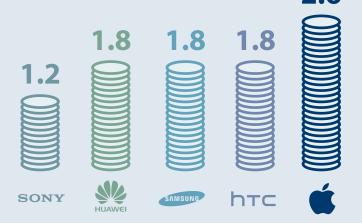


## Repair frequency of selected manufacturers HTC and Apple bring up the rear

Sony scores points again: their smartphones are particularly robust, while Apple and HTC prove to be significantly more susceptible to damage.

### Repair costs of selected manufacturers Sony absolute front runner

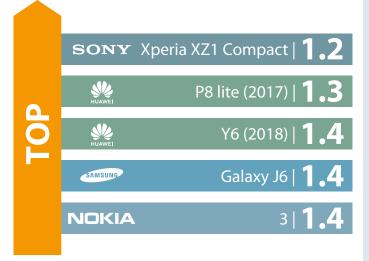
Also in this criterion, Sony is clearly a step ahead; for Apple models, by contrast, premium prices are charged.



#### Tops and flops: Overall score

#### Sony maintains leading position

With Xperia XZ1 Compact, Sony again heads the Top 5. Regarding the Flop 5, Apple and Samsung – being represented with two models each – aren't that well-positioned.





### Tops and flops: Repair frequency Apple is clear winner by points

The Apple iPhone XR scores the top mark, followed closely by Sony's Xperia XZ1 and XZ1 Compact. In the Flop 5, Apple appears twice while Google Pixel 2 is most likely to need repairs.



2	HUAWEI	Honor 8   <b>3.0</b>
ue	SAMSUNG	Galaxy J7 (2017)   <b>3.0</b>
		Galaxy 37 (2017)   <b>3.0</b>
ā	<b>É</b>	iPhone 8 Plus   <b>3.0</b>
4	<u> </u>	iPhone X   <b>3.0</b>
15		IFHORE X   3,0
	G	Pixel 2   <b>3.2</b>

#### Tops and flops: Repair costs

#### Huawei and Sony in head-to-head race

Huawei P8 lite (2017) and Xperia XZ2 Compact each get the best possible mark. For Apple and Samsung it isn't going so well: two models each have a rating of 4.0.

easy		P8 lite (2017)   <b>1.0</b>
	SONY Xpe	eria XZ2 Compact   <b>1.0</b>
	SONY Xpe	eria XZ1 Compact   <b>1 . 1</b>
	NOKIA	3   <b>1.2</b>
	SAMSUNG	Galaxy J6   <b>1.3</b>



as per: 10/2019

#### Damage facts:

## The most frequent causes of damage

If a smartphone has a defect, it is usually the display that is affected. This includes not only scratches and cracks but also technical failures. For almost 70 per cent of smartphone users, the display is thus the greatest weak point. Somewhat fewer, but still 50 per cent of all smartphones, have damage to the casing. The most robust parts, on the other hand, are the phones' built-in cameras, with a damage rate of 7.9 per cent.

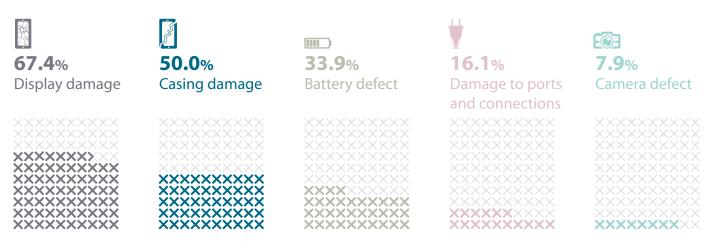
The Samsung Galaxy S6 edge experiences drop damage at an above average frequency. When it comes to technical problems, another Samsung smartphone also takes the worst place: the Galaxy S3 mini exhibits a particularly high number of defects. Among all the technical defects, users complain most often of a weak battery, irrespective of the device.

Broken components in smartphones

#### Displays break most often

More than two thirds of all damaged smartphones have display damage. Damage to the casing is also found in one in two smartphones.

Multiple answers possible



Flop 5 for fall damage

31.9%

Galaxy

S6 edge

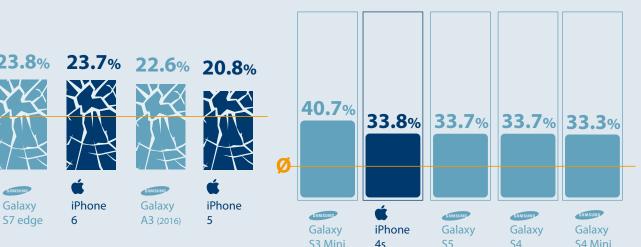
Galaxy

#### Samsung and Apple most at risk

Users of the Galaxy S6 edge have drop damage in almost a third of devices, while with iPhone 6 users it is just under a quarter.

Flop 5 for technical problemens Samsung Galaxy S3 mini most affected

The questionable honour of being among the 5 biggest flops for technical problems is also shared here by Samsung and Apple. The reason for the defect in all devices: a weak battery.

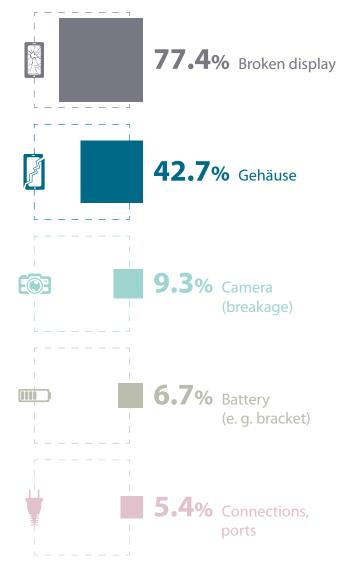


Smartphone models from 2010 onwards

Drop damage affects which components?

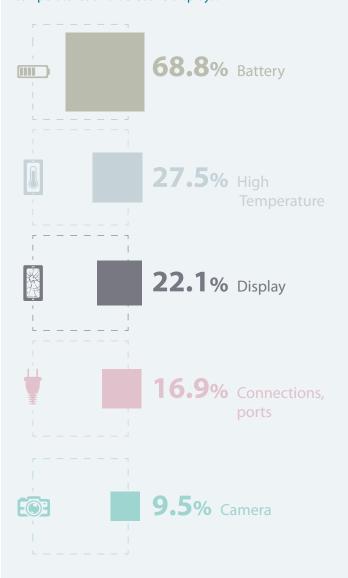
#### Particularly fragile: display and casing

In three out of four cases, a drop ends with a shattered display, followed by defects in the casing. Damage to the camera, ports and connections are considerably rarer.



### Frequency & types of technical defects Weak point is mostly the battery

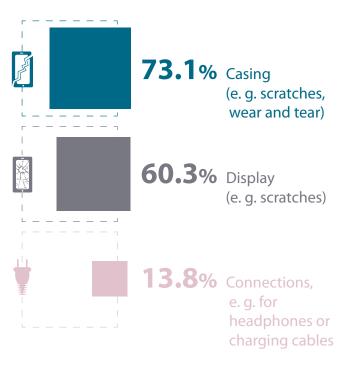
When it comes to technical problems, the battery is by far the most common, followed by the development of high temperatures and defective displays.



#### Defects from everyday use

#### Parts that suffer: casing and display

Everyday use leaves its (scratch) mark(s) above all on the casing and display. Ports and connections are only damaged in just under a tenth of cases.



Damage & protection:

# Comparison of protective measures

In this section we examine the damage frequency of smartphones with and without protective measures. Users who have either a screen protector or a protective case report less drop damage to their mobiles than users without any physical protection. The biggest difference is seen with the manufacturer Xiaomi. With users who had not taken any protective measures, drop damage occurred five times more frequently. With the manufacturers HTC and Nokia, there is hardly any difference in the proportion of drop damage between users with a screen protector or case and those without.

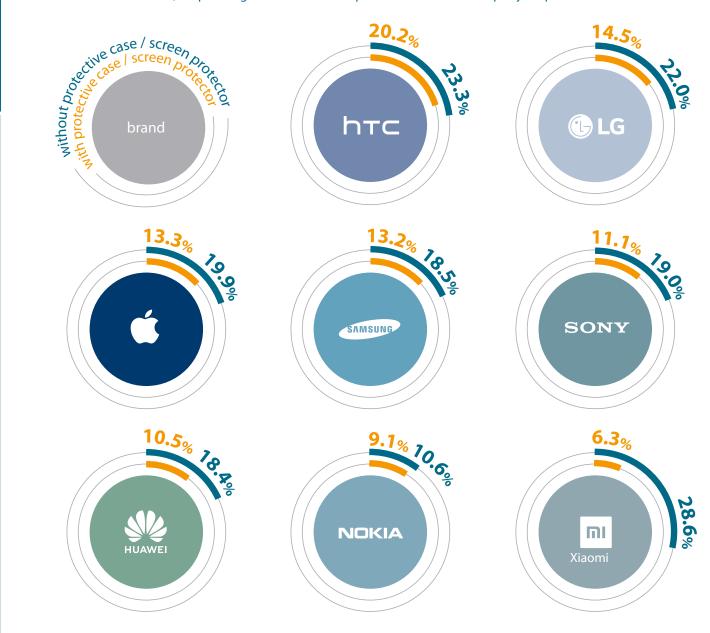
While with Nokia, only about 70 per cent of users choose a protective case and merely a third use a screen protector, with the manufacturer with the most frequently protected smartphones (Apple) more than half of all users make use of a screen protector. More than 86 per cent of iPhones are actually protected with a case. Also for the devices manufactured by Xiaomi, importance is particularly often placed on cases, at 82.1 per cent. Similar levels are seen among the smartphones of manufacturers Samsung (83.1%) and Huawei (83.7%). Screen protectors are actually used most frequently by Xiaomi users at 57.1 per cent.

\* This analysis is based on all the smartphones of the individual manufacturers.

Frequency of drop damage with and without protective measures\*

#### Protective effect varies by manufacturer

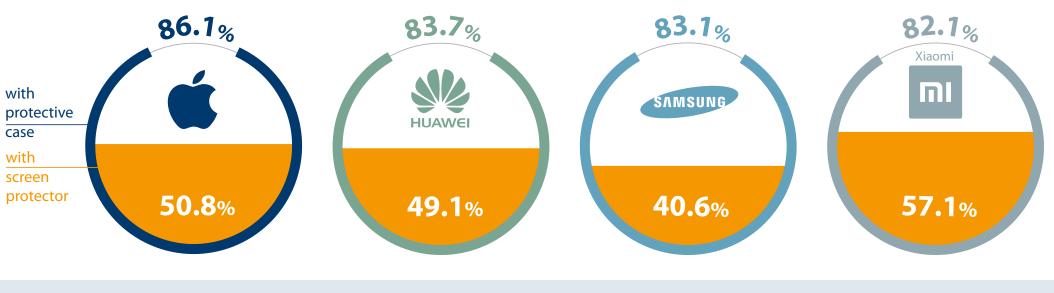
With Xiaomi, drop damage is considerably less frequent with protective cases and screen protectors than without. With HTC, drop damage with and without protective measures is equally frequent.

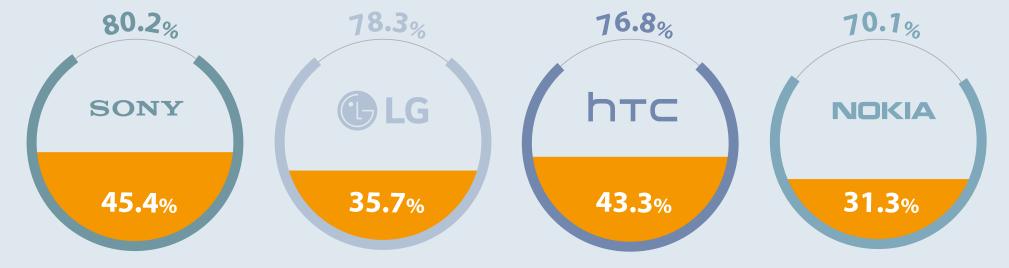


## Protective measures according to brand Nokia most often unprotected

The trend is towards protective cases, especially among Apple users. Screen protectors are commonly used with Xiaomi.







Repair behaviour:

## The reasons for a repair

Apple users decide to get a repair in the case of damage more often than users of the competitors' smartphones: one in five iPhones are repaired. Smartphones of the manufacturer Huawei are only repaired in 1 in 10 cases of damage. Striking is the stark difference between the desire to get a repair in the case of damage and the significantly lower number of smartphones that are actually repaired.

Across all manufacturers, the financial aspect is mentioned most often (49.1%), closely followed by ecological reasons (42.5%).

More than one in ten Apple and Huawei smartphone users state emotional attachment as a reason for repair – with Samsung this only applies to one in a hundred users.

Smartphone models from 2010 onwards

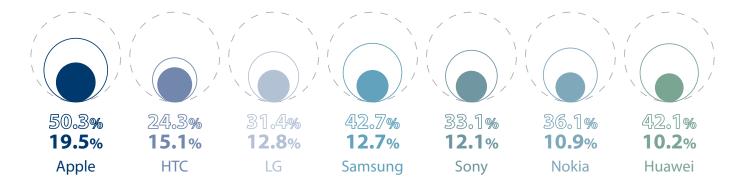
#### Desire for repair

#### Apple users count on repairs

More than half of all Apple users would like to have their smartphone fixed, just under a fifth actually does get it fixed. Huawei owners are the least inclined to get a repair.



Explanation:

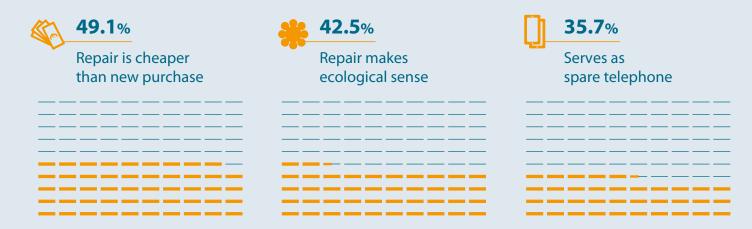


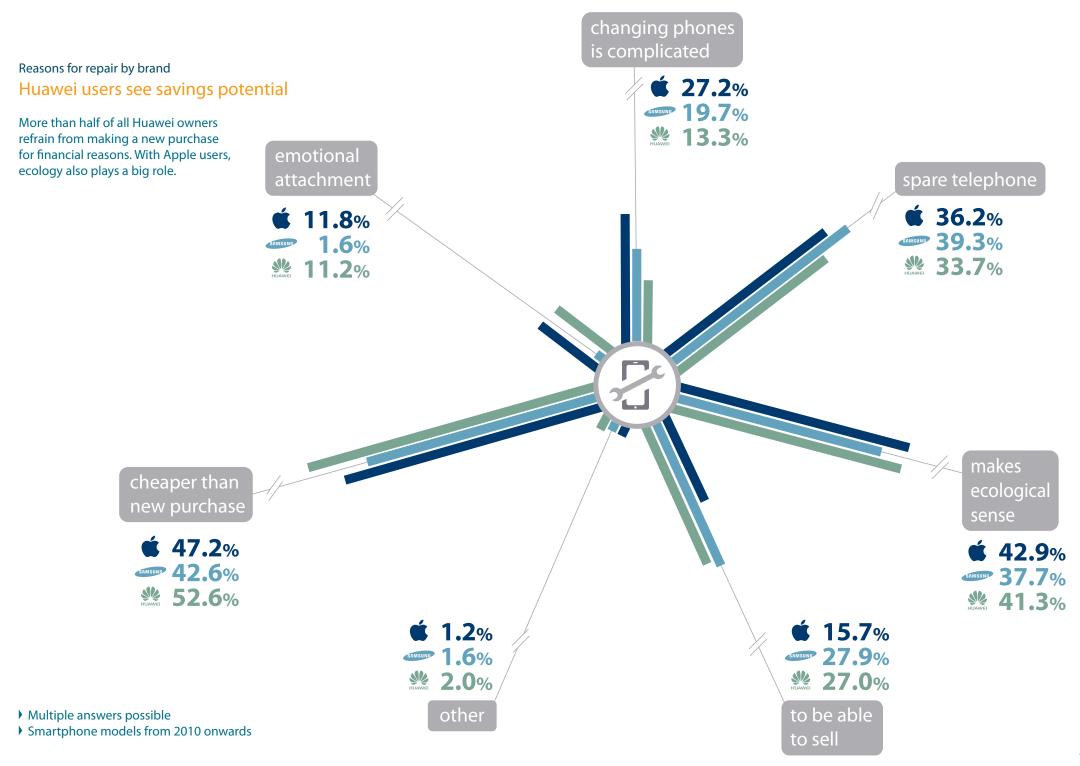
Reasons for smartphone repair

#### Financial aspect as main motive

Almost half of all smartphone owners have had their device repaired for reasons of cost, but many also think of the environment in the process.

all manufacturers





Repurchase probability and users' views:

## The loyalty of users

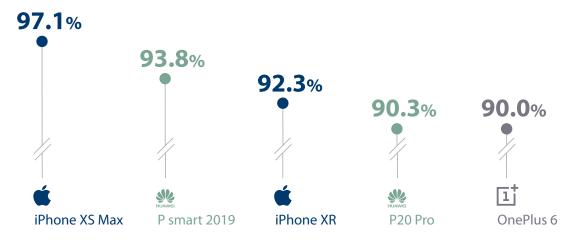
On the basis of the repurchase probability, it is easy to ascertain how satisfied users are with their smartphones. Here the iPhone XS Max performs the best by far, followed by the Huawei P smart 2019. The third and fourth places are also held by an Apple and a Huawei device respectively. The exception is the OnePlus 6 in fifth place.

We find the same reflected in the results of the repurchase probability according to manufacturer. Apple is in first place, closely followed by Huawei. Nokia brings up the rear with a repurchase probability of 59 per cent.

Repurchase probability by device

#### Apple iPhone XS Max almost always impresses

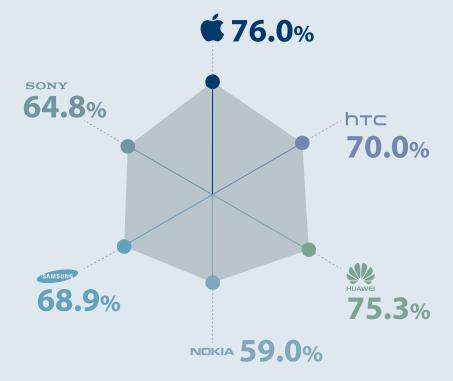
Clear figures: the estimated repurchase probability of the Apple iPhone XS Max is extremely high.



Repurchase probability by manufacturer

Apple and Huawei top of the list

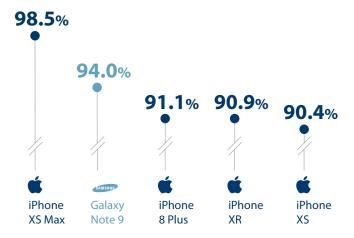
About three quarters of Apple and Huawei users would probably choose the same brand again.



#### Quality of workmanship by device

#### Apple of exceedingly high quality

Apple users consider their devices to be of particularly high quality; the highest quality is almost unanimously ascribed to the iPhone XS Max.



#### Susceptibility to damage by device

#### OnePlus 6 particularly sturdy

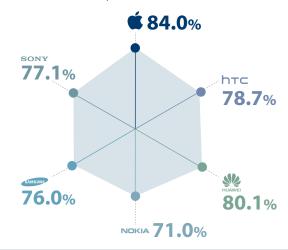
The Top 5 smartphones perceived to be especially robust are not subject to any physical damage in eight out of ten cases.



#### Quality of workmanship by manufacturer

#### Apple closely followed by Huawei

The Apple brand is most frequently considered a guarantee of quality; Huawei is in second place when it comes to consumers' favour.



#### Susceptibility to damage by manufacturer

#### Nokia at the top, Apple beaten

Here Finland takes the first place: Nokia is considered to be decidedly durable. Sony and Apple merely lag behind in this case.



#### In the spotlight:

## The smartphone users

Looking at demographic aspects gives interesting insights into smartphone owners. These cover age, gender and place of residence. According to their age group, users choose a manufacturer that best covers their needs. Younger users have a distinct preference for Xiaomi, whereas older consumers currently prefer Nokia and LG.

Although almost all smartphone owners use protective measures, the number of protected devices is slightly higher among women. The opposite is true when it comes to repair orders: here it is men who are more likely to hand their mobile over to a repair shop in the case of damage.

Hamburg's residents seem to handle their smartphones more carefully, since their devices have a damage frequency of 45 per cent, whereas the German state of Hesse displays the most cases of damage at 59 per cent.

Age-specific preferences

#### Xiaomi for younger and Nokia for older consumers

Almost a third of Xiaomi owners are under 30. Apple, HTC and Sony are in the middle, while older generations like to go for Nokia.

<b>É</b>	19.6%	26.8%	24.4%	18.1%	11.1%
htc	19.3%	29.6%	20.6%	17.2%	13.3%
HUAWEI	14.8%	19.4%	24.6%	23.5%	17.6%
<b>E</b> LG	13.3%	24.1%	17.8%	29.7%	15.0%
NOKIA	6.1%	19.4%	22.4%	29.9%	22.1%
SAMSUNG	11.2%	23.1%	24.1%	26.1%	15.5%
SONY	15.4%	24.7%	26.8%	21.1%	12.0%
Nicomi	28.6%	22.3%	13.4%	22.3%	13.4%
Xiaomi	up to 29 years	30 - 39 years	40 - 49 years	50 - 59 years	60 years and older

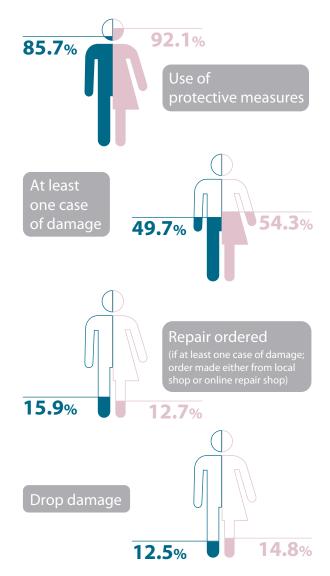


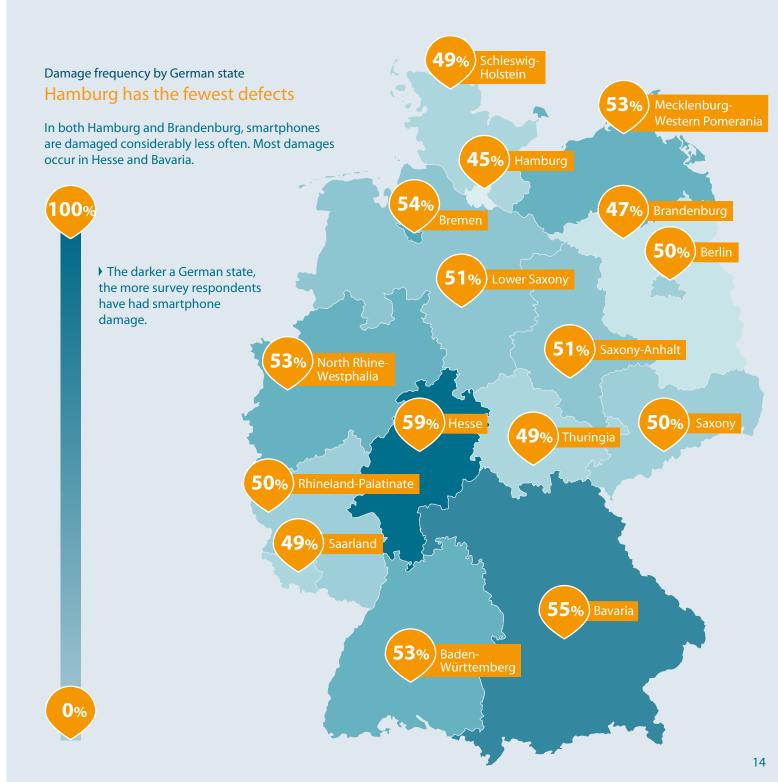
The darker the box, the more survey respondents in the stated age group own a smartphone of that brand.

#### Comparison between women and men

#### Protection versus repair

Women take protective measures more frequently; men have repaired their smartphone more often. When it comes to damage frequency, women take the lead.





Good to know:

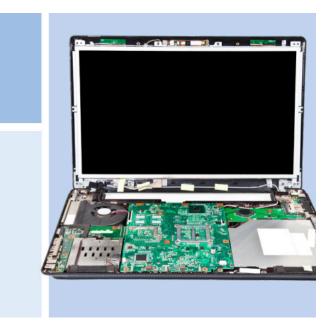
## Further WERTGARANTIE studies

Laptops in the spotlight

#### Laptop Repair Study 2018

With the Laptop Repair Index and the corresponding Repair Study, WERTGARANTIE provides a comprehensive overview of the robustness and durability of individual laptop models. A representative survey of 11,140 users was conducted for the study.

Click here for the study.



Tablets in the spotlight

#### **Tablet Repair Study 2018**

Using the Repair Index, WERTGARANTIE reveals how durable and robust individual tablets are. The study shows, among other things, which tablets break particularly often and which models are expensive to repair.

Click here for the study.



### Smartphones in the spotlight Smartphone Study 2017

clickrepair provides an overview of the robustness of current and older smartphone models. The study shows which manufacturers build the most robust devices, which have particular weaknesses in smartphones and more.

Click here for the study.



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This study provides just a selection of the results that were collected and analyzed. Do not hesitate to get in touch with us if you would like to have more detailed information!

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