

# Sell your tech, not your data

You don't need to destroy your unwanted tech to ensure your personal data is deleted. **Andrew Laughlin** investigates how to safely wipe your gadgets and sell them for hundreds of pounds

## AT A GLANCE

- ▶ We check second-hand devices for undeleted data
- ▶ How to ensure you properly wipe your device
- ▶ What you can expect to get when you sell it

**T**hink about your smartphone – all those apps, photos, messages, and maybe even bank details; there could be half your life in there. You certainly wouldn't give all that personal information to a stranger. But fail to properly wipe your device before you sell it and you could be doing just that.

### Your data is valuable

Gadgets such as smartphones, tablets and laptops can cost a small fortune, so getting some money back for your device by selling it is a nice bonus when you come to upgrade. However, if you're not careful, you could be giving away your personal data to criminals in the process.

And that data is valuable. According to the Office for National Statistics, there were more than 5.8m incidents of cyber-crime over the past year. Those are made up of various criminal activities, including people stealing personal data with the intention of scamming you. In total, cyber-crime now costs us an estimated £193bn a year. Criminals often seek out nuggets of personal data, such as your email or home address, to make their scam attempts more convincing.

### How your data can be misused

■ **Photos** In 2014, researchers at security firm Avast extracted 40,000 photos from 20 Android phones bought on Ebay, including more than 1,500 featuring children. While not necessarily a crime risk, the thought

of someone else viewing your photos feels intrusive to say the least.

■ **Emails and text messages** Emails and texts can both be rich with information that could be very valuable to a criminal. We all tend to let down our guard in the supposed privacy of an email or text, potentially even revealing confidential financial information.

■ **Contacts** Leaving your full address book undeleted means that a scammer has a treasure trove of other people to target.

■ **Apps and accounts** We often sign up to apps using bank details or other personal data, meaning that leaving one app undeleted could give a criminal a way in. The same goes for any accounts that are left open on your phone, such as iCloud photos on an Apple device.

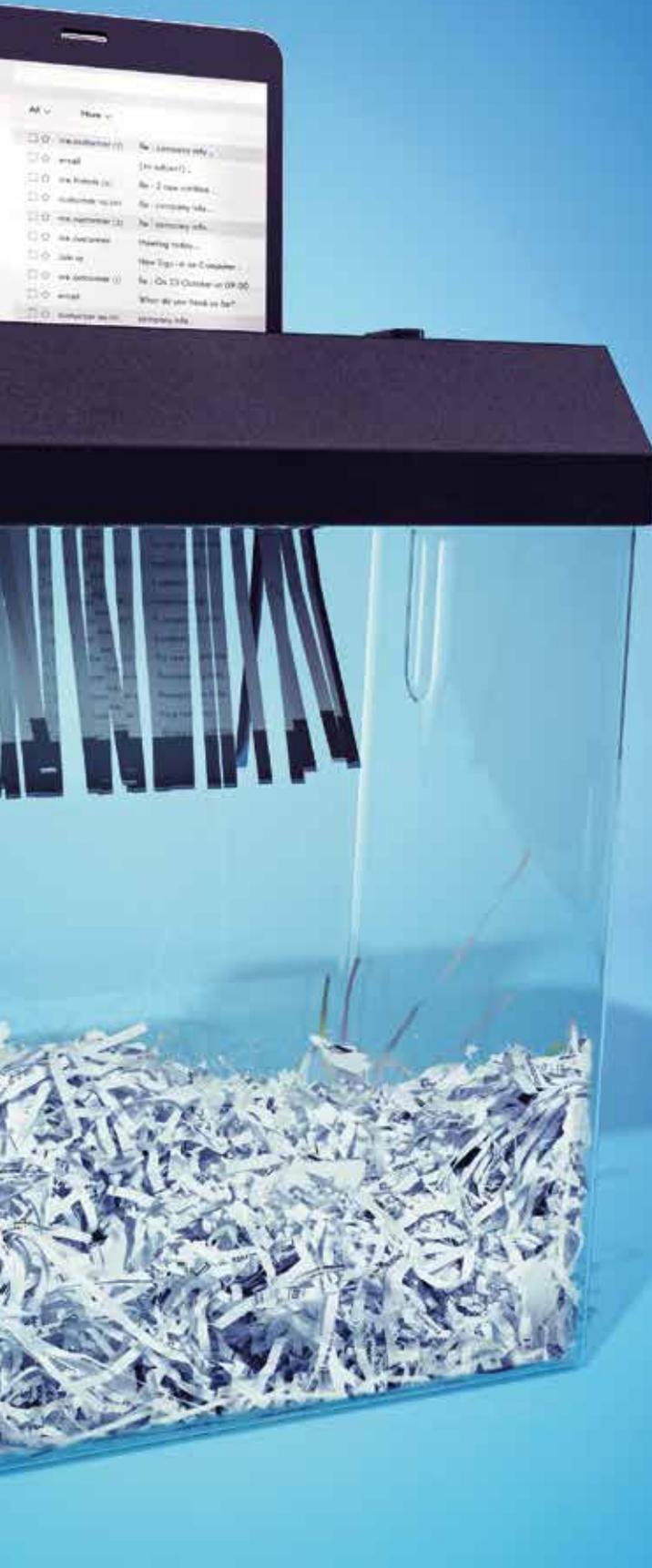
### How safe is selling second-hand?

To find out, we bought smartphones and tablets made by Apple, Microsoft, Samsung and others, along with a range of laptops from big-name sellers of second-hand tech, such as Amazon Marketplace, CEX, Ebay, Laptops Direct and O2.

We then checked to see what personal data, such as emails, photos and messages, we could find on them. The good news is that on most devices we tested we didn't find any data at all. But it wasn't all rosy. The data on an Apple iPhone 3GS that we bought from an independent seller on Ebay wasn't erased at all, meaning that we easily found 180 contacts and 41 text messages.

An LG Nexus 4, sold in the same way on Ebay, had 200 photos and one personal document left on it. Other devices we tested, such as an Apple iPhone 4 and Samsung Galaxy Tab 2, had been wiped, but continued to be used before selling, meaning there were some contacts, photos and a text message left over. The data was freely available, and we required no specialist software to access it. >





## Top tips for selling safely

*Before selling your device, back up any data that you want to keep and remove any memory cards*



### ANDROID DEVICES

Go to your device's 'Settings', click 'Backup & reset', followed by 'Factory data reset'. Then tap 'Reset phone' or 'Reset device'. Find out more about wiping Android devices, including older ones, at [which.co.uk/wipe](http://which.co.uk/wipe).



### WINDOWS LAPTOP

Windows enables a quick sanitisation of your hard drive, but using free third-party software, such as Disk Doctors Data Sanitizer or Killdisk will fully overwrite the data. To ensure that sensitive data is gone, go for the extra data-overwriting services that they offer, costing around £40.



### APPLE iPADS & IPHONES

If you use iCloud on your device, make sure you sign out. Then use the iTunes restore function, or select 'Erase All Content and Settings' from the menu. Both of these options delete the encryption key associated with the device, rendering any remaining data unrecoverable.



### APPLE LAPTOP

Restart in recovery mode (hold down Cmd+R during restart). Use Disk Utility to erase the hard drive by selecting 'main volume' and click 'Unmount' then 'Erase'. When you've done that, re-install MacOS.

## Your rights when selling devices

Ultimately, you are responsible for removing data from your gadgets before offering them for resale. Resellers and marketplaces, such as Amazon Marketplace and Ebay, often won't accept any responsibility for the removal of data.

Instead, most companies that offer services for reselling or recycling your old tech put the onus on you to ensure that your device is fully wiped of all data before you hand it over. Moreover, many stores state that by sending your device to them for sale, you're agreeing

to release them of blame for any losses, claims or damages incurred as a result of data getting into the wrong hands.

You don't want someone snooping on your personal photos, emails or messages from a device you've sold. The nightmare scenario is that a hacker recovers your data and uses it to cause you financial harm. Although that is very unlikely, follow the steps outlined in this article, and you can sell with peace of mind. The Information Commissioner's Office website [ico.org.uk](http://ico.org.uk) has more information.

## Outfox the scammers

In the past, we've found deleting data didn't always mean it was gone, but our most recent research shows technology has improved. In fact, with Android and iOS smartphones and tablets, it is now virtually impossible to extract any data from them after they've been properly wiped. We didn't find any data at all on the used laptops that were sold to us.

All the personal data we did find in our test was down to the device not being properly

wiped by the user or seller before it was sold. Follow the steps on p33 to ensure your laptop, smartphone or tablet is completely clear.

Once you know it's safely wiped, you can sell it with peace of mind. Below, we've given an idea of how much you can get back from your old tech to help pay for your upgrade.

## Our research

We bought 16 laptops, seven smartphones and eight tablets, all second-hand or used,

from big-name sellers and marketplaces. We then sent them to specialist data recovery lab, Kroll Ontrack. It was tasked with trying to recover personal data from the devices using a variety of techniques, ranging from turning them on and running a basic check, to using sophisticated recovery software (we stopped short of breaking open or deliberately damaging the devices to get the data). Any personal data we did find in our test was safely stored and then destroyed.

## Earn cash towards your upgrade

*Apple tech tends to best hold its value, but other gadgets from even a few years ago can still be worth something. These prices are based on fully working devices with all the original accessories. Sell your older devices, and put the cash towards Best Buy upgrades*

SMARTPHONES	TABLETS	LAPTOPS
<p><b>Apple iPhone 6 (16GB)</b> Retailed at <b>£539</b> Average resale value <b>£224</b></p> <p>worth <b>32%</b> off an... ...Apple iPhone 7 (32GB) <b>£599</b></p>	<p><b>Apple iPad Air 2 (16GB wi-fi)</b> Retailed at <b>£399</b> Average resale value <b>£167</b></p> <p>worth <b>30%</b> off an... ...Apple iPad Pro 9.7 32GB wi-fi (2016) <b>£549</b></p>	<p><b>Apple MacBook Air 13-inch (2014)</b> Retailed at <b>£849</b> Average resale value <b>£243</b></p> <p>worth <b>26%</b> off an... ...Apple MacBook Air 13-inch 1.6GHz 128GB <b>£949</b></p>
<p><b>Samsung Galaxy S5 (16GB unlocked)</b> Retailed at <b>£579</b> Average resale value <b>£82</b></p> <p>worth <b>16%</b> off a... ...Samsung Galaxy S7 (32GB) <b>£499</b></p>	<p><b>Google Nexus 9</b> Retailed at <b>£399</b> Average resale value <b>£57</b></p> <p>worth <b>14%</b> off a... ...Google Pixel C 32GB <b>£399</b></p>	<p><b>HP Envy 15 2014 (i7 4th generation)</b> Retailed at <b>£900</b> Average resale value <b>£155</b></p> <p>worth <b>22%</b> off an... ...HP Envy 15 (Core i5, 8GB Ram) <b>£699</b></p>

## EXPERT VIEW

### DATA IS GETTING MORE SECURE

Robin England, senior data recovery R&D engineer at Kroll Ontrack



We use specialist tools to recover data, often for people

who have lost photos stored on their mobile or tablet, and haven't maintained a backup.

Due to changes in mobile software such as Android and iOS, it is now so difficult to recover the deleted data that the cost can be prohibitive for many customers.

With laptops, there's a growing trend to move from traditional spinning hard disk drives (HDD) to solid-state drives (SSD). Again, data deleted from an SSD is even harder to recover. While these improvements are positive for consumers wanting to protect their data, do make sure you back up anything you want to keep before clicking the 'wipe' button.

## THE BOTTOM LINE

In the past, deleting data from your gadgets often didn't actually do the job, meaning your photos, emails and other data could be at risk. Our snapshot research suggests times have changed and improvements mean that pressing the 'wipe' button will genuinely remove all personal data from prying eyes. Use our practical steps to wipe your phone, tablet or laptop, and you can safely earn a decent chunk of cash to put towards your next tech upgrade.

## FIND OUT MORE

### Tell us what you think

Have you bought second-hand devices and found personal information on them? Tell us at [which.co.uk/datadevices](http://which.co.uk/datadevices)

### Recent related articles

'Software updates: A step backwards?', *Which?*, Oct 2016, p18

- 'Wipe it clean', *Which? Computing*, Aug 2016, p42
- 'What your smartphone apps know about you', *Which?*, Jun 2016, p27

### On Which.co.uk

- Computing Helpdesk: How to wipe your data from a hard drive [which.co.uk/wipeharddrive](http://which.co.uk/wipeharddrive)
- Computing Helpdesk: Wipe an old iPad or iPhone [which.co.uk/wipeios](http://which.co.uk/wipeios)