Choosing hardware

How to choose the right new hardware for your organisation



EMPOWERING YOU THROUGH SECURE TECHNOLOGY

It's Monday morning and your team is getting ready for another busy week. Then the inevitable happens. Your internet connection seems to be on a coffee break, and half the team is sitting idle, waiting for their computers to wake up from their morning nap.



These are the kinds of headaches that every organisation faces when their hardware is past its prime. Whether it's slow computers, unreliable printers, or a network that can't keep up, outdated tech can hold back your organisation, costing you time and money... and really testing your patience.

That's when you know: It's time for a hardware upgrade.

It's easy to get lost in a sea of tech options. Where do you start?

It's always a good idea to bring in experts (like us) when you're thinking of upgrading equipment. Then you can feel secure that you're choosing the right options for your needs and getting the most from your budget.

There are a few things you'll need to consider, from understanding what your team really needs, to checking if your network equipment is up to the task. Then of course, how to futureproof your investments so you're not desperate for another upgrade anytime soon...



Understanding your team's needs

The first, most important step is figuring out exactly what your team needs. The right hardware should make their work easier, not more complicated. Before you dive into specs and brands, take a step back and think about how your team works.

Are they primarily office based, or do you have team members who are on the move? Do you have a hybrid work environment? These factors will help you decide whether you need powerful desktop computers, laptops, or maybe even tablets for more mobility.

For example, a team that spends most of their day working at desks might benefit from desktop workstations. Desktops typically offer more processing power, better ergonomics, and are easier to upgrade down the line. On the other hand, if you have a sales team that's always on the road, investing in lightweight laptops with long battery life could be a better choice. Next, think about the type of work your team does. Do they rely on basic software like word processing, emails, and spreadsheets? Or are they handling more resource-intensive tasks like graphic design, video editing, or data analysis?

For simpler tasks, a standard laptop or desktop with mid-range specs should be more than enough. However, if your team is working with large files or specialised software, you'll want to invest in machines with more processing power, better graphics capabilities, and larger storage capacities.



Think about what your staff or employees do most often, and make sure the hardware can handle that comfortably. A little extra power is always better than too little, but there's no need to go overboard if your team just needs reliable, everyday tools.

It's not all about what's under the hood though. Don't overlook usability. The machines you buy should be comfortable for your staff or employees to use over long periods. For desktops, this means considering things like the size of the screen, the quality of the keyboard and mouse, and the adjustability of the monitor stands. A good ergonomic setup can help prevent fatigue and injury, which keeps your team productive.

For laptops, look at factors like screen size, weight, and keyboard feel. If your team is going to be lugging these around to meetings or remote locations, a lightweight, durable machine with a comfortable keyboard and clear display can make their day-to-day work much more enjoyable.

Of course, every organisation has a budget, and you need to balance your hardware needs with what you can afford. *The key is* to avoid spending too much on features your team won't really use, but also not to cut corners on the things that matter.

Instead of buying the latest, most expensive gadgets, focus on buying hardware that's a good fit for your current needs and can grow with your organisation. For instance, getting a mid-range laptop with the option to upgrade its RAM (memory) or storage down the line might be a smarter investment than buying a high-end model with all the bells and whistles you won't use.

Making sure your setup supports your organisation

Now it's time to look at your overall tech setup. A common mistake everyone makes is focusing solely on computers or printers while ignoring the infrastructure that ties everything together.

Your hardware, no matter how new or powerful, won't perform at its best if the backbone of your system isn't up to the task.

Is your current setup built for today's needs?

Start by taking a hard look at your current infrastructure. Are your systems running smoothly, or do you experience frequent slowdowns, crashes, or issues with accessing important files? If your network struggles to handle your team's daily workload, it's a clear sign your setup is outdated or underpowered for what you're asking of it.

More and more schools and businesses are making the switch from traditional, on-site servers to cloud-based solutions,

and for good reason. Cloud servers can offer flexibility, scalability, and cost-effectiveness that on-site setups often struggle to match.

If your organisation is growing or has fluctuating needs, cloud servers let you easily scale up or down without the need for expensive hardware upgrades. You only pay for what you need, and updates or maintenance are handled by the cloud provider, freeing up your time and resources. Plus, if your team works remotely or across multiple locations, the cloud makes it easy for everyone to access the same files and applications no matter where they are.

That said, moving to the cloud isn't a one-size-fits-all solution. If your school or business deals with sensitive data or requires absolute control over your servers, an in-house solution might still make sense. In many cases, a hybrid setup, where some data and applications are stored in the cloud and others are kept on-site, can give you the best of both worlds.



Upgrading your network equipment

When we talk about upgrading hardware, computers and servers tend to get all the attention. However, there's a piece of your setup that quietly plays a massive role in keeping everything running smoothly – your network equipment!

Without reliable routers, switches, and access points, even the best hardware will struggle to stay connected and productive.

Your network equipment includes all the devices that keep your computers, servers, and other hardware connected to the internet and to each other.

Routers, switches, and access points may not be the most exciting pieces of technology, but they're the hidden backbone of your school's or business's operations. Outdated or insufficient network equipment can slow everything down, leading to productivity bottlenecks and frustration.

So, how do you know when it's time to upgrade your network equipment? Here are some telltale signs:



Slow internet speeds: If your internet connection feels slow and you're noticing delays when downloading or uploading files, it could be your router struggling to keep up with demand.



Wi-Fi dead zones: If parts of your office suffer from weak or non-existent Wi-Fi, it's a clear sign your access points or routers aren't providing enough coverage.



Frequent disconnects: If your devices keep losing connection, even for a few seconds, it's a red flag that something's off with your network stability.



Security concerns: If your network equipment is more than a few years old, it could lack the robust protection needed to safeguard your organisation from modern cyber threats.

Once you've identified that it's time to upgrade, it's important to understand what to look for when choosing new network equipment. Here are the key things to consider:

Speed and performance

Your router and switches should be capable of handling the current and future demands of your organisation. With more devices connecting to networks, including smartphones, laptops, and smart office equipment, you need equipment that can handle a higher load.



Coverage and capacity



Upgrading your access points can make a huge difference. Mesh Wi-Fi systems are a great option for organisations with larger spaces, as they allow you to place multiple access points around the office for consistent, strong coverage everywhere.

Security features

Modern routers come with built-in security features to help protect your organisation from cyber threats. Some even offer advanced threat detection and monitoring, keeping an eye on unusual activity across your network.

Scalability



As your organisation grows, your network will need to grow with it. Invest in equipment that can scale up as you add more devices and team members. Look for routers and switches that support multiple users and connections without slowing down.

Manageability

Today's network equipment often comes with management software that allows you to monitor performance, troubleshoot issues, and optimise your setup. These tools can give you better visibility into how your network is being used and help you address potential problems before they affect productivity.



Futureproofing your hardware investments

Technology moves fast, and the last thing you want is to make a big investment, only to find your equipment is outdated in a year or two.

Futureproofing your hardware means making smart choices today that will serve your organisation well into the future. It's about ensuring that your tech not only meets your current needs but also has the flexibility to grow with your organisation as it evolves.

Here are a few examples...



Computers and laptops: Opt for models that allow for easy upgrades. For example, desktops with extra RAM slots or laptops with expandable storage can save you from having to buy new machines as your organisation needs increase.



Network equipment: Make sure your routers and switches can handle the increasing number of devices that will connect to your network over time. Choose equipment with high user limits and the ability to expand coverage as your office space grows.



Cloud solutions: Whether it's cloud storage, software, or even cloud-based networking, these solutions can easily scale up or down based on your needs. You're not tied to physical hardware, and you only pay for what you use.

When shopping for new hardware, it's easy to get caught up in the excitement of the latest high-tech gadgets. However, the most expensive or cutting-edge option isn't always the best choice for your organisation. Instead of going for the shiniest, newest technology, **focus on what makes sense for your organisation now and what will support it in the future.**

By avoiding unnecessary extras and keeping your focus on your school's or business's core requirements, you can make smarter, more cost-effective investments.

Futureproofing's also about durability. When you're investing in hardware, it's worth spending a little more on products that are built to last. Cheap hardware might save you money upfront, but it often ends up costing more in the long run due to repairs, replacements, and downtime.

Choose well-built machines that are designed to handle the wear and tear of daily use. For laptops, look for features like rugged designs, spill-resistant keyboards, and reinforced hinges.

10 I.T. ISN'T ROCKET SCIENCE – breathetechnology.com

Invest in hardware from reputable brands that offer strong warranties and reliable customer support. Knowing that you can quickly get help (or a replacement) if something goes wrong can save you a lot of stress.

Check the devices you buy will continue to receive updates for years to come. This is especially important for security. Some manufacturers offer longer term support, making sure your hardware stays up to date with the latest security patches and performance enhancements.

Cyber security is more important than ever, and it's essential to futureproof your hardware with security in mind. If you're investing in new equipment, look for features that help protect your organisation from cyber threats now and in the future.

Consider hardware with **built-in security features**, regular updates and patches. Invest in reliable **backup and recovery plans** to **protect** your organisation in case of **data loss**, **cyber attacks**, **or hardware failure**.

Finally, consider hybrid solutions that give you the flexibility to adapt as technology changes. A hybrid approach combines on-site hardware with cloudbased services, allowing you to take advantage of both worlds. For example, you might keep certain data or applications on local servers for security reasons while using cloud storage or software for everything else.

Hybrid solutions let you scale up or down as needed, and they offer the flexibility to move more operations to the cloud as your business grows. This kind of flexibility is key to futureproofing your business, ensuring that you're ready to adapt to whatever changes come your way.



Ser. 198 - 5

breathetechnology

The key is to strike a balance, investing in technology that serves your current needs while staying flexible enough to grow with your organisation.

Whether it's upgrading your computers, improving your network, or preparing for future growth, you now have a roadmap to help you choose the right hardware for your organisation.

Of course, making the best decisions for your school or business often requires a deeper level of expertise. Every organisation has unique needs and navigating tech upgrades can be tricky.

We help local schools and businesses develop and implement effective technology strategies, ensuring you maximise your hardware investments - without the hassle.

...get in touch.



www.breathetechnology.com (live chat available)

020 3519 0124 London > Cambridge 01223 209920 Sheffield 0114 349 8054 Suffolk 0144 059 2163



EMPOWERING YOU THROUGH SECURE TECHNOLOGY



lucy@breathetechnology.com