

Before you buy another school server: Is now the right time for you to migrate to the cloud?

Why move to the cloud?

Before we get into the detail of the 'how', it's worth just defining what the cloud is (it is nebulous by its very definition!) and some of the practical and administrative benefits of migration (as opposed to the educational benefits which we will look at in a separate article).

When schools began introducing servers some 30 years ago, they were a radical development, allowing technical teams to manage multiple devices, multiple user accounts and large volumes of software with ease. Since then, technology has moved on significantly, rendering servers less relevant. With the maturity of Software as a Service (SaaS) as a way of delivering applications directly to users via the internet – instead of installing and maintaining software in your school – SaaS has opened up a new way of delivering and managing your IT with the added bonus that it is now not fixed to a physical location. This approach is often referred to as 'The Cloud'.

Budgetary advantages

Over the longer term, moving to the cloud may be more economical that maintaining and replacing aging hardware. It can be difficult to forecast capital outlay to either repair or replace expensive physical items or to predict when these costs might land. With SaaS you can have fixed annual costs with the assurance that any issues will be fixed as part of your service agreement. Furthermore, as there is no need for site visits when the software is in the cloud, you avoid call-out fees too.

With some careful procurement, you may be able to save money on upgrading your infrastructure and devices too as there are currently several funding and buy-back schemes available. Meanwhile, since cloud based apps exert less pressure on a device than local apps you can buy simpler (and more economical) devices such as Google Chromebook, without diminishing quality of performance.

Finally, not running a physical server and associated additional infrastructure in school will add up to a significant reduction in your energy bills – not to mention your carbon footprint – over time.

Supporting school/ Trust strategy

The use of EdTech in schools has been growing for many years, long before Covid pressed the fast-forward button, but IT planning has often taken place at a more micro-level, as part of subject planning or lesson planning rather than as an integral part of a school's vision for education. Increasing numbers of schools and Trusts are taking the next steps, introducing 1:1 device schemes or investing

in additional laptops and tablets with a view to increasing the use of technology in the classroom. Moving services to the cloud supports this by taking a lot of the hassle out of supporting multiple devices, whether it's provisioning new devices, running updates and patches, or managing licences. Whether you have an in-house technician or IT support partner, moving to the cloud means they can spend less time managing and fixing tech issues, and more time helping support teachers and students to use technology innovatively in teaching and learning.

Security

Cloud devices and infrastructure receive automatic regular updates from manufacturers (of both hardware and software), ensuring that you are always protected against the latest threats and giving you increased reliability of devices in class.

Reducing system complexity

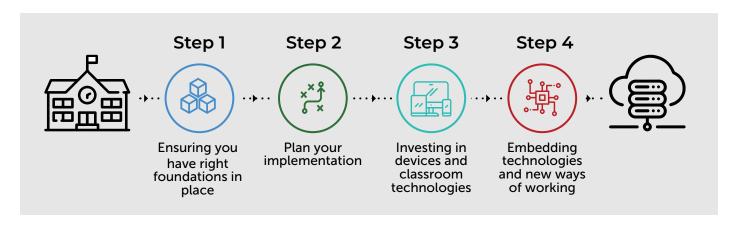
The organic growth of systems over years or even decades, combined with staff turnover and sometimes incomplete documentation, means that you may be left with a physical system that is now overly complex and fragmented, and possibly is no longer delivering what you need it to. Moving to the cloud is an opportunity to audit and streamline.

Scalability

Conversely, with a non-physical infrastructure there are no impediments to growing your services to meet your requirements in the future and keep pace with technological advancements.



Planning your cloud strategy



Once you've decided that your end goal is to build a more consistently reliable system that is both secure and flexible for your school, you now 'just' need to plan for how to get there! While there is a lot to consider, our four steps will help guide you through the planning process and alert you to the various possibilities and dependencies for a successful migration. If you are lacking the expertise or the resource within your school to work through these steps you may find it beneficial to engage a project partner to help you navigate the journey. Many of our customers have found that bringing in an outside partner like RM to assist is an investment that pays for itself over the longer term as they benefit from the expertise and purchasing power of a larger, specialist organisation.

Moving to the cloud can be done in one go or incrementally, depending on your requirements. The exact detail of how you go about it will depend very much on your school's situation and ambition. A technical partner can support you right from the start of the process, helping you to audit your current infrastructure and resources, scope what you need, establish your vision, and set realistic goals for achieving it.



Step 1: Ensuring you have right foundations in place

Before anything else, you need to ensure that you have solid foundations in place on the ground: there's no point in building a Rolls Royce on the chassis of a Reliant Robin! Without getting your connectivity fundamentals in place, your cloud experience will be inconsistent, unreliable and may not be secure. So what do you need?

Broadband

Having a strong broadband connection is vital for cloud services and you'll need to ensure that your bandwidth is sufficient for the type of services you are using. The good news is that many schools already do have sufficient bandwidth to deal with moving to a cloud solution, but if you're unsure you can ask your current broadband provider to produce a report showing your usage.

A project partner, such as RM, will be able to help you understand how much bandwidth you need, alongside other considerations. Broadband is often more than just a connection so it's worth understanding a bit more about what each provider is offering through their connection before making a decision.

Strong wired and wireless infrastructure

While having a good broadband connection is vital, it will make very little difference if the infrastructure that carries the internet connection to the end user's device is insufficient. Something we often see when replacing schools' infrastructure is black spots, or areas that have no connection. This is something no school should accept.

Your chosen partner will be able to help you audit your existing infrastructure and make suggestions as to how it could be improved or whether it is already sufficient for the school's requirements.

Design and implement an effective structure for your productivity platform

Whether you have already committed to a platform or just started using one through the need for access to remote learning, it's important to ensure that it is well structured. That is to say – making sure there is a clearly defined and baselined setup for storage, communication channels, data retention and security as a minimum. Both Google Workspace for Education and Microsoft 365 are designed for ease of use, but if not well organised can become difficult to work with. Your chosen partner can help design and implement this structure taking into consideration all the latest tools and updates on your chosen platform.



Step 2: Plan your implementation

Once you have laid the foundations, and you understand both where you are and where you are going with your technology strategy, you can begin to plan what can go into the cloud and when – whether to move services incrementally or commit to transitioning all in one go. There is no right or wrong answer to this and there are pros and cons to both approaches, which we list here for your consideration.

The incremental approach

This gives you and the school the ability to make a staged journey, combining an up-to-date local network with a cloud presence, with a view to gradually moving more and more services to the cloud, and ultimately removing the reliance on the local servers that costs money to maintain and manage. Note that with an incremental approach strong project-management will be crucial to its success.

✓ Pros:

- Staggered approach allowing for bite-sized projects
- Training to be split over a large period of time, building skills as needed
- Migration over a period of time allows for the full value to be realised from existing assets
- Ability to test scenarios with test team before implementing
- A time to sort and organise files before being migrated to the cloud
- Time to upskill school / trust team to help support other users

X Cons:

- With a local and cloud-based solution, there are two systems to manage and update rather than one, and you may find yourself forced to invest in older technology to maintain the old systems that remain.
- Users of the systems and services can become confused when more than one option is available
- Some funds set aside for elements of the project could be spent on unexpected occurrences along the way, delaying a move to the cloud
- Potential to duplicate documents on servers and the cloud, creating version control issues
- Change fatigue, as staff become more frustrated with the ever-evolving IT environment

Fast track / One project

In contrast, the fast-track approach involves moving the school to the cloud in one go. It can be completed over holidays to avoid disruption, but consideration must be given to how and when staff will be given training to help them acclimatise to the new systems and adapt to the more flexible ways of working. This approach is seen to be more effective and can save money for sites that do not have their own technical team. Some pros and cons of this method would be:

✓ Pros

- The savings in future IT expenditure will be realised more quickly
- The complexity of managing two IT environments in tandem has been removed
- The school community will adopt and adapt to their new working environment once and then move forward
- The Software as a Service (SaaS) approach removes the never-ending update and patching of the network
- Flexible and collaborative working can be fully adopted creating improved work/life balance for staff and improve pupil outcomes.

X Cons

- Swiftly moving to the cloud will mean any recent server investments will not be fully appreciated
- Users will not have a long time to sort and reorganise files before the migration to the cloud
- Some fast-track approaches can initially cost more before the longer-term savings are delivered
- The quick pace of change and new systems adoption can scare some users
- Extra investment in "Go Live" support could be required to support quick transition to the new solution.





The best cloud technology in the world won't do any good if you can't put the power of that technology into the hands of the users. Investing well in devices will help give teachers, non-teachers and pupils the ability to realise the power of your investments.

Cloud-Ready Devices

Looking at all the features available in newer devices, it's easy to assume they are not affordable, or to view them as gimmicky additions to standard laptops. However, it's exactly these additional features on that deliver the exciting innovations for your users and school

Your device supplier will be able to help identify the right devices for you and explain what each device offers and how they can be used in the classroom. They will also be able to talk to you about payment

options that allow regular refreshes such as lease or parental contribution schemes if required.

Classroom Screens

For many schools the projector – whiteboard setup has been a staple for at least the last 15 years. In that time connections have changed, software has changed, and so has the use of the boards. Some classrooms don't see interactivity as a must, while in others interaction with the front-of-class screen is an integral part of teaching and learning. It's important, whatever the case, to ensure any new user devices can interact with the board at the front of the class. This means reviewing usage and connections to make sure new user devices will work seamlessly. Your technology partner will be able to take you through options and details of the classroom screens available to you and options on purchasing.





Finally, once you have spent the time building a solid foundation and putting the right devices in the hands of users, you need to ensure the technology and use of technology continues to improve. Keeping systems and users up to speed with the latest developments means never getting stuck in a position where large changes need to be made again. This keeps users engaged, financial outlays consistent and ultimately keeps technology doing what is supposed to do.

Tailor the systems to your school

Continuing to grow is vital as your users find their feet using the new technologies. No two schools are the same because they are shaped by the community they work in. Therefore, it's important to work with a support team that can understand your needs and help develop your platform so that it delivers an optimal experience for all your users – be they pupils, teachers, parents or leaders.

Getting the most from changes in the cloud

While the development and updating of Software as a Service products such as Microsoft 365 is part of the subscription, whether paid or free of charge, how those services and setups are configured is something that the school is responsible for. Identifying, understanding the implications of, and configuring each change is time consuming but a very important aspect of avoiding ending up with a messy setup and insecure system.

Embedding great usage

You can put as much technology as you like into your school but if users don't understand how they can use it in their own way you will never see the full benefits of moving to a cloud solution. Embedding the technology is the key to reducing workload, building confidence and ultimately making the experience for the whole school community better. Traditional training for half an inset day is less impactful than multiple streams of training through short-form videos, mentoring and support. To embed the use of this technology involves a mix of approaches that are continuously available.

So what are the next steps?

Now that you have seen some of the different stages and approaches to moving to the cloud, the time has come to convert your learning into action. If you have the expertise and resource already available within your school or Trust, then it may simply be the case of planning this project into your annual calendar. If, however, you would like to work with technology experts who can support you at every step of the journey, we recommend that you look for an advisor with educational experience who can:

- Review your school's current position and use of IT identifying any systems or technology that needs updating, is at risk if no changes are made, or is not secure. This can also ensure that forgotten dependencies are not 'missed' as you migrate your services to the cloud.
- Assist you in creating a top-level IT strategy in line with your school vision and objectives.
- · Help you understand how and where the cloud can help you achieve your goals
- Work with you and your team to find the right journey approach, taking into consideration the level of IT confidence and ability of your staff, and advising on training and development.
- Examine the cost and investment of IT now and in the future.
- Help you identify sources of funding and apply on your behalf.
- Advise you on the best suppliers to work with and get you the best deals on infrastructure and classroom devices.



Who are RM?

We can help you with every stage of the journey, from getting the foundations right, to investing in new devices, to getting the best suppliers with the best financial terms, to managing your migration from start to finish and adding clarity to your vision for the future, to helping you with training and onboarding.

Because we only work in the Education Sector, we understand how schools really work, bringing our breadth of expertise to your unique setting, so that you always remain in charge, because we – more than many – recognise that no-one is better placed to know what your school community needs better than you.

Further reading

How does a server support IT at school?
What is the cloud and how does it help schools?
Contact Us

