Fujitsu Inform Guide to Education ICT

How technology can help you address six of the biggest challenges and opportunities in a changing education sector.

Fujitsu PRIMERGY servers and ETERNUS storage are powered by Intel® Xeon® Processors.
How technology can help you address **six** of the biggest challenges and opportunities in a changing business environment
Shrinking education budgets, complex legacy ICT environments and rising expectations from staff and students – sound familiar?

Yet at a time when sectors such as Healthcare and Retail are pushing ahead with plans to upgrade ICT infrastructure, Education still seems to be playing catch-up.

Your department is no doubt affected by the rising involvement of an increasingly interested range of stakeholders in the running of your school, college or university. And with the consumerisation of ICT more than just an emerging trend, it seems like everyone is now an expert on how technology could be improved.

What is more, just as Government pressure to raise standards and the need to attract students impacts what happens in the classroom, so education ICT is being asked to do more than ever before. New central initiatives, such as Digital by Default and Cloud First, are all well and good but they bring with them a fresh set of challenges if you are dealing with creaking legacy systems or stretched resources.

You probably don’t need us to tell you that for all the issues, ICT still offers new ways to adapt to this evolving education landscape. But as ICT moves from behind-the-scenes to the forefront of education, choosing the right technology is essential in improving the quality of the learning experience.

On the pages that follow, we explore how a fresh approach to ICT can help you deal with six of the biggest factors facing education IT departments today.
At Fujitsu, we understand that overcoming the everyday issues associated with maintaining your ICT infrastructure is only one part of the story. Keeping pace with the latest technological trends brings a fresh set of challenges but it also offers new opportunities.

Here, we set out six of the most influential factors in education ICT and what you can do to deliver the one thing that really matters... a better learning environment for all.
As technological change gathers pace it can be hard to keep up. Perhaps your local teams within stores lack some of the skills to quickly implement new ICT trends, such as virtualisation and cloud infrastructure. Or maybe your central resources are too stretched already and you simply do not have the time to instigate change.

With the rise of Big Data, do you have the right storage capacity to hold ever-increasing volumes of information? And how will you help your marketing and operations departments to process that information faster so they can use it to improve customer order management? Questions like these inevitably lead to a clash over budgets.

A cost-effective, future-ready ICT infrastructure will help you overcome these issues. With Fujitsu, you have access to a powerful storage and server portfolio that will bring you right up-to-date. We can also support your transition to a new ICT environment with our one-stop Cluster-in-a-box solution.

And if you need a faster, simpler way to begin your virtualisation journey then FUJITSU vShape is the ideal solution.
Cloud services could give your company a way to reduce its capital expenditure, especially when you need to service multiple stores. By outsourcing standard services and focusing on Business Process Optimisation (BPO), you could significantly reduce your ongoing IT support and maintenance costs. But is your server infrastructure ready for this new way of operating?

Furthermore, are you ready to take on some of the new opportunities in local education provision? Groups of institutions, particularly smaller primary schools, are being encouraged to pool resources, such as HR and payroll, to make significant savings. Only modern, robust ICT infrastructure will allow your institution to lead from the front as the provider of Shared Services.

The business case for ICT services that can proactively reduce costs is compelling. FUJITSU Server PRIMERGY is cloud-ready and fully optimized for virtualization, meaning you start benefiting from lower-cost ICT on-demand almost immediately. And with FUJITSU Server PRIMEQUEST you can deliver mission-critical computing that offers the reliability and performance your departments need to deliver Shared Services.
If your resources are already constrained then introducing new, efficient education technologies can take time. Time that your departments probably do not have. Without external support, good intentions towards deploying the technology that will attract staff, students and additional investment can go to waste.

Meanwhile, any departmental concerns about the security of cloud Infrastructure-as-a-Service could be preventing your institution from benefiting from cost-effective, optimised and user-centric technologies.

Fujitsu’s cloud-ready storage and servers will give you the flexibility to meet changing requirements across the board. They will also help you maintain the highest possible levels of security. What is more, with our ETERNUS CS storage architecture you can radically simplify your ICT infrastructure to ensure complete data protection and backup.

Cloud-ready storage

FUJITSU ETERNUS storage
FUJITSU Server PRIMERGY
FUJITSU Server PRIMEQUEST
FUJITSU ETERNUS CS
FUJITSU High Performance Computing

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In an increasingly competitive education environment, your ICT plays a key role in encouraging staff and students to join your institution. Whether it is a network that can support Bring Your Own Device or the rollout of new collaboration tools - such as lecture capture systems and MOOC (Massive Open Online Courses) - you need state-of-the-art infrastructure.

Specialist subjects often demand specialist ICT. The rise in popularity of CAD design and digital media courses requires servers that can operate at the highest speeds. So how can you meet these demands at a time when central ICT budgets are under downward pressure?

Fujitsu can help here too. Our powerful server portfolio includes industry-leading High Performance Computing (HPC). Used in research hubs and education establishments around the world, FUJITSU HPC is helping organisations attract the best talent and significant research grants.

Cloud-ready storage

FUJITSU ETERNUS storage
FUJITSU Server PRIMERGY
FUJITSU Server PRIMEQUEST
FUJITSU ETERNUS CS
FUJITSU High Performance Computing

Check out how HPC Wales relies on Fujitsu technology to power research and innovation >>

Intel INSIDE XEON

Fujitsu PRIMEGY servers and ETERNUS storage are powered by Intel® Xeon® Processors.
While the rest of the organisation focuses attention on yearly budget cycles, your department could help break the mould. By adopting new technologies that offer long-term return on investment, you can show your Finance team how a small change now could have a big impact on the bottom line for years to come.

Yet without the in-house expertise to provision and quickly demonstrate the value of this new technology, you could miss this opportunity to improve your ICT infrastructure for good.

At a time when there is demand for simpler, faster ICT estates and lower costs, our industry-leading storage and servers can work alongside other systems so you can avoid the expense of a complete technology refit. With world record-holding energy efficiency, our PRIMERGY servers deliver data centre savings of up to 23% on power and cooling. And with the choice of FUJITSU ETERNUS or NetApp FAS storage you can find scalable technology to suit any budget.

Computing capability

FUJITSU ETERNUS storage
FUJITSU Server PRIMERGY
FUJITSU Server PRIMEQUEST
NetApp FAS storage
FUJITSU vShape

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Many education leaders support the view that ICT offers an opportunity to do things differently. In most instances they are technology savvy people who understand that virtualisation and consolidation, for example, will free up resources to focus on teaching.

They are also looking ahead to new systems like augmented reality and smart sensors. These are the tools that could offer students the chance to develop multi-disciplinary skills or ways to comprehend complex subjects more easily. High performance computing (HPC) and gamification are also hot topics for education leaders. Especially if they can help improve collaboration across the institution and provide that competitive edge for meeting growing student, parent and staff expectations.

Fujitsu’s storage and server portfolio can support these potential new demands on your ICT infrastructure. As data-driven learning becomes part of everyday education, Fujitsu will also give you the ICT you need to support continuous improvement of courses through greater insights into attrition rates and student preferences.

Computing capability

FUJITSU ETERNUS storage
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FUJITSU Server PRIMEQUEST
FUJITSU Cluster-in-a-Box
FUJITSU vShape

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Whether you face all six of these influencers or just one, Fujitsu can help you find the right technology to meet your ongoing ICT requirements.

Despite organisations sharing many of the same external challenges, Fujitsu understands that there can be no one-size-fits-all approach to your ICT. That is why our new approach to storage and servers offers you more flexibility to tailor data centre technologies to your specific requirements.

Instead of the restrictions of an ad hoc, incompatible and multi-vendor storage and server environment, we give you the benefits of robust, future-proofed technologies from a single source. What is more, you benefit from Fujitsu’s unique, consultative approach to ensure you get exactly what your organisation demands.

A reliably perfect fit.
Fujitsu storage and servers: The benefits

Fujitsu ETERNUS storage family:
■ Manage all your Fujitsu storage from a single platform and minimise OPEX and training costs
■ Choose to upgrade and tier your storage according to your data requirements Access consistent support from Fujitsu’s expert team
■ Software licences last for the lifetime of your platform so there will never be any nasty surprises
■ With the ETERNUS S3 you can expect a market leader in its class and 5x the performance of the S2

World record-holding Fujitsu servers:
■ Record-breaking virtualisation performance
■ Complete portfolio: x86 to mainframe
■ 99.997% availability guarantee
■ CoolSafe™ technology for increased efficiency
■ Fujitsu ServerView™ offers a single source for deployment, monitoring, administration, remote operations and power management
■ With Cool-Safe™ technology, our servers can reduce data centre power costs by 27%
Fujitsu solutions:
At a glance

**FUJITSU ETERNUS Storage**
Our fully scalable ETERNUS DX range offers enterprise-class disk storage to meet an increasing range of internal and external demands. It helps drive the consolidation of existing silo storage and offers the flexibility to access data anywhere at any time to improve top line and bottom line performance. Featuring de-duplication, data compression and thin provisioning, it enables a more efficient use of storage infrastructure. Our ETERNUS CS storage architecture also reduces disk capacity by up to 95% and delivers improved automated disaster recovery. This makes it the ideal solution for IT teams facing frequent backup window over-runs or the challenge of business continuity.

**FUJITSU PRIMERGY**
Our record-breaking PRIMERGY servers and solutions are designed to help organisations meet the demand for maximum productivity, cost-effectiveness and agility in the face of rapidly changing IT requirements. Offering a fully customisable, cost-effective and quick to deploy x86-based industry standard server systems, choose from tower servers (TX), rack-optimised servers (RX), blade servers (BX) and cloud server infrastructure systems (CX).
**NetApp Fabric Attached Storage (FAS)**
This family of storage solutions from our partners at NetApp enables sophisticated data management techniques, such as thin provisioning, de-duplication, replication, snap shots, clones, archives and vaults for effective management of critical information. With this wide range of options and solution you can find the perfect fit for your unique requirements and budget.

**FUJITSU Cluster-in-a-Box**
Our entry-level, low cost virtualisation platform allows for consolidation of a number of physical systems while providing increased availability. No hidden costs means it is perfect when budgets are tight and IT expertise may be limited.

**FUJITSU High Performance Computing (HPC)**
For organisations that require a high performance technical compute platform Fujitsu brings over 40 years of heritage and experience to deliver an end-to-end platform including hardware, network and grid software. This empowers organisations to create and/or share their own scalable and performant HPC grid, enabling highly complex mathematical problems to be solved.

**Fujitsu solutions for SAP HANA**
Our industry-leading solution for SAP HANA offers the ability to utilise real-time analytics rather than retrospective patterns. It will help ensure your organisation is putting the right information in front of the right people at the right time, maximising productivity and response times. Fujitsu’s global relationship with SAP means that our customers get the full benefits of certified and reliable SAP based analytical systems.
FUJITSU Server PRIMEQUEST
Specifically suited to an always-on, data-rich ICT environment, our PRIMEQUEST servers deliver high availability proprietary computing environments that leverage the benefits of industry standard platforms, such as x86 servers and OpenSource. PRIMEQUEST also gives you the added confidence that applications will deliver a continuous service.

FUJITSU vShape
vShape is ideal for organisations looking to move towards an agile IT environment. Our out-of-the-box virtualisation solution integrates storage, server, network and software to help reduce the cost of deployment. With vShape, state-of-the-art technology from Fujitsu, NetApp, Brocade and VMware is already built in. vShape is unique in bringing complete, validated virtual infrastructures to any type of organisation, all supported under a single maintenance contract provided by Fujitsu.

FUJITSU SPARC Solaris Servers
With an enduring record of industry success, coupled with broad ISV support, SPARC Solaris Servers from Fujitsu continue to be a key technology for large-scale organisations. Our latest server, the M10, provides the most scalable and resilient platform available in the UNIX space. With 13 world record performance benchmarks and over 1,000 cores available in a single instance, the M10 offers mainframe class availability and capacity-on-demand – meaning your users can depend on Fujitsu SPARC servers whatever the workload.
Why Fujitsu

Unlike other providers, with your Fujitsu storage and servers you get the peace of mind that comes with knowing that your technology has been built by us in our own manufacturing facilities. All of our products are designed and developed in Japan and constructed to exacting specifications by our technicians in Germany.

With Fujitsu you can expect

- A single platform management layer
- A single licence fee
- A single point of contact for your storage and server support
- A single product family for complete scalability
- Access to the largest number of storage and server engineers in the UK
- Access to some of the most powerful and performant ICT in the industry
- Complete transparency when it comes to selecting your configuration
- No surprises when it comes to upgrades