

EDUCATION

U.S. School Districts

Debunking common myths about public
cloud migration in higher education



Why public cloud?

What does this mean for the 16,800 U.S. school districts?



Cut costs

Through SaaS and reduced hardware



Instant scalability

Immediately available resources to meet any need



Remote learning and collaboration

Through the internet



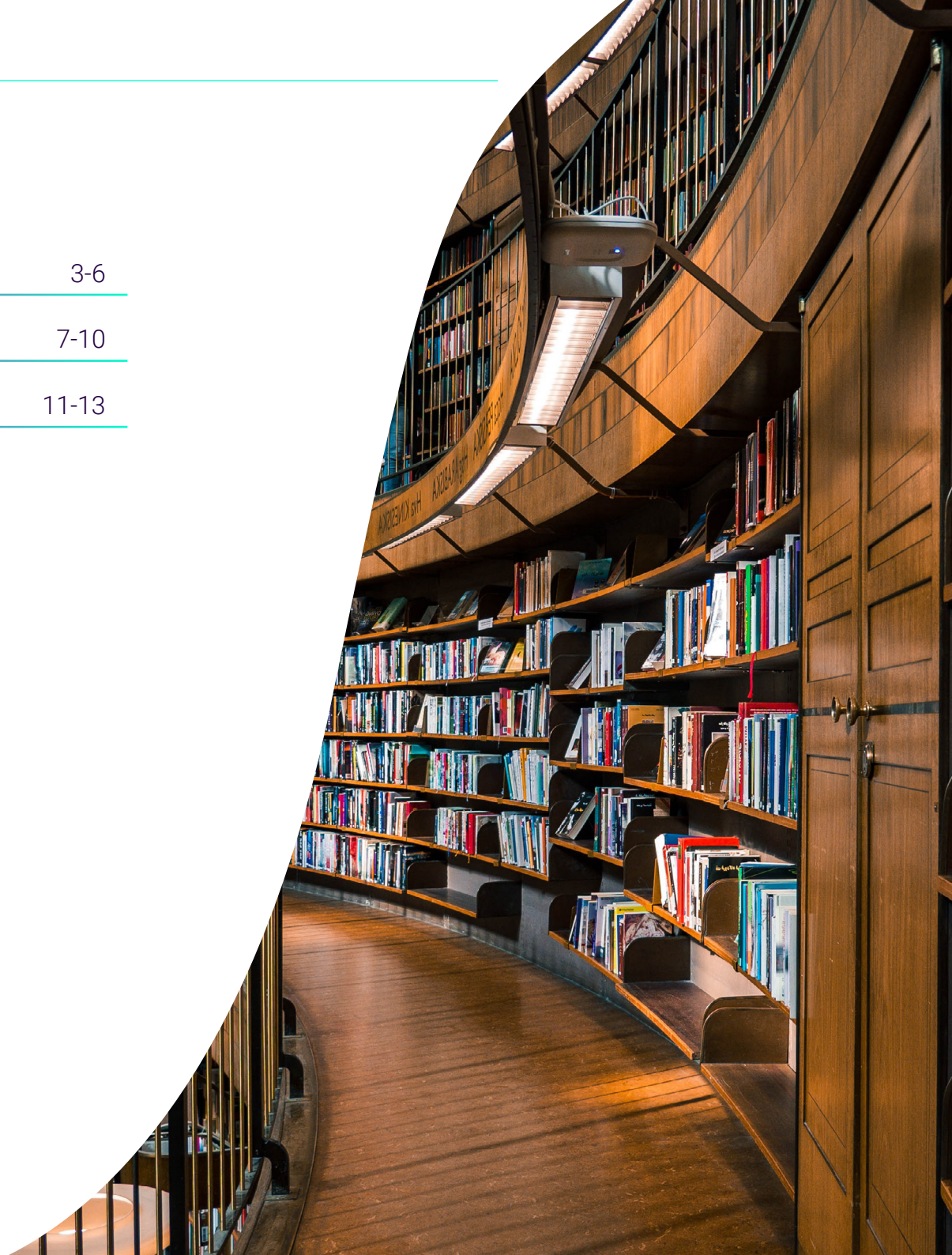
Save time

No need to constantly update and maintain infrastructure



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1 All U.S. school districts moving to public cloud

Providers actively targeting education.

- The K12 cloud computing market is expected to [increase by more than 18%](#) between 2021 and 2026. 55% of this growth will stem from North America.

Apparent urgency to migrate to the public cloud.

- Amazon Web Services (AWS), for example, claims to have over [14,000 education institutions](#) of all sizes amongst its global customers.

School districts may well be considering moving to the public cloud. However, migration is far from straightforward, so a piecemeal and phased approach is much more likely.



Not all U.S. school districts migrating to public cloud.

→ School districts have unique needs, so a cloud strategy that works for one, may be completely unsuitable for another.



Migration to public cloud carries risks.

→ E.g. Leverage documentation to install new tech correctly from the outset and optimize configuration.



There isn't always a strong business case.

→ Benefits calculators such as Forrester's Total Economic Impact (TEI) model allow IT leaders to consider the appropriateness, cost, and flexibility of public cloud.



Let your apps do the talking.

→ Decisions should be driven by the applications themselves, and when and how these are used.

OPTIMIZATION

Calculate costs carefully

For example, consider platform-agnostic software to avoid spiralling traffic charges once you're in the cloud.

Understand your support requirements

Public cloud providers offer little support, so this needs to be factored in, and could cost an additional 10%.

Future-proof your decisions

Migrating all your applications to a single public cloud provider can lead to vendor lock-in, making it difficult to extract yourself later on.

Do the maths!



2 Public cloud migration is all-or-nothing

Covid led to a surge in cloud adoption as education institutions rushed to deal with short-term pressures.

- Demand for Software-as-a-Service (SaaS) dramatically increased, including remote desktops, specialist coursework and teaching platforms.

More and more IT services are being moved to the public cloud.

- This has left some claiming that all services now need to be moved to the public cloud.



The reality will likely be a hybrid environment for most, with a test-and-learn phased migration, initially for non-critical applications.



Few U.S. school districts will migrate everything to public cloud.

→ Not all apps are cloud compatible, and some are too mission-critical to be handed over to third-parties.



Cloud providers still can, and do, fail.

→ E.g. [StorageCraft Cloud Services](#) had an outage in its cloud-based disaster recovery service, impacting U.S. customers in 2022.



Public cloud isn't always cost-effective.

→ Charges can be based on new connections, active connections, processed bytes, or rule evaluations.



Back-ups remain the responsibility of school districts.

→ Need continuous and guaranteed access to backups to ensure sensitive information isn't lost.



OPTIMIZATION

Simplify IT management

Using platform-agnostic software can make hybrid and private cloud environments much easier to manage.

Migrate at your own pace

School districts may want to migrate modern applications and systems to the public cloud, but legacy applications will likely remain in-situ, or need replacing.

Respond quickly to changes in demand

A hybrid or multi-cloud environment allows school districts to be more agile and innovative with the resources available.

Stay agile 

3 Data centers are a thing of the past

Data centers being closed down.

- Gartner predicts that [80%](#) of enterprises will shut down their traditional data centers by 2025.

School districts under pressure to deliver better value for money.

- Traditional data centers are not very energy or cost efficient.



Data centers are unlikely to ever disappear completely. Public cloud still relies on a data center somewhere - just not one the school district has control of. The reality is that there are some legacy applications school districts are likely to always need, or want, to keep out of the public cloud.



Security concerns.

→ Lack of customization and increased risk of unauthorized access in public cloud.



Increase in ransomware attacks.

→ E.g. Maryland's third-largest school district forced to close schools in 2020 after a ransomware attack that cost it nearly [\\$10 million in recovery costs](#).



Infrastructure being repurposed.

→ Many school districts joining forces to set up centralized data centers that deliver shared IT services.



Data center expansion.

→ Other [school districts](#) expanding their infrastructure to deliver free internet to pupils in surrounding areas.



Make it easy to optimize app performance

Deploy high availability solutions for hybrid environments that are clever, not complex, so that they can be easily managed and maintained by in-house IT teams.

Gain value for money

Account for hidden extras like support and bandwidth constraints in the public cloud.

Bolster IT security

Public cloud is designed for the majority, not the few. It is much harder to secure data in an environment where resources are shared, hence a hybrid or private cloud environment may be more suitable.

Still needed



Summary

1. Platform-agnostic software makes hybrid environments easier for school districts to manage, and reduces cost creep in the public cloud.
2. There is a need to consider security, as well as cost and convenience, very carefully.
3. Data centers continue to play a role in any mission-critical application strategy.



Don't compromise the security of your applications. Have a hybrid environment you need to manage? We can make sure it stays resilient, and always-on.”

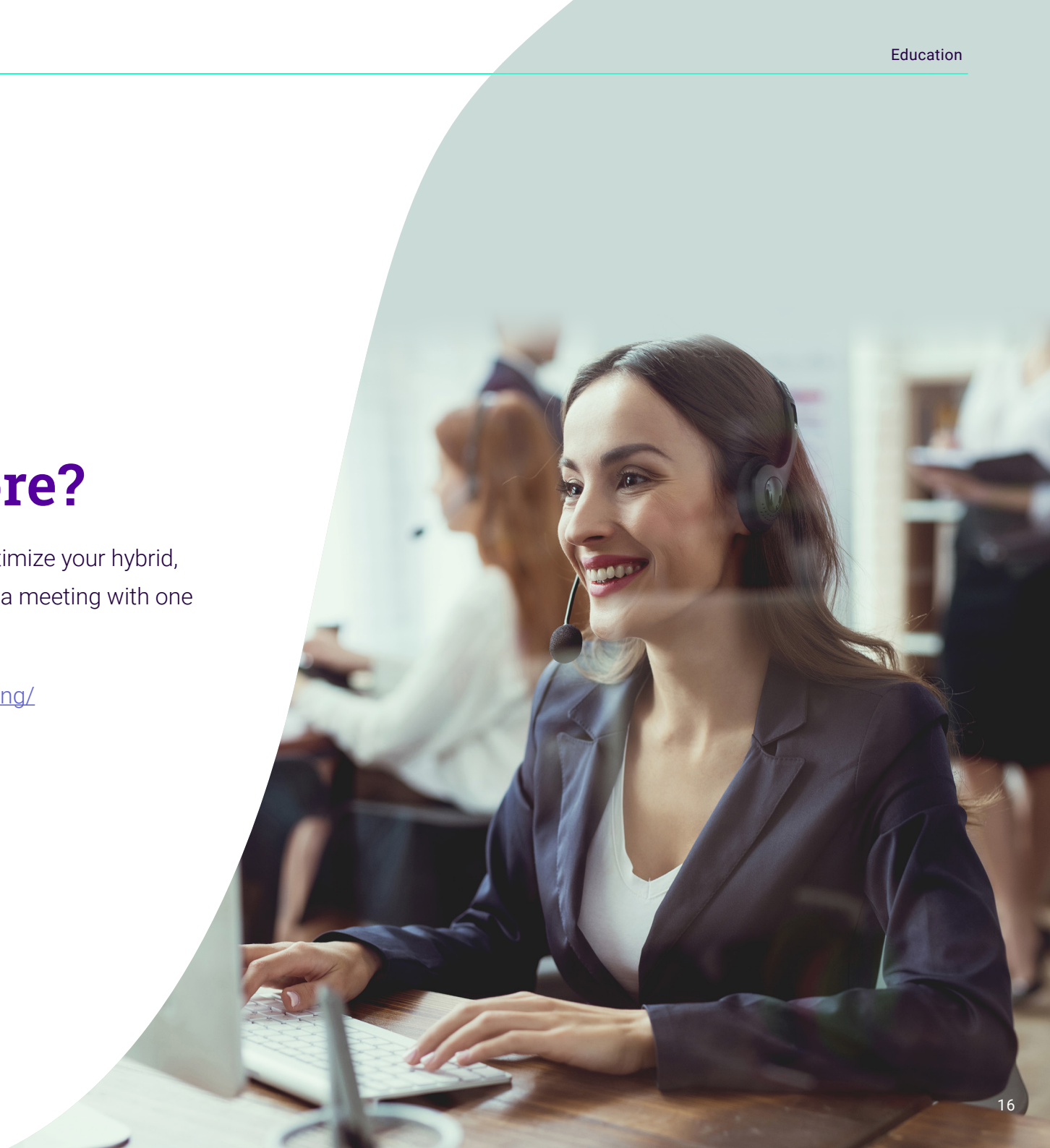
Malcolm Turnbull, Co-Founder, Loadbalancer.org



Want to know more?

If you would like more information on how to optimize your hybrid, private, public, or multi-cloud environment, book a meeting with one of our technical experts:

www.loadbalancer.org/get-started/book-a-meeting/



About the company

Our mission is to ensure your business is never interrupted by downtime — using tailored, high availability solutions to optimize application delivery.

Bringing decades of experience to your deployment, we're here to get to the heart of what matters to you, delivering uptime you measure in years, not months.

Find out if our clever, not complex, Application Delivery Controllers (ADCs) and exceptional, personalized support are the right fit for your application stack.

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