

Why are LAs behind MATs in switching to Cloud MIS? The issue of fragmented TCO

Vanessa Pittard

Following the MAT MIS lead

Local authorities have fallen behind multi-academy trusts (MATs) in the adoption of Cloud MIS solutions. Big MIS procurement contracts are, in the words of Joshua Perry – Director of Assembly, a non-profit schools data platform – “turning heads”¹. Last academic year the list of large MATs switching to Cloud MIS included Harris Federation, AET and Bath and Wells, and there are others in the pipeline. Nearly all schools that switched MIS last year were academies and individual LA maintained schools, but not via LA-wide procurement – a flaw in the Cloud MIS market.

LA-maintained schools are by far the largest segment of the school MIS market and yet LA-wide switching is notable by its absence. 80% of schools have an MIS that’s still under historical LA-wide contracts from the 1990s (Capita SIMS).

Why is this? One reason is that the costs of MIS ownership are fragmented across schools and LA business units, leading, in contrast to MATs, to a lack of visibility and ownership of financial savings – a key factor for MATs making the switch. This lack of visibility removes financial incentives for change.

These incentives are compelling²: Harris saved over £500k annually across the Federation and figures of £12-13k per-school are being achieved by Newham Partnership Working (NPW) by switching schools to Cloud-based MIS within its strategy of serverless schools.

For LAs, serving 80-400 schools, there is potential for savings between £1.4m and £5.2m annually. This is a serious ‘blind spot’ for LAs in the context of stretched school and LA budgets.

There is a clear need for LAs to examine true LA-wide and ‘end to end’ costs of MIS

We need total cost of ownership (TCO) thinking about local authority-wide school management information systems (MIS). The problem is that MIS costs are fragmented: no-one has oversight or ownership of costs across schools and local authority business units.

Without this transparency and oversight, financial incentives for change are removed. What needs to happen to address this situation?

ownership when LAs review the annual MIS software maintenance costs.

I talked to representatives from LAs and LA-wide MIS services to find out more.

Talking about local authority-wide ‘end to end’ MIS costs

I asked LA and MIS service representatives how school MIS costs were considered and whether they recognised and accepted the ‘fragmented TCO’ argument. Once they considered it, they agreed.

I asked about how decisions about LA-led MIS services and procurements were made, and how they could become better informed by a fuller picture of true costs. There are considerable challenges of fragmentation and poor oversight.

Crucially, strategic decision-makers in LAs never see the full cost picture, and neither do individual schools. They’d be interested if they knew the order of the financial savings that can be achieved.

¹ <https://schoolsweek.co.uk/multi-academy-trusts-are-driving-edtech-innovation/>

² <https://www.vanessapittard.co.uk/blog>

'It's better; it's cheaper', but LAs don't see the total picture

Dom Norrish, learning technologist and blogger, was spot-on recently with his take on why schools must move to the Cloud³. His argument was simple: *1. It's better; 2. It's cheaper.*

Dom made the key points that:

- It's better due to released capacity – financial savings, reduced workload and ability to collaborate.
- It's cheaper because Cloud software and infrastructure is more efficient and far cheaper to support.

These issues are highly pertinent to the domain of MIS in schools, a domain that's changing through gradual adoption of Cloud MIS solutions, but not in LA-based services, leading to missed opportunities both for savings and what organisations in many other sectors want – reduced burdens from the management of data and information, enabling staff to focus on the core aim of better outcomes for students⁴.

Dom's points out that:

"There are many reasons why the schools sector has largely failed to make this shift [to Cloud],

mostly around organisational inertia, perceived risk and the capacity for change projects on this scale."

I would make the further crucial point, which came through clearly from my conversations with local authority and LA-wide services representatives and which lies at the heart of a common and sometimes deep 'local MIS inertia' – a lack of understanding and awareness of the benefits of Cloud MIS.

This is due partly to a lack of trusted information and advice on the issue, but it's also due to the fragmented oversight of MIS costs. This 'fragmented TCO' sets MIS switching apart from other Cloud switching by schools.

Examining total LA-wide MIS costs

Examining total costs of ownership (TCO) and return on investment (ROI – analysis of savings and benefits from an investment) is common across IT in many sectors, but it's rare to see it applied to MIS services for schools. That's mainly because the historical licence and annual maintenance contract and servicing covering LA-wide MIS costs are spread between:

- LAs
- Local traded/ICT services organisations

- Schools on premise IT

Everyone I spoke to agreed that it's difficult to bring together or evaluate the full cost picture. Even where representatives acknowledged this would be a good thing, they struggled to propose how it could be done to inform decisions in practice. It is no surprise that nobody I met had an understanding of the full costs of MIS in schools.

Local Authorities have been under significant financial pressure for years now. Many LAs pride themselves in running lean services which offer value for money for local people. MIS in schools, however, appears to have slipped under the radar.

There are no cost benchmarks, little awareness within LAs or LA service providers of reasonable total costs and no real work to develop and advance LA MIS business cases.

Gartner Group was responsible for originating systematic approaches to total costs of IT systems⁵. The list of Gartner's potential cost categories is long, but its framework is relatively simple. Costs are categorised as:

- Infrastructure: Computer hardware and software, including installation and migration – a mixture of capital expenditure, generally on a 3-5-year

³ <http://domnorrish.com/?p=418>

⁴ <https://johnroberts.me/education/2016/03/can-technology-reduce-teacher-workload/>

⁵ https://en.wikipedia.org/wiki/Total_cost_of_ownership

replacement cycle – and annual costs.

- Running costs: Operational expenses, including electricity, space, system and data back-up and support and user training. These are usually annual but include some one-off costs such as onboarding.
- Longer term expenses: such as server replacement and decommissioning.

In the context of Cloud, there's strong emphasis in other sectors on TCO and ROI, focused on hard 'end-to-end' costs and like-for-like comparisons based on functionality

Conducting rigorous, *detailed* TCO and ROI analysis is a serious endeavour⁶. It may not be the sort of activity typically expected of an LA official or Senior IT Manager in an LA-based ICT service. However, until 2012 Becta, the government's lead agency for ICT in schools, promoted TCO methods, encouraging both LAs and schools to look at ICT costs in the round⁷. At the time, poor quality ICT placed demands on technicians and admin staff to keep things going and provide support to users. These were unseen costs in the system which limited the capacity of schools to gain value from ICT.

Today it's about hard costs.

As Yoav Mor – multi-cloud solution evangelist at Cloudyn – suggests⁸, it's best to make a start by estimating the infrastructure costs associated with the current system, for example by using typical costs. A practical, approach can be taken to operating costs – for example, using typical day rates and estimating time-spent maintaining the system by technical support staff.

There is a myriad of 'TCO calculators' published online, mainly by commercial IT suppliers, many of them Cloud suppliers to the corporate sector, to help organisations compare the cost of their existing or legacy set up with a different, newer Cloud-based offer. These, with cautions, can offer insights into savings from ditching client servers.

My point is that practical, and pragmatic, approaches are possible to start a process of building a financial case for switching to the Cloud. Assumptions and typical costs can be tested and refined as options develop, through the procurement process.

Infrastructure – cost estimates & transparency

Costs for MIS infrastructure generally lie between the LA/local service and schools but should be one of the first 'ports of call' for LAs when estimating MIS TCO.

To run a legacy operation requires staff to administer regular updates and technical fixes in schools as well as provide technical support when things go wrong. A TCO approach factors in these costs as well as core infrastructure.

Actual costs, however, are not always visible behind annually-charged maintenance and support contracts which can encompass a range of different services.

Ultimately the goal of this exercise is to achieve savings for schools to release cash and capacity at the front line. This is where dialogue with traded service providers is crucial, to understand charges to schools and identify true costs.

It's difficult to put a precise percentage saving on infrastructure and related support costs from data centre rationalisation, but they should be in the order of 80%+ compared to 'legacy' school-based servers. Some current costs borne by schools and are not

⁶ See for example: <https://www.hosting.com/calculating-tco-total-cost-ownership-cloud-computing/>

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http://archive.teachfind.com/becta/research.becta.org.uk/index048a.html?section=rh&catcode=_re_rp_02_a&rid=13611

⁸ <https://www.cloudyn.com/blog/cloud-vs-house-explain-cloud-roi-decision-makers/>

necessarily transparent to LAs. Again, dialogue between schools and LAs is important in estimating total costs.

Remote data hosting relieves schools of the responsibility of software updates and server maintenance and reduces risks. It's a good thing, but here's a caution. These costs should nonetheless be scrutinised on the same basis – that charges and true costs are different.

Rationalising infrastructure should lead to significant cost reductions for schools. If hosted services don't deliver these savings, questions should be asked. LAs are well advised to make comparisons with options beyond those offered by current suppliers before they jump.

Software licencing – more savings from 'true Cloud' MIS

TCO analysis should incorporate licencing costs borne by schools that are not visible to the LA.

There can be annual costs for additional software layers for the MIS to be 'internet-ready' – sometimes costing £1,000 or £2,000 per school, but core to Cloud-based MIS.

Similarly, apps such as parent portals and payment systems should be included – many are integrated more cheaply (for example, without the need for exporter software) or come as part of Cloud MIS packages. In practical terms, LAs could look at a

sample of schools and base estimates of such costs on this sample, then scale it up.

Developing cost-informed LA-wide MIS strategy – what's the answer?

Crucial points emerged from my discussions on how to address 'LA-wide MIS inertia':

- If change is to happen, schools must want it, no matter how much effort the LA puts into leading it. But headteachers are (generally) not well-informed about the benefits of Cloud true Cloud-based MIS software.
- MIS in schools literally never surfaces as an issue at *strategic* level in LAs. Directors of Business Strategy are potentially key players, but they don't get to see an analysis of overall MIS costs and potential savings because MIS is generally viewed as an operational issue.
- Schools are, however, beginning to 'jump ship' towards Cloud MIS services. As awareness grows, other schools will see the benefits and place demands for change on LAs. This demand could become a 'burning platform'.
- But steers from government are important too, to encourage schools and LAs to think differently

about the value of Cloud systems.

The overall implication is the need for a 'pincer movement' to raise awareness among schools and to encourage LAs to develop cost-informed (and benefit-informed) MIS strategies.

The following suggestions were put forward:

- School leadership teams need better MIS cost-comparison information. This should be set out simply to enable Headteachers and SBMs to do something they've not been able to – compare total 'end-to-end' MIS costs with those for like-for-like Cloud solutions.
- LA Directors of Business Strategy need access to convincing case studies from trusted sources, providing evidence of savings from Cloud MIS across schools – to expose them to the business case for Cloud MIS.

There is a burning platform already in many LA contexts, which is that tough decisions are being made about spending where school budgets don't add up. The opportunity for back-office savings, with an assurance that change can be delivered without disruption, will be compelling for many hard-pressed LA budget-holders.

A role for government

Both these areas play into statutory and non-statutory responsibilities:

- The Schools financial value standard (SFVS)⁹, which requires that maintained school governing bodies report on value for money.
- Guidance to school governors that: “Each year your school must review its contracts for all of its services [and] check that contracts are good value for money (VFM) and meet the school’s needs”¹⁰.
- LAs’ duty under the Dedicated Schools Grant (DSG) to “maintain proper arrangements to ensure value for money”¹¹

The DfE’s budget guide encourages LAs and Schools Forums to have “informed debate about budget levels and use of funds.”.

Perhaps it could do more.

LA representatives told me that the Department for

Education has a vital role to play in stimulating change by providing guidance to schools and LAs on the savings benefits achieved by switching to true Cloud MIS.

This information should be specific enough to inform discussions by leadership teams and Governors about MIS costs and value for money, highlighting what they should consider in assessing costs and, ideally, offering benchmarks for comparison.

The Department for Education already provides cost benchmarking tools for schools, but these tend to focus on simpler purchases and services. If this principle were to translate to MIS in schools, tools would need reflect a wider picture and be related to defined service levels.

Steering local authorities to look at MIS costs as part of their duty to ensure value for money means targeting Directors of Business Strategy – offering clearer guidance on MIS opportunities and providing

quantified examples of where savings were achieved from switching away from legacy systems.

A role for suppliers: MIS cost calculators

Suppliers can help by offering schools and LAs tools and analysis to understand and compare MIS costs more accurately. Transparent pricing of the kind found on the G-Cloud framework is a start, but only part of the picture.

I’d be keen to see government and MIS suppliers work together towards to define ‘typical’ MIS service standards (perhaps at differing levels) against which total costs could be set out for comparison – in effect, MIS TCO calculators.

For LAs, overall costs would need to be calculated based on, for example, the number of schools and average size, and they should of course reflect the full range of costs, of the kind set out in the table on the next page.

⁹ <https://www.gov.uk/guidance/schools-financial-value-standard-and-assurance-sfvs>

¹⁰ <https://www.gov.uk/guidance/school-resource-management-top-10-planning-checks-for-governors#list-of-contracts-with-costs-and-renewal-dates>

¹¹

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/579306/DSG_Conditions_of_Grant_2017-18_-_Final_GH.pdf

Removing the TCO 'blind spot'

I'm inviting LAs to overcome the 'blind spot' of total MIS costs by conducting TCO analysis.

There are compelling reasons for LAs to review the true and total costs of MIS in schools, including costs and charges incurred by individual schools from legacy MIS and those borne by LA business units and services.

There may be scope for debate about the range of costs included in this table, but the list reasonably reflects what LAs should look at when thinking about total costs. I've stopped short of presenting 'typical' or benchmark costs here as this may cause controversy, but I have suggested figures for some of these earlier in this report based on case study information.

The value of this approach comes when making comparisons with the alternative - Cloud MIS services. Cloud MIS costs are published in information on G-Cloud's Digital Market Place and are transparent.

The future of MIS in schools?

This is the last of a series of three papers on MIS in schools. While change is slow, I'm confident that the future of MIS in schools will be very different. The pressure for cost savings and inexorable rise of Cloud software will lead to inevitable change. I hope, however, that the resulting decisions are strategic ones, informed by sound analysis of costs, benefits and future opportunities.

SUGGESTED MIS TCO ELEMENTS

SUGGESTED MIS TCO ELEMENTS	
MIS costs	
Infrastructure	Electricity (per server p/y)
Infrastructure	Server refresh (five years)
Infrastructure	Server commissioning (five years)
Infrastructure	External hosting (SIMS - as alternative to above)
Technical support	System updates/patches & basic support
Licencing	SQL License 2 core
Licencing	MIS software licencing/entitlement
Back-up	MIS data back-up
Licencing	Remote access/desktop
Key Applications/Modules	
Licencing	Online parent portal
Licencing	Online Cashless Payments
Licencing	Event/parent evening booking
Licencing	Data Analysis & Progress Tracking
Licencing	Safeguarding
Licencing	Other
Technical support	Applications maintenance & support
Change costs (first year only)	
Data migration	Migration Costs per server
Data migration	Migration Costs - Exporting and formatting effort
Onboarding	Set up and training
MIS Support	
Support	MIS first line support

About the author:

Vanessa Pittard is a former Assistant Director and Head of Technology Policy Unit at the Department for Education. She is now working as an independent consultant.