



By: **Harvey Morris**

Can data superheroes rescue the UK economy?



British primary school children still have a month to go to create the ideal superhero to protect their local data centre from internet villains and keep it running at super speed.

For older generations who were introduced to the world of work via Thomas the Tank Engine or Bob the Builder, injecting a sense of juvenile adventure into the sprawling and anonymous warehouse-style blocks that have spread around the country in recent years may seem like an uphill task.

The Data Superhero Challenge is nevertheless a small indicator of the efforts by politicians and the sector to convince the public that the UK's much-touted data revolution - some call it a frenzy - is truly under way.

The competition's creators clearly believe in catching them young. Open to 9 to 11-year-olds through their schools, the contest is part of a wider educational project **devised** by Kao Data, a leading UK-based data centre builder and operator.

Addressing what it describes as a critical talent shortage, the company aims to engage pupils in their formative years for future tech careers, specifically in the data centre sector. Or, in the words of its appeal, to introduce them to "the real-life superhero careers behind the scenes".

The data centre boom

The Labour government clearly views a current data centre boom as an integral part of fulfilling Prime Minister Keir Starmer's pledge to turn the UK into an AI superpower.

Business secretary Peter Kyle set the tone a year ago when, in his previous role as technology minister, he **described** data centres as "the engines of modern life".

More specifically, their banks of computers host a range of increasingly pervasive digital services from online banking to media streaming to games of Minecraft for those primary school kids.

They also handle data vital to health and other public services and to AI-linked medical and climate research.

The UK's current estimated 477 data centres are expected to grow by 100 over the next five years or so

Kyle had been outlining the government's decision to highlight the centrality of data centres by designating them as part of the UK's Critical National Infrastructure (CNI) alongside energy and water.

The accompanying guarantee of government support in the event of cyber attacks and IT blackouts was described as a massive boost for the mainly private-owned sector.

It was one of a series of measures undertaken by the government to boost data centre growth and encourage more inward investment. The UK's current estimated 477 data centres are expected to **grow** by 100 over the next five years or so.

Ever larger data centres, ever larger costs

Shortage of talent, as cited by companies such as Kao, is not the only factor that might potentially slow the onward push. As the data boom has gradually entered the national debate, critical voices have been raised about the societal costs.

Ever larger data centres require staggering quantities of the UK's high-priced energy - 200 megawatts per centre is the new normal, up from 30 a decade ago. That could threaten the integrity of the electricity grid, while the increased demand could cancel out the benefits of green energy output.

Expansion is also a challenge to the UK's already tottering water sector, given the requirement of data centres for a readily available coolant.

Government moves to liberalise planning rules to speed their construction have already raised Nimby hackles

And then there is the issue of where all these new centres will go. Government moves to liberalise planning rules to speed their construction have already raised Nimby hackles.

Local campaigners in green belt Buckinghamshire challenged a government go-ahead for the development of a 72,000 square metre site that had previously been rejected by the local council.

"Local people and businesses in Buckinghamshire will soon be competing with a power-guzzling behemoth to keep the lights on, which... usually means sky-high prices," according to a campaign spokeswoman **quoted** by the BBC.

A silver bullet for a struggling economy?

But what about all those extra jobs? Here again, the sceptics remain unconvinced. The construction sector might benefit from a flurry of new mega-projects but critics point out that, once completed, a data centre will operate with a relatively minimal staff.

Others point to an imbalance in data centre location in favour of the more prosperous south of England, where tech company operations are based.

The government claims the UK is behind only the US and Germany in the current data centre boom

The government's announcement of an AI Growth Zone in the formerly industrialised northeast, on the back of £30 billion of anticipated private investment, is part of its

response.

The government claims the UK is behind only the US and Germany in the current data centre boom and believes that developments in AI, dependent on mega-data, could be the silver bullet that finally turns the struggling economy around.

When the AI bubble bursts

And what's in it for the investors, who include the most familiar high-tech names?

In mid-September, coinciding with President Donald Trump's state visit to the UK, a raft of them signed up to a UK-US partnership linked to a multibillion-dollar investment package.



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The chief executives of Nvidia, Microsoft and OpenAI were among those who accompanied Trump and announced their companies' roles in the "tech prosperity" deal.

A string of **investments** were announced, including £5 billion by Google, which promised more than 8,000 new jobs, and \$30 billion, the largest, by Microsoft.

Chancellor Rachel Reeves, opening a new Google data centre outside London in the week of the state visit, **said** it represented a vote of confidence in the UK economy.

Or is it that the UK is a convenient and potentially malleable hub from which US big tech will continue to line its private coffers?

There is a lingering prejudice in Britain that, in half a century of industrial decline, the role of its subsequent service-based economy has amounted to taking in other people's washing. And too often it has been the average Briton who has been hung out to dry.

What if the AI bubble bursts and the tech giants up sticks? In any case, all those new data centres could be redundant in 20 years. By then, according to Amazon founder Jeff Bezos, data centres will be orbiting in space.

It might be too late to find an enterprising primary school child to create a superhero to bring them back down to the UK.