When the Cloud Flickers, Business Goes Dim

For the digital era to come of age, cloud-based solutions need to become as reliably available as electricity.

How often have you been in a situation where you've been told, "sorry, the computer's running slow today" or "I can't access your details at the moment because the system is down/on a go slow"? All too frequently. It's unlikely you'd hear, "sorry, it's a bit less bright in here today because the electricity is running slower than usual".

I recently attended a medical appointment (nothing to worry about) where a new, cloud-based AI diagnostic tool was to be used to make my diagnosis. I was quite excited to see AI in action – outside of ChatGPT and the likes (other AI assistants are available). Having done the necessary data and image inputs, the cloud-based AI diagnostic tool was set to work on determining my fate. Unfortunately, the spinning wheel of progress spun too long and eventually it crashed so, disappointing for a self-confessed "bit of a geek", I didn't get my AI diagnosis. (As an aside, while we watched the little progress wheel spin endlessly, it was a great opportunity to talk to the technician about how he felt about AI being introduced to replace his role but that's for another day).

Back in the room, we needed to revert to a suitably trained human to diagnose. Fortunately, the human was in the building, available and not suffering any "crash" …. she was available to take over the diagnosis (nothing to worry about). If no one had been available, then the consequences would likely have been a return visit at another time. An inconvenience for me, but not a big deal as it wasn't urgent even if it had turned out to be something needing treatment. But double the appointments, delaying access to critical and constrained healthcare for others.

It got me thinking, "what if that medical facility's internet had gone down in the middle of a critical procedure?" Patient records not available, treatment given "blind" and the clinicians discover too late that the patient has a serious allergy to the administered drug. (I'm sure that medical facilities have documented procedures to cope with such situations – note to self to ask neighbour who is an A&E doctor). But I'm sure you get the point.

If the problem had been the mains power supply going down then the hospital has back-up generators which would kick in and the hospital would continue, at least with critical activities, for a period while mains power is restored. No such local backup for internet services.

I am making a huge assumption here: that AI services will stay "in the cloud" …after all, it's the power of the cloud that makes AI computationally feasible and affordable, isn't it? That said, will there be a tipping point in the economics where an organisation is so reliant on computing power that it is more economically viable and lower risk for an organisation to go "backwards" to the days of "on-prem" computing? I'm no tech expert but I'd imagine that cloud services are a little more difficult to replicate in an "on-site" backup system than an auxiliary power generator.

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I recently read a McKinsey article[1] which suggested that the organisation of the future is one which is designed as AI-first, where proprietary data becomes the key differentiator. McKinsey predicts that "the new paradigm unites humans and AI agents", "to work side by side at scale".

Sounds exciting!

Imagine the business opportunities with Agentic AI in your business! Imagine being completely reliant on Agentic AI but the biggest failure point is totally exposed to:

- Someone cutting the internet cable "accidentally".
- Intentional cyber-attack on your business or that of your data centre or software provider
- Data centre affected by power outages, natural disaster, or physical activists.

Of course, your software provider and their data centre hosts will have built in some level of backup at an alternative site – probably. But this is not going to address all the risks.

And you are unlikely to have sufficient human backup systems or resources (like the medical expert that stepped in to take over my diagnosis) because the AI is either 100% autonomous, or more likely (according to McKinsey), overseen by humans - but not at the scale that allows them to step in and have anywhere near the same output as the agentic teams described by McKinsey.

You just have to look at what happened here in UK to Morrisons, M&S, Co-op, JLR in the past few months. All were paralysed for a significant period because of cyber attacks. I'm sure Morrisons' Christmas business continuity plans read quite differently this year compared to last year when their cloud-based WMS was cyber-attacked during peak Christmas trading and they couldn't replenish store stocks of fresh produce for 4 days. Co-op declared that their cyber-attack cost them £206m in lost sales earlier this year. They are rebuilding "better and stronger to meet the challenges and opportunities that lie ahead", according to the Co-op Chair, Debbie White. M&S online shopping was out of action for 7 weeks with click & collect taking 15 weeks to come back online, resulting in a reduction on profit of around £300m this year. JLR are undoubtedly revising their own business continuity plans after their production was stopped for more than 5 weeks due to a cyber attack which they are only now, at time of writing, starting to recover from. The financial impact may never be fully understood because it stretches beyond JLR and right up their supply chain.

While cyber attacks are a big issue, this article is not about them alone – it's about the growing reliance on internet-based software solutions (including AI) provided "in the cloud" – and the vulnerability of businesses as a result. Maybe one of my more tech knowledgeable contacts will step in now and tell me how this has all been sorted and there's nothing to worry about if companies just do x, y, or z. But I fear not, or we would not be seeing the sort

[1] The agentic organization: Contours of the next paradigm for the AI era, McKinsey & Company, September 2025 https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-agentic-organization-contours-of-the-next-paradigm-for-the-ai-era?cid=eml-web

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of disruptions that I described in the paragraph above – which alone amount to over £2b in lost sales. That's a compelling business case to invest in x, y, or z to fix the problem.

So, what can we do? Just like with all other significant business investments, before investing in cloud-based applications, do the risk assessment and develop a mitigation plan:

- Understand the potential risks.
- Develop preventive measures where possible.
- Have a back-up plan where prevention is not feasible.

Cyber attacks, internet cables breaking, data centres going down – these are to cloud computing what weather storms, droughts and terror attacks are to power generation: an ongoing threat of disruption. We have backup plans in place where we need uninterrupted power supply. Businesses need to develop the same for critical business systems….and do it before introducing so much AI that you don't have the people-bandwidth to cope if critical systems go down or into perpetual "spinning wheel" mode.

An uninterruptable internet/cloud software "supply" and a 100% hacker-resistant hosting service both seem unlikely. Perhaps we need a form of local/cloud hybrid software as a service. Local "low-load" transactional computation allow businesses to operate, albeit sub-optimally in the event of a disruption in internet and cloud "supply". Combine this with "surge power" of cloud computing which allows businesses to gain from the power and cost-effectiveness of cloud computing and operate optimally when internet and cloud services are functioning. Until technology companies come up with a robust solution, businesses need that contingency plan.