EM Law

The cloud: How far is too far? - Technology Untangled

Speaker 1:

Financial services has been through a loop of let's put everything in cloud two, we probably want to spread our risk and do more than one thing. What if 75% of banks, for example, or 80%, or whatever it is, rely on the same service providers in the back end, maybe two, three levels abstracted and that provider fails and suddenly the financial system of the UK turns off and then suddenly we're not going to be able to buy or import or export anything. So we're looking at a situation of basically financial meltdown that makes the 2008 crisis look like you just dropped your pocket money. It would be huge if that system went down, even if it was momentarily.

Speaker 2:

Right. Well, that sounds like a bit of a doomsday scenario. It's very, very unlikely to happen. But we're thinking about, because we've all worked with the cloud for a decade or more, it's nothing new, we've all heard of it before and there's a reasonable chance you are using it right now to listen to this show. In fact, 93% of businesses are on the cloud in some way, shape or form. Honestly, it's surprising that number isn't higher. The cloud has become such a huge part of the way we do business over the last decade that it's hard to imagine a world without it. And it's brilliant for most organizations, it's everything they need. But there are situations where it might not be the right solution, at least not right now.

Speaker 2:

We've become reliant on the cloud, in particular the so-called hyperscalers, and it works. It works so well that we are happy to throw everything at it from photos to the kitchen sink without necessarily stopping to think if we should. In this episode, we're going to look at whether the blue skies of the cloud might be starting to look like storm clouds and explore some of the issues which are starting to appear as humanity goes cloud native. This is part one of a two part special about cloud computing. In the next episode, we're going to look at a couple of the solutions and how the best way to use the cloud might be to go hybrid, whatever that means.

Speaker 2:

You're listening to Technology Untangled, a show which looks at the rapid evolution of technology and unravels the way it's changing our world. I'm your host, Michael Bird.

Speaker 2:

Okay, so first a very potted history, just so we're on the same page. The cloud is essentially getting somebody else to manage your data or run your compute and workloads. It allows on demand scalable access to your stuff on a platform managed by somebody else who deals with all the fiddly bits as a service. If you want more cloud, you just pay for it. If you want less, you pay less. Somebody else keeps it running. So in theory, you can reduce your reliance on owned, or on-premise servers and data centers. The term cloud was first coined in the early nineties, but the cloud really exploded with the launch of Amazon's simple storage service and elastic cloud compute in 2006. Google followed suited in 2008, and the rest they say is history.

Speaker 2:

From a few early adopters, we are now in the developed world pretty much all in the cloud in some way or another. Everything from banks to our smartphones rely on as a service infrastructure to keep us going. So here's where the challenge comes in. And yes, I work for HPE who make this podcast and HPE are known for selling on-premise hardware, but even HPE know how powerful the cloud is and can be. So that said, challenge number one is this, if you don't own the platform, how do you know your data is in the right hands and well, how do you know it's actually secure? Put simply, what happens if something goes wrong is a massive potential issue. And we're not just talking about a few celebrity photos being hacked here, embarrassing though it is. We are talking about major data loss, and I guess at its most extreme potentially the stalling of world economies.

Speaker 1:

My name's Adrian Lovell, I'm the CTO for our financial services industry customers here at Hewlett Packard Enterprise. There is scare mongering and there are legitimate concerns. I think it is completely legitimate to say that you can run pretty much any service within financial services on a cloud provider. The question is more should you do it? And how do we make sure it's done in a way that is safe and secure? And by secure I mean from a system stability point of view. So when we design and test technology systems in financial services, it has been core to financial services for as long as I've been in the industry that we test breaking them regularly. It is very common that we either pull out plugs, turn things off, see what happens to make sure that the systems don't fall over. Everything is duplicated, everything's doubled up. The idea of a single point of failure is heresy. You do not have single point of failures anywhere in your systems. Every single disaster scenario is documented. There's a manual that says if this thing breaks, this is what happens.

Speaker 1:

The challenge is when we get into consuming things as services, we need to look at what is that service? Fine, I might have some SLAs from our service provider, but what if that service provider fails to meet those SLAs? What's our plan B? Okay, fine, we'll have two service providers. We use service provider A, service provider B, and therefore if A fails to meet their SLAs we'll flip over to B, everything's good. The problem is, what if service provider A and B somewhere down the line are both using the same core underlying infrastructure or technology platform? That way one failure can take out both your service providers and suddenly your whole environment's fallen over. And that's a problem you didn't really have when it was all in your own data center being managed yourself, because you knew end to end the entire stack. Now you don't.

Speaker 1:

And that's pretty bad for an individual firm. But where it gets really concerning and where the regulators are now looking at or starting to talk about what should we do here, is what if 75% of banks, for example, or 80% or whatever it is, rely on the same service providers in the back end, maybe two, three levels abstracted and that provider fails and suddenly the financial system of the UK turns off? Firstly, it's unlikely just to impact the UK, but let's, for arguments sake, say it is the UK financial service system just turns off because of a technology outage. That effectively will impact the value and the worth of the pound sterling. It could half, it could get much lower and suddenly, A, you can't pay people and B, you can't go to the shops. And that's a bit annoying.

Speaker 1:

But if the value of the pound is based on the rest of the world having a level of trust that the economy of the UK is as it is in relatively secure and relatively stable, and then suddenly it isn't, the pound isn't going to be worth anything and then suddenly we're not going to be able to buy or import or export anything. So we are looking at a situation of basically financial meltdown that makes the 2008 crisis look like you just dropped your pocket money. It would be huge if that system went down, even if it was momentarily. So that's what the problem we're looking at now, is how do we legislate for that? Do we call certain downstream technology providers critical infrastructure and regulate them, or do we require financial institutions to understand more about the technology architecture of all of their providers? Or do we tell people not to use these things?

Speaker 2:

I guess some people listening might think, oh, that will never happen. But that has happened with some of the content delivery networks that protect some of the website. I can't remember which company, but they had an outage. They took a load of websites out for a couple of hours. So it's not a million miles away from that really, is it?

Speaker 1:

No, it's not. And even if it was fundamentally that's what we do in financial services, we assume that the thing that's never going to happen might happen. And as soon as it happens somewhere, even if it doesn't happen in our industry, we plan in case it does. So a good example would be 9/11. Prior to 9/11, we didn't really have regulations around the number of miles that you had to have between data centers. And then suddenly a whole bunch of data centers went out at the same time in 9/11 and we went, let's get some more legislation around that. So now there is legislation around geographical disbursement of technology.

Speaker 2:

Nevertheless, despite the theoretical risks of global economic meltdown, it seems more and more organizations are moving to the cloud, with several governments, including the UK and soon South Africa, to declare themselves cloud first and prioritize digital transformation ahead of traditional on-prem IT. So what's driving this transition forward despite the risks to your data and technology being owned by a third party you can't control? Alex Hilton is the CEO of the Cloud Industry Forum, a body which promotes responsible cloud adoption and conducts annual research into digital transformation trends. His answer probably won't surprise you.

Speaker 3:

Every year in the 12 years we've been running our research security has been the big inhibitor or barrier to cloud adoption. So people have been making that step. As we move forward now, we really are seeing significant changes in there as organizations have really embraced what cloud can deliver for them. So it is start to save money. And indeed 96% of our organizations that we surveyed believe that cloud has saved the money. I talk about three basic tenants of cloud technology. I talk about flexibility, agility, scalability. And if you go, what does that actually mean to our businesses? Well, every business wants to be flexible because they've got to adapt to situations, they've got to be agile because they've got to move quickly around that. And you want to be out of scale whether

your business is growing or indeed slowing. There's periods of austerity at the moment, but also many businesses have seasonal aspects to what they do in all kinds of sectors.

Speaker 3:

People have had to adapt unbelievably quickly over the period of the pandemic with these changing working priorities that they've suddenly realized. And actually cloud over the pandemic genuinely has proved it's worth where people are hamstrung and tied to offices and so forth. We don't need to be doing that anymore. They've been moving into infrastructure SaaS services, the likes of Office 365, Microsoft 365. Those are all easy low hanging fruit for businesses to adopt. And I think cloud has really proven its worth as a technology in its most holistic sense and that will continue.

Speaker 2:

I guess that money, that cost saving could also be people's time in that sense.

Speaker 3:

That's a good point. We don't consider how we power our houses or our offices these days, we don't have somebody doing that. That's just a service that we pay for that comes into the building and that's great. And then what we can do is free up our time to make sure we're thinking about, well, how we're now going to use that capability if they're moving to this technology? You are two in a tenth, to all intense and purposes, outsourcing your technology. So do you need an IT department? Well, yes, you still do need an IT department, but you can repurpose some of the people in there to actually look at fundamental things that your business might need to grow.

Speaker 2:

So cloud services are becoming more popular and saving organizations time and money, particularly when it comes to the easy stuff like simple storage emails and office operations. So, that brings us to challenge number two, what about the more complicated products and projects that major organizations work on? Russell McDonald is chief technologist at HPE covering hybrid cloud and he used to work for Cloud Hyperscaler, Amazon Web Services.

Speaker 4:

So I started really experimenting with cloud in 2011. Amazon had been going a few years, maybe about three years. Google Cloud was just starting out with some very basic services. But the interesting thing about cloud back then was it did IT in such a very different way, and you had this almost unlimited scale and great performance. That was where I started and got really evangelical about the potential for cloud to radically change the way we do compute. I think what happened subsequently was that enterprises always had concerns about, but what about my virtual machines and what about security and what... Quite rational concerns because enterprises have spent years and decades defining governance and processes and service management and basically how do you run IT? And so those were all the objections initially to why you would adopt cloud. But eventually that turned into, well, I want to put my VMs in the cloud, I want to do more of that day to day compute in the cloud.

Speaker 4:

So we've really evolved from cloud being radically different to what we used to do, to cloud being this kind of, well you can do almost anything IT related on these platforms, but it's not quite as simple as that. And my experience was that naturally as AWS, I'd be talking to customers about how they're going to migrate all of their workloads into AWS. But, of course, lots of these workloads that run in virtual machines are old, they're running on old versions of software. They were neverarchitected for a cloud environment. They can't benefit from some of the new technology in cloud. And as a result there's almost limited value. What I was finding with clients is they'd get 50, 60% through our cloud migration, they've moved all the easy stuff. That's all worked great because it was easy. And then they get to some of this old burgeoning, highly architected, highly interconnected stuff with large volumes of data and it starts to get difficult, because customers didn't want to rearchitect all these workloads, they just wanted to lift and shift them.

Speaker 4:

They'd persist at this. But then you end up with this phrase unconsciously hybrid, which is you've not been able to exit the old environment completely, but you've also adopted a cloud environment and you end up with a compromise. You're using both environments, maybe not in the way you intended and maybe you're not getting the benefits, the full benefits of both. And I think there was a lot of fashion for going all in on cloud and simplicity. There's some flawed economics here, which the business case for clouds could be justified by, we can shut down all of our data centers and there'll be cashable savings out of that. It's a bit of a trap because you can't realize those cashable savings until the last workload leaves the data center. So if you get 80% through a cloud migration and then realize the last 20 percent's too difficult, where are you hosting the 20%? You thought you were going to get rid of everything though there's a whole bunch of stuff you can't get rid of. What are you going to do with it?

Speaker 2:

The answer in many cases is to store it somewhere else, and the likely place is off the cloud in your existing data center. So you end up just paying twice. And when we talk about the last few percent of the work and trying to force it on the cloud to finish the job, that is when things start to get really quite expensive. It's easy to think about on-premise computing as just being server acts and desktop computers, but that's because it's what the majority of us probably know from our daily lives. However, there are whole industries built around on-premise computing where actually moving to the cloud isn't just tricky, it's basically impossible without throwing away an eye watering amount of perfectly good infrastructure.

Speaker 5:

I'm Adrian Becker, I work for Soft Works Limited. We are specializing in Microsoft security and cloud infrastructure. I work with organizations ranging from 250 seats right up to large enterprises with 10, 20,000 staff worldwide.

Speaker 2:

Adrian has been advising clients on IT infrastructure and cloud projects for around 20 years. He's not afraid to push back against clients who suggest ditching their specialist infrastructure to go all in on cloud when, well, there's no value in it. Can you give some perfect use cases for the cloud and some perfect use cases for not going to the cloud?

Speaker 5:

Perfect for the cloud, I'm a relatively young business, or I've been around for little bit, all of our softwares available as software as a service. We've got a workforce that is spread across a large area. We are mostly services based. We don't actually manufacture anything. They are a perfect case because you can literally pick all of that up, run all of the services, the applications, the systems that they will require can be put into the cloud. And when we then go back to for organizations where the clouds aren't perfect, what we find is normally organizations that's been around for quite a while, they've invested a lot. So for example R&D, manufacturing. And the good example would be I've just engaged with an organization, we've talked about the options for the cloud. They have actually written a piece of software over a 15 year period specifically for their environment. And it is not cloud aware. It'll never be cloud aware in its day.

Speaker 5:

It's been written to integrate with their on-premise environment, some of their manufacturing processes, some of the equipment that's probably 10 years old and costing millions to replace. And we looked at them and the first thing question was, can we change this application to be cloudaware? Well, we can't buy something off the shelf to match this, so we either got to go and bespoke change it, or secondly we need to rewrite it. And when they looked at the cost of rewriting, it was actually prohibitive in comparison to what it would be, the return they would get, because they would get, yes, they'll be able to move to the cloud, but they're actually not going to get any new functionality and they will be pausing their development for four years while this application gets rewritten. So from their point of view, it made no sense to move that whole system to the cloud.

Speaker 5:

And we're seeing that quite often with manufacturing, research and development. And a good example would be relatively small company, we could easily move them to the cloud, but the piece of equipment that they needed to be able to talk to the cloud service cost over two million pounds to replace. So suddenly somebody sat down and gone, hold on, but it's still working, it's still doing everything we need to do. Am I really going to go and spend two million pounds just so that I can tick a box that says this is now talking to our system in the cloud, or shall I leave that little system alone? And that's what we sometimes forget about and even IT people, we get so excited about cloud, it's flexibility but actually from a business point of view, does it matter? Do I care?

Speaker 2:

What's riskier from a security perspective, having everything in the cloud or having everything on-premise?

Speaker 5:

I think all of it is risky from a point of view. Cloud, yes, the cloud security, there's a lot of processes you can leverage to improve the security. You can put in MFA, you can put in the breach detection and everything. But again, at the end of the day, I always have a saying, doesn't matter how much you spend, all it takes is one person. And if you want a good example, the Pentagon got hacked and they spent how many billions? So what chance does actually organization have? So you just want to make sure you secure yourself as best as you can within the limitations and budgets. So the cloud reduces risk in areas that if you are compromised that there's multiple failover systems, there's additional security, additional detection. But at the end of the day, if you really want to be secure, cut yourself off the internet. Don't allow any email in and just be completely standalone and go back into the dark ages.

Speaker 2:

Be a hobbit.

Speaker 5:

Absolutely, be a hobbit. I like that. At the end of the day, security is very important, but it can't stop you from being a business as well. You got to get that balance right versus risk, the cost of securing yourself and the ability to continue providing a service.

Speaker 2:

It's an interesting point and one I wanted to put to Alex Hilton. Clearly there must be some organizations where there is stuff that they currently can't put into a cloud server, can't put onto a hyperscale at moment for whatever reason. Do you think that's likely to always be the case or do you think in another 10 years time everything's going to be put into public cloud or a hyperscaler or similar?

Speaker 3:

Yeah, very good question. I think it will take time and I think there will be some organizations and some applications that will always be reluctant to move to cloud. Okay. And that might simply be because they're secure or the individuals have maybe a lack of trust in there, or in actual fact what we describe within the industry is legacy technology. Okay. So organizations do still use mainframes. They do still exist. Lot of enterprise organizations still have a mainframe and use within their organization. The principle, if it ain't broke, don't fix it does apply in here. There are benefits to using on-premise technology. Absolutely. And I'm not for a moment shying away from that. Organizations actually, and again, our research backs this up, the biggest challenge organizations have in moving to cloud services nowadays, is actually not security, it's about legacy and legacy compatibility and implementation in there. So how do I migrate my on-premise service to a cloud-based service? And that's a big issue that organizations really have to figure out how to overcome.

Speaker 2:

It's a challenge for many major organizations and one which you could argue is holding them back. On the other hand, as Adrian and Alex said, if it's not broke, why fix it? I'm interested to note though how this affects probably one of the most important industries of them all, financial services where

time literally means money. It was time to speak to HP's Adrian Lovell about whether the financial industry might be one of those where the right answer was giving the cloud some space so to speak, and keeping the operations as in many manufacturing and R&D organizations on-prem. And if not, how do we keep key cloud infrastructure IT safe and secure? Can you talk to me a little bit about cloud adoption in financial services? Seems like it could be something that's, I don't know, not necessarily compatible.

Speaker 1:

You'd be surprised. It's fairly widespread. I think it's one of those industries that has been pretty much at the forefront of technology for years and years. It's very much a technology driven industry, different levels of maturity across as you would get on any industry. But if anything, financial services has been through, most firms anyway, have been through a loop of let's put everything in one hyperscaler to, we probably want to spread our risk and do more than one thing. And adopting cloud with multiple hyperscalers, multiple on-premises data centers and multiple Kolo sites as well. That seems to be where most people are and the industry as a whole seems to be trying to find where that sweet spot is rather than debating should there be a sweet spot.

Speaker 1:

Pandora's box is open, we're not going to be able to ban these things. What's the right answer? And there's lots of questions and there's lots of potential solutions. The problem is we've got to do it in a way that, A, doesn't put an undue burden on the financial services firms in question. And B, doesn't damage the technology industry, because especially in the UK is pretty much the center of the FinTech world from a financial technology point of view. We don't want to destroy all the new companies offering services to financial services companies by unduly regulating them. But we do need to protect the system.

Speaker 2:

I suppose the perception of financial services is that there's just tons and tons of regulation and checks and balances. Around the cloud there must just be loads of regulation about where you can put stuff, how you can put stuff, data attention, that kind of stuff.

Speaker 1:

The financial services industry has typically been very good at regulating technology because it's been doing so for so long. Regulation hasn't really changed that much as it pertains to using cloud services, because most regulatory frameworks around showing that your business is resilient and then that your customers are protected regardless of what your technology choices are. So it is very much beholden upon the financial institution in question to demonstrate the technology choices they've made are appropriate or not, which is often the hurdling block for people is their internal departments don't really know how some of these more modern technology services work.

Speaker 1:

But regulation is beginning to look a little closer, the technology itself rather than simply looking at the outcomes, which is traditionally what we've done. We're beginning to get concerns definitely from the UK regulators and the EU. I think the US are coming along as well with similar concerns around concentration of risk, which is if all financial institutions are reliant on the same one or two services, those services fail or have an issue, then what happens? Because then we have a more systemic risk to the financial system of the planet. And that would be a pretty bad day for everybody, not just those of us that work in financial services.

Speaker 2:

It's hard to believe that the world economy could be based on a potentially breakable technology system, but helpful if nothing else, to know that the problem has been identified and that banks and regulators are coming up with solutions and testing for failure. But even so, it's hard to believe that there's literally no limit to what can be put onto services owned by somebody else, be that banks or much smaller, less regulated organizations. And that brings up challenge number three, who owns what we do on the cloud?

Speaker 2:

Neil Williamson is a commercial lawyer. He runs EM Law based near London's Old Street known as the Silicon roundabout for the huge number of startups and tech giants with offices on or around the junction. Among many other things, his firm specializes in making sure that tech heavy businesses are compliance and safe when it comes to collecting and storing data, particularly on the cloud. Which does sound like the kind of thing you'd want lawyers for. It sounds like there's not necessarily any legal restriction as to what data can be put on the cloud, but perhaps instead it just has to be really thought through.

Speaker 6:

There are no laws that say no, not in the UK at least that say you can't put this in the cloud. You're right. You've got responsibilities as a data controller to make sure the data's secure. So you need to make your own assessment about that to figure out what's appropriate.

Speaker 2:

Do you think there would ever be a shift where the government would either mandate or advise as to what types of data can live in the cloud?

Speaker 6:

Yeah, no, that's a good question. At the moment, the government policy is cloud first. That's the message that is sent out to all the government departments when they're thinking about buying a software solution. But I guess if GCHQ's data on Amazon web services was hacked, I can imagine the government having a look at that. One likes to think that a lot of risk assessment has been done already, I'm sure it has. The assessment has been that it's more secure to put data in the cloud. The problem with the cloud is that you can end up losing a bit of control. You're entrusting your data to somebody else. That's the issue really.

Speaker 2:

It sounds like if you work with a lot of startups, a lot of them will be using software as a service, a lot of them will be putting their data in the cloud. So what do these organizations need to be considering?

Speaker 6:

If you want to buy SaaS services, you are the customer. Then not all SaaS providers are gathering vast amounts of personal data, but quite a few of them are. The question is how much personal data you'd be giving. If you're getting a solution that really is about helping your business processes, they are going to be getting some of your staff's login details, names, addresses, emails. But if that's all it is, you don't need to really worry too much about that frankly. If the SaaS provider's going to be taking health record data, that's a different ball game altogether. So you need to be damn sure that you are working with someone who is robust and who who's doing things properly.

Speaker 6:

Either way, you are going to be entrusting a SaaS supplier with a load of personal data. So you need to make sure that the SaaS provider's going to look after it properly because you are the data controller, you are responsible for making sure that the data's kept securely and that the data subjects, whose personal data you've collected that they are aware of what you are doing with that data, where it's held, who has access to it, etcetera cetera. So as a data controller, you've got a lot of responsibilities. So when you're choosing a SaaS provider, you've got to make sure that you're choosing someone who's going to look after that data. You're going to have proper contracts in place with them and the SaaS provider is worth suing frankly, in case things do go wrong.

Speaker 2:

So it really is the case that we are being left to our own devices when it comes to data security in the cloud. I don't know how that makes me feel. Probably a bit nervous. Obviously in some places we are protected by things like GDPR, but that doesn't stop systems from breaking and mistakes from happening, especially as we trust more and more third party software to store our data on third party systems. As Adrian Lovell pointed out with his example about 9/11, you can't really prepare for the unknown. And whilst the government may not be considering more legislation for protecting the cloud and the data we store on it, who knows what might happen in the future. That in turn could have a huge knock on effect for organizations if they have to wind back some of their storage plans. Of course, all of this is hypothetical. One thing that is bound to happen in the future is the planet getting warmer and that's going to impact our lives in a whole load of ways from economic upheaval to human upheaval.

Speaker 2:

The cloud has been seen for years as a get out of jail free card for organizations when it comes to their environmental impact and sustainability policies. By shifting all the carbon emissions of their IT infrastructure off to a third party, the CO2 created by their organization drops dramatically. But the thing is, it doesn't actually drop off, it's just been moved. There is, of course, an argument that the hyperscalers like Google, Microsoft and AWS are doing us all a favor by grouping our IT together and adapting their capacity to meet our demand. But was that over simplifying it?

Speaker 2:

Russel McDonald passionate about sustainability in the technology industry. So I put the question to him. Surely they've got racks and racks of servers, they can switch those servers off, they could power it from a big wind turbine or some solar panels or some batteries. They can optimize everything, voltages on CPUs with an interest life. That must be a more efficient, more sustainable way to doing it than buying lots of different versions of the same thing and lots of title data set or your relatively small data centers dotted around the world. Surely that's more sustainable.

Speaker 4:

What you're getting with cloud, it's hyperscale automation. So there are benefits and these companies got deep pockets so they can buy shares and wind farms and solar farms and all those sort of things, which is great, although this isn't the cloud provider's fault, but just in general with IT, IT is one of the fastest growing sectors in the world. We are already consuming more energy as an IT sector than the whole of air travel globally, and we're growing exponentially year on year. So there is a global challenge about the digitization of our economy means that our energy consumption is actually becoming unsustainable and cloud providers and tech providers who buy up renewable energy aren't really solving the problem because we need a lot more renewable energy to decarbonize the rest of the world.

Speaker 4:

So it's all very well saying, my cloud workloads are powered by renewable energy, but the steel plant is still running off of gas power or coal power. So in that sort of term there are bigger problems to worry about and I think renewable energy for cloud is a good thing, but it's not the solution and it doesn't mean that you've got a get out of jail free pass. There's almost a idea with cloud that there are no limits on your consumption. It's hyperscale, you can use as much as you like. But I think the flip side of that is we're in an age where we're having to reconsider how we consume and that touches all aspects of our life.

Speaker 2:

So whilst it's great that the big organizations and hyperscalers are investing in renewables, that doesn't necessarily solve the problem of the enormous amounts of energy that they are using. And besides, do their customers really care about the environment anyway? Well, you'd hope so. Companies all want to make a song and dance about their green credentials these days. And green IT is a huge part of that. The man with the figures is Alex Hilton of the Cloud Industry Forum.

Speaker 3:

We really trying, wanted to get a bit of a handle on how important sustainability is to organizations and what that actually means. So we looked at this and we looked at ESG, which is environmental, social, and governments and sustainability. So we put these all in the same bucket to really get a bit of an understanding around it. And the longer the short of it is, 84% of organizations, businesses, this is UK businesses, said that environmental and sustainability is really important when they're choosing a cloud vendor. It's really important. It's a top draw priority when they choose a vendor.

Speaker 3:

However, when it comes to priorities, when choosing the cloud service or particularly the provider who's delivering the cloud service is the sustainability actually falls quite a long way down the stack. So remember 84% say it's super important, top priority. However, when it comes to actually making that decision, 53% said no price is the number one thing followed by availability of services, followed by the trust of the provider. And actually sustainability fell way down the stack there to only 25% of organizations. So my question there is really are businesses just paying lip service to this? Is it something that we think is an important thing to do because we've been thumped over the head with this for quite a long time and we recognize the importance of it? Certainly perhaps for our children's generation, but actually they're not really voting with their feet when it comes to purchasing side of that.

Speaker 2:

Do you think part of that is because if you are putting something on somebody else's infrastructure, it's out of sight out of mind?

Speaker 3:

The tangibility of it?

Speaker 2:

Yeah.

Speaker 3:

Yeah, I think so. I like to hope and think we're a little bit more intelligent, sophisticated about it in terms of our approach to technology. And I think, again, when you talk to all the big providers these days, they actually all have a very good and a very strong sustainability story, at the very least, carbon neutral. Microsoft, Google and AWS have all made very strong statements in context. So I think that's important. I think anybody who's utilizing those cloud services from any of those big vendors and then is working with a third party who might be sourcing those services on their behalf, just has to think through how does that actually reflect for me? Would I change my cloud provider who has a poor sustainability record because actually price is my priority, or will I pay a little bit more for that service even though it's going to cost me more, but a great sustainability and the eco record around that one. So it's an interesting one. It's the first time we've looked at this really in any more depth, but it is something that clearly is preying on people's minds.

Speaker 2:

Catastrophic crashes, legacy systems, which white migrate, tricky data protection laws and questions around sustainability. This has been an episode all about how the dream of the cloud may be getting flipped upside down, but it's not all bad news. Firstly, whilst the cloud has some specialist problems, and we shouldn't shy away from the potential world ending economic crashes, these are enterprise level and relevant largely to specific use cases. We aren't all running banks, not at home anyway. For the vast majority of us, the cloud is a convenient, accessible way to get hold of what we want and serve people products they want. Be that world changing multi-billion dollar enterprise level workloads, or simply to share a cute photo of your cat. But what if there was a better way?

Speaker 2:

In the next episode, we'll be looking at some of the solutions to these problems from finding the right people to hybrid models, which mean you get the best of both worlds. Until then, you've been listening to Technology Untangled. I'm your host, Michael Bird, and a huge thanks to Alex Hilton, Adrian Becker, Neil Williamson, Adrian Lovell, and Russell MacDonald. You can find more information on today's episode in the show notes and be sure to hit subscribe on your podcasting app of choice so you don't miss out when our next episode lands and to catch up on the last two series. Today's episode was written and produced by Sam Data and me, Michael Bird. Sound Design and editing was by Alex Bennett with production support from Harry Morton and Sophie Cutler. Technology Untangled is a lower street production for Hewlett Packard Enterprise.