

NETEVENTS

## EMEA PRESS AND SERVICE PROVIDER SUMMIT

*FINAL*

*KEYNOTE PRESENTATION*

### *2020 Vision for Cloud Services to the Enterprise What Service Should the Enterprise Expect and Demand by 2020?*

Tom Homer

**Head of EMEA and the Americas, Telstra Global**

Good morning everyone. It's actually Tom Homer, Manek. I'll forgive you for that. And I'd also like to apologise for not being Australian. Everybody I've met so far has said to me this morning, wow, you've come a long way. And I said, not really, I've come from Gatwick which isn't very far. So I'm responsible for Telstra's business in Europe and in the Americas and I'm really here to talk about what we think is going on in the cloud and how it's going to affect particularly our enterprise customers around the world.

So first of all, to use a metaphor from a film, this really is a perfect storm. And I particularly like this film because it's a great example of what goes on when massive forces are at play around the world. And another of my favourite films is the George Clooney one, *Up in the Air* and for those of you that travel a lot you'll sympathise with me that I work for an Australian company, my boss is in Hong Kong, my team are in Europe and America. And so I spend a lot of time up in the air.

And this perfect storm is really manifesting itself in a few ways that I'd like to talk about today. So I want to cover some of these in a bit more detail. I want to share some stories about Telstra's own cloud journey because actually we, unlike quite a few telcos around the world, have actually eaten our own lunch here because we've deployed a number of cloud solutions already as part of the transformation that Telstra's gone through over the last few years.

And the other thing I wanted to do was really just talk about where we think we fit in the cloud world because what we're trying to do is help our customers make better things. We're trying to help our customer create new revenue streams and build new opportunities for themselves.

So here's some trends that I'd like to talk about today and whichever way you look at it whether you agree with what Gartner talk about in the nexus of forces or whether the third platform from IDC is your bag, or some work that we undertook with McKinsey, which was talking about the real transformational trends that are going on in technology, these are the areas that we think really particularly affect cloud.

By the way, the only other two that fit on here when McKinsey did that piece of research to identify what the big transformational trends were in the world of technology at the moment were big data and I think to be honest, big data fits into all of this. And Telstra is one of the world's biggest consumers of big data. We get millions of call records every day from our consumers and enterprise customers around the world.

And the other one is robotics. So I can't promise that we're going to talk about robotics today, but it's clearly one of those things that's transformational.

So I think for those of us that are in the telco world the fact that four of the five transformational opportunities or challenges that are going on at the moment fit in our world is pretty exciting.

The other thing I'm going to do is talk a little bit about Telstra's point of view on this.

So number one, let's talk about Web-Scale IT. Now this is really the transformation of technology infrastructure driven by applications. So in the old world, it was a dominated world with IBM, HP delivering servers that were really around scale-up type capability. Bigger and bigger machines driving the traditional apps of Oracle and SAP.

Then the world got taken by storm by the guys like Google and Facebook and Netflix where they said, do you know what, we're going to take the front off the server to cool it. We don't care where it comes from, we're going to start to build this scale-out type capability. And so Gartner reckon that 50% of enterprises will be using scale-out rather than scale-up type platforms by 2017. So the enterprise is moving this way.

But they're not moving wholesale. When I talk to our customers, what our customers are telling me is that they need a mix. They want to go to this scale-out type platform where they are no longer dominated by the size of CPU and RAM and memory and stuff like that. They're interested in scaling out with more machines, more failover capability and potentially lower capacity in each.

And Telstra's response to this is to build platforms that enable our customers to do all of this stuff. So we've already invested about \$800 million in building cloud platforms around the world that are designed to help with this and I've put some more on the next slide to really talk about this hybrid cloud.

So every enterprise customer that I talk to is getting a different kind of pressure. The CIO is now getting pressure from the CEO to move to the cloud. The CEO uses iCloud. They use all of these consumer solutions and they're driving increased demand for cloud. But most enterprises don't have the capability to go to this wholesale Web-Scale IT. They've got a hybrid platform. But more than 80% of

enterprises see this hybrid cloud architecture as their target within the next few years according to IDC.

So pretty much this is where everything is going. Every customer, every enterprise customer is in a very similar situation. They've got all of this new big data coming in from all sorts of different places. They need to analyse it. They've got their legacy platforms. They need to continue to develop capability there. They want to grow and they want us, the telco world and the ICT world to take more of the risk of that growth. But they don't want to make the capital investment because they're increasingly constrained in that area.

The challenge of course in a hybrid cloud is the fact that you've got multiple vendors and then you've got integration hassles. So Telstra's response to this is again to offer a multi-platform, multi-channel hybrid cloud type service for our customers. We see the space that telcos need to operate in and that telcos need to provide service to the market being in billing, integration, service management. Those are the kind of areas that we believe are where telcos can provide most value. We see ourselves effectively hosting the app store, the enterprise app store of the future.

So developing the hybrid cloud story a little bit more, I've used us as an example and in Telstra's scenario we've recently signed a quite revolutionary deal with Cisco that positions Telstra as the world's first inter-cloud partner. This is Cisco's Cloud of Clouds. This means that Telstra effectively becomes a cloud broker across multiple service lines. Meaning that we're providing capability that's potentially our own, with partners within the Telstra cloud family like Cisco, but also potentially, other partners like AWS. And we think this addresses the customer demand for this hybrid cloud solution.

So what customers want is they want to move some of their workloads on to AWS. They want to keep some of their high value services potentially in an enterprise grade cloud service which Telstra operates in London, Hong Kong, New Jersey, Singapore and Australia. As well as a sort of public cloud platform that Cisco is providing around the world and I guess a web-scale public cloud platform that somebody like AWS can provide.

So we really see this as the ultimate end game for cloud in 2020. And we're all on our way there now. We're probably a little bit ahead of where our customers are on this because most of our customers are still struggling with, they're still challenged with this dynamic of having a mixed bag of their own infrastructure in their own datacentres with co-location, managed hosting, with infrastructure as a service just coming in. And so we see that telcos play a great part in gluing all of that stuff together.

So the other dynamic that we think is driving huge cloud adoption, in the hearts and minds really of customers and particularly enterprises, is the idea that all of these consumer type apps are becoming the enterprise standard.

So what does the enterprise need to do to address this? Well, CIOs need to change their role from being a technologist to being a service manager, to being an account

manager for the customers' demands. Everybody in every enterprise is using apps like this whether it's kind of [skunk works] using it illegally or whether actually enterprises are encouraging the use of these services. The CIO needs to be much more cognisant of policy and driving the proper kind of security and data governance framework than being a technologist in the future. So we see the role of the CIO changing quite significantly.

And Telstra's position on this is quite an interesting one actually. So over breakfast, we were talking about the fact that telcos are falling into a few different camps and I was at an event recently run by [STL], a consultancy who were talking about telcos falling into the camp of being a happy piper. That is to say, are you happy just being an infrastructure provider or are you really going to transform and turn yourself into a proper services and software provider.

And it's okay being a happy piper, if you've got the right kind of economies of scale, if you can drive cost out or if you've got huge volume. But if you haven't got that, you need to be a proper service provider and increasingly that means having a position in software of some kind.

So what Telstra's response to this is, is to build a couple of new businesses, which we've done. So Telstra has a ventures business, so essentially it's a Telstra-branded private equity company and we've taken a stake in about a dozen businesses around the world that are cloud and software businesses, including Box that provide a file storage service, Docusign that provide a way of managing the consistency of documents and TeleSign who do mobile identity management as well as another business that we've just acquired 100%, Ooyala, who do video analytics. So they help media companies to monetise video content.

So we increasingly see that you've got to play in this space, not necessarily in the OTT space. We don't necessarily want to be Facebook, but we absolutely want to be in the cloud business when it comes to providing services that enterprises find relevant. Clearly for us there's an opportunity and pull through as we bring customers into our business that way to consume the sort of technology, the traditional telco and managed service platforms that we offer to our customers.

So our guidance on this is that CIOs of large enterprises need to embrace this stuff.

The other thing, which is not so much about technology, but is really about enterprise work spaces is that increasingly now, we're seeing that the workplace isn't a place. It's a set of data. And it's critical now for enterprises as they consider cloud, as they deploy cloud solutions that they really need to think about the more fundamental -- and again another discussion over breakfast was around organisational structure. This is what cloud deployments and technology deployments are really about.

As enterprises become more mobile -- and Telstra are a pretty good example of this. We've deployed globally close to about 40,000 people around the world. We recently about six months ago offered all of our employees flexible working. So that means everybody in our business gets the opportunity to request to work part time. Everybody in the business gets the opportunity to work flexible hours. And our

managers are encouraged to work on the way of ensuring that our people can do that to give our customers a better service. So a 40,000 person business that does that needs a different approach to mobility and building the capability in our business to be able to use that. So you know for us, it's meant much more increased use of web collaboration services and telepresence and Java and all of those kind of things.

The other thing is that it also starts to change the dynamic in how enterprises acquire applications. So this idea of an app store, that's going to become more and more prevalent in the enterprise as enterprises want to buy and consume services in the same way that they do at home. And so for CIOs for enterprises managing data, managing access, security becomes incredibly important.

And Telstra's response to this, as I mentioned we've got a flexible working policy. And in the world of telcos what that fundamentally means is you have less seats than you have people. If everybody comes to work you're in trouble. So you have to build the kind of infrastructure that's capable of supporting massive flexible working, mobile working policies.

So what we've done in that space is for example, we've invested in a company called Kony, who build CRM applications for mobile workforce. So again if we use it ourselves, we think it's relevant for our customers. We are also launching cloud collaboration services because again the better people can work together, the easier it is for them to work at home. The lower cost for the enterprise, the bigger opportunity it creates.

And the final trend is the Internet of Things. So we've all heard about this, but what does this really drive? This drives that conversation about big data because everything is connected to everything else. Gartner reckon 25 billion devices by the end of the decade. I think Cisco's number is much bigger than that probably, unsurprisingly.

We've been aggregating and consuming data from our customers for many years and that's what this really is about. You know when your fridge is connected to the Internet, the amount of data it's going to generate and send into a big data cloud is going to drive consumer habits, supermarkets, FMCG companies into making different decisions. And so it's the kind of thing that will drive huge cloud uptake.

So the Internet of Things for us is really around big data. That's what we see it driving and that's why again we're investing in analytics companies.

So I mentioned we've got our own cloud story. So I guess it's helpful to start with a bit of Telstra history. So Telstra have been operating internationally for about 50 years. And we were in a joint venture with PCCW who are Hong Kong Telecom and in 2011 we decide to exit from that JV.

The reason for that was we'd signed a very big deal with the Australian government called the NBN which is the National Broadband Network which essentially the nationalisation of the local loop in Australia. This is giving Telstra \$25 billion over the next ten years in investment. So we knew we wanted to invest in new growth

opportunities and one of Telstra's three growth priorities along with cloud and media is international.

So we decided to exit from the joint venture with PCCW. We took about 80% of the assets from that JV into Telstra. That gave us about 300 extra people, licenses, datacentres, products and services, cable systems, telco stuff around the world.

What it also gave us was a bunch of federated businesses. So we had a mini telco in the UK, we had a mini telco in the US, we had a bunch of mini telcos in Asia. They had their own products different products, they had their own on-boarding system, they had their own billing system, they had their own managed network offers. They had basically individual offers that were all only brought together by potentially a cable system.

And because we were building a new global telco, this was something that we needed to change and the reason we needed to change was we had no single view of our customers. We had massive silos operating around the world. We had legacy applications. We had no collaboration because everybody essentially was competing with one another. We had a duplication of systems and process.

So what did we do to address this? We implemented a new cloud stack. So the advantage that we had of course was that we had no choice. We were building a new business, so to some extent we could leave behind some of the legacy. But we were able to build a new system stack based on cloud platforms that were a range of our own private cloud, mixed up with public cloud solutions, a product configurator, salesforce.com, cloud-based Oracle financials, a cloud-based HR system.

And we brought those all together so that we could provide essentially a single view of our customers. So we think we're one of the few telcos in the world in the international space that now have a single view of our customers, driven by a complex but cloud-based customer database. So we've got now a single view of our customers which means wherever you are in the world you can look at the same view, customer data for all of Telstra's customers internationally.

It's also driven much more collaboration between the sales teams, so it's enabled us to do global account management. And when you're selling to large enterprises in banking, manufacturing, resources like we are what you need is a single view. They want to buy the same way, with the same on-boarding, the same billing, the same quoting process wherever they are in the world. And it's what drives them mad in the telco space normally. It's one of the key drivers for dissatisfaction in the telco space.

We've saved a bunch of money by decommissioning legacy systems. We've tried to remove the silos. I think to be honest, you could put your hand on your heart and say -- put your hand on your microphone and say I'd like to get rid of all of those silos. It's very challenging to do. But one of the things that you can do is drive collaboration. You can push people together with single systems and single processes.

And the most important thing for us was driving customer satisfaction. So Telstra globally uses the NPS system, the net promoter score. So I guess some of you guys in

your businesses probably use this. This is a way of measuring whether you have advocates as customers.

So we ask our customers a question which is, would you recommend Telstra. They score us between 1 and 10 -- between 0 and 10 actually. If they score us from 0 to 7 - - sorry, 0 to 6, they're a detractor, i.e. they wouldn't recommend us. If they score us 7 and 8, they're neutral, they could go either way. If they score us 9 and 10, they're an advocate. So that's the methodology that we use to measure customer satisfaction.

And so I don't know about you when you get surveys, I tend to score a 5 or a 6 because I'm British and that tends to be you're doing quite well, 5 or a 6. It takes exceptional customer service to get a 9 or a 10.

And in part through the deployment of this solution we've actually improved our NPS score by 25 points in the last three years. So a dramatic improvement in customer satisfaction down to the deployment of a single view of customer through a cloud platform.

But it wasn't obviously just about cloud for us. Much more important was the change to operating model which it drove. And I think in all of our discussions over the next couple of days about cloud and SDN and different ways of working, different technology transformations, the most critical thing is working at the organisational change in the operating model because that's the most fundamental thing about a business that's in flux. Not a new system, it's never a new system really because actually they're not that difficult. It's everything that goes around it. And so making sure that you've got this ecosystem working well is absolutely critical.

So I think as an enterprise service provider, it's critically important that we all get this right in terms of building the right level of partnerships. And in telco obviously, we have a world where we've been playing together. Most telcos' biggest customers are other telcos. And I think in the cloud world that stays exactly the same. I think we'll be sharing workloads across multiple platforms for our customers in the same way that we share network, in the same way that we use each other and build network to network interfaces to connect with one another. Cloud will be no different in my view.

So what are Telstra about? Well, we're really about trying to, as I say help customers to create new business streams. So telcos have long been focused on this end here, making things work. Can we do it cheaper? Can we do it faster? Can we do it better? And for me, that's a happy piper job. That's the job of a telco that's focused on doing the plumbing. And all of us in telco need to be doing that anyway.

But what customers are really interested in, what CEOs are interested in talking about is how they can create stuff, how they can make better things. And so I think all telcos have got to move up this stack, whether it's cloud or telco, whatever it is in terms of the service offer.

And again our response to that from a product point of view, which I won't go into now, is how can we add value? How can we do things differently? Because all the

core network and telco stuff that you do and basic cloud stuff is really only about making things work. It's not really about making things better.

So that's why we've been investing in all these other businesses and continue to do so. We've just hired 20 -- we've just hired 25 business development people in China to investigate inorganic opportunities for us there. So for us this is really, really serious. It's something that we think we can differentiate on rather than just being the best people at doing the plumbing. We absolutely see that there's a huge opportunity for us in the enterprise space by leveraging that cloud infrastructure capability with a range of higher value applications and services on the top. In our view we need to be a services business to be successful in the cloud space.

And we're not doing too badly. So it's always quite interesting isn't it when you win an award from a supplier. So we've won a bunch of awards from EMC and CISCO for being their global cloud service provider of the year. And yes, okay, maybe it's platitudinous to say we've won an award from our suppliers who we spend millions of dollars with. But nonetheless they have to give the award to someone. And typically they give the award to the people that spend lots of money with them because they're deploying lots of solutions and winning lots of customers.

We've now got thousands and thousands of proper cloud customers. We've actually got hundreds of thousands if you include all the 365 customers and all of the kind of extraneous other cloudy type customers that we've got. But we've actually got thousands and thousands of infrastructure as a service customers and that's why we're winning all these awards from various industry organisations and figures. So I really just wanted to finish there and hand back over to Manek, who I think wants to question me.

## *Q&A Session*

### **Manek Dubash - NetEvents**

Tom Homer, thank you very much. If you could please take a seat. I've got a handful of questions here, but I'm hoping most of the questions will come from you guys over there. I'm just going to pick up on two or three points and we'll see -- we'll take it from there, shall we?

Okay, Tom, thanks very much for joining us.

So just on the point of cloud brokerage you suggested that telcos can access cloud brokers, which is I think one of the areas that telcos can really start to add value higher up the stack which traditionally they've been pretty rubbish at. But most large enterprises have teams of people who are already doing that and to have another layer, another set of profit margins effectively increases their cost. So what's the value add here?

**Tom Homer - Telstra Global**

I think like any other managed service, it's a return on investment calculation for the customer. I think telcos need to be better at selling the service [wrap] rather than the infrastructure and that's really a conversation at a different level. Telcos I think are typically a bit constrained to talking to telecoms' people in enterprises where they really need to be talking at a different level. Because actually the conversation for an enterprise is do you actually need that layer of people? It's the classic outsourcing conversation where does it make sense for you guys to employ half a dozen people to do a job that Telstra's got hundreds of people doing? And so I think telcos need to be much more focused on service.

I don't think telcos have done a good job of delivering a great service for customers. At Telstra, we think delivering customer advocacy, so making our customers so happy that they recommend us to other people is so important that we've actually made it our number one strategic priority. So our CEO, David Thodey, would say if he was here of our overall strategy in our \$25 billion business, number one is delivering customer advocacy. So it is critically important to us.

And we are -- I think we're lucky because we are a business that's able to invest. Because Telstra's been extremely successful, extremely profitable, extremely cash generative, we have the ability to invest in customer advocacy, which might be a bit more of a challenge I suspect for some of the telcos that are operating in different markets.

**Manek Dubash**

And we have the Australian tax payer to thank for that.

**Tom Homer**

Exactly.

**Manek Dubash**

So another thing that the telcos often struggle with is monetising all the traffic that comes from the likes of the OTT players, the Googles, the Amazons of this world. What are your plans in that area because let's face it, as we've agreed, I mean telcos have generally been rubbish at making money out of anything higher up the stack from the pipes and that's because they've tended to be engineer led. So how can you break this trend?

**Tom Homer**

So I mean the first thing to say is the OTTs are some of our very biggest customers already. So we're doing an awful lot with the big OTT players. In fact, we created about a year ago, a specific global segment in our business to focus on OTTs because we think it's an incredibly important opportunity. And so I guess that's -- one answer is that.

The second is that these guys need cloud services as well as telco services and we think we can help them by providing some of that higher value add service. And some of them are buying it. Some of them are buying those services. So I think there is an opportunity for us here.

And I think we all need to coexist in an ecosystem for customers. I think in the same way that there's a place for public cloud, private cloud, utility cloud, whatever you want to call it, equally it's the same in the OTT space for what consumers want and how those OTTs play in the enterprise.

**Manek Dubash**

Okay. And finally, I suppose obviously cloud computing is going to play a big role in the future. I think most people would agree with that

**Tom Homer**

Yes. I hope so.

**Manek Dubash**

Well, you've spent a lot of money on it.

**Tom Homer**

\$1 billion

**Manek Dubash**

Yes, and a lot of other telcos too .

But essentially, what's really distinctive about this vision in a nutshell because an awful lot of other telcos are doing something similar. Verizon for example springs to mind. What's really distinctive about this?

**Tom Homer**

Okay. So for us it's this idea of the hybrid cloud. So we think -- we know the customers don't want a one size fits all answer. They want to pick and choose. And so we think our offer of giving our customers choice with a consistent service wrap, it's what our customers are telling us they want. And they're telling us that they're not getting that now whether that's from cloud providers, telcos or anybody else.

**Manek Dubash**

Do you see -- I do have one final question. It's a sort of -- this is not intended to be xenophobic, but do you see a sort of push back from people wanting to deal with a Australian company at all in Europe as opposed to someone local?

**Tom Homer**

I actually think that people like doing business with Australian companies because I think they see us as having quite an open and honest and a can do attitude. And we're -- Telstra are a global telco with a focus on Asia and so a lot of what we do, a lot of what my team do here in Europe and in the US is help European and US multinationals that are growing into and out of Asia and they see Telstra as a great bridge between west and east.

They see that US or European carriers don't focus on Asia or don't invest in Asia, but they don't necessarily want to deal with an Asian carrier. They see our, I guess the principles of doing business with Telstra, the accessibility of our senior management, that kind of thing as something that differentiates us.

**Manek Dubash**

Great. Thanks Tom. Okay, questions from the floor. You must have lots.

**Bob Emmerson**

Bob Emmerson, I'm a freelance writer. It's a bit of a specialist question but I've got a -- I've been doing some work for a company who've got a cloud-centric solution for end-to-end devices and IoT devices and they're foreseeing millions and millions and millions and millions of devices sending data to this cloud. And they tell me that not all the data gets through, that the devices particularly drop out on the cellular network and this is a serious problem. And of course they've got a solution for it inevitably. But I don't hear anything about that. Is there something special about the short bits of data that are coming from things and end-to-end devices that makes this a problem?

**Tom Homer**

I think you might have stumped on the technical question there because I don't have an answer for why or why not that might be the case. But I'm not getting any feedback from customers that they're suffering from this particularly. So I'm absolutely certain there are some people in the room that could probably answer that question better than me.

**Bob Emmerson**

[If they're here] I'd love to talk to them.

**Tom Homer**

Yeah, I'd be interested in hearing the answer actually, but I'm afraid it's not one I can answer.

**Hans Steeman**

Hans Steeman freelance from the Netherlands. You're focusing on Asia, but if you look at the partners in many cases it's American-based companies. What about

companies like [inaudible] who are offering a lot of cloud hardware and sometimes even cloud services to telcos?

**Tom Homer**

Yes, I think we're not constrained by doing business with anybody in any geography. So I think we'd consider -- we consider all suppliers for all solutions. It happens that a lot of the innovation comes out of the US. So we tend to -- we've invested in several US second round funding software companies for example because we see them as great, innovative, exciting businesses. But we'd absolutely consider -- we'd consider investing in companies anywhere in the world if they have the right profile and they're sufficiently interesting for us. And we'd also partner with organisations from anywhere in the world if they had something that was relevant for us where it's not constrained to the US or Europe or anywhere else.

**From the floor**

I didn't quite understand your PCCW story. I mean was it because the Australian government politically didn't want PCCW to be involved in your infrastructure or did you want to get hold of some assets from PCCW? What was the story?

**Tom Homer**

Okay, so we were in a joint venture with PCCW for ten years, a 50-50 joint venture that was called Reach. And it became clear in year eight- let's say ish that Telstra wanted to invest and grow the business quite dramatically. The reason we wanted to invest and grow the business quite dramatically was we were getting a -- well, for one thing we were getting a big cash injection from the Australian government which enabled us to grow our international business exponentially. And PCCW had a different set of priorities.

So there was no kind of political angle to it at all. It was quite simply we wanted to grow effectively. We wanted to double down on our international business, PCCW wanted to do something else. So we said okay guys, let's dissolve this JV and we took about 80% of what was in that JV into Telstra. And so that was it. And subsequently we've continued to invest in new cable systems, new points of presence, new datacentres, people, products, very, very significantly. And we've been growing our international business about 20% year on year since then.

**From the floor**

Anthony Savvas, freelancer with ITProPortal.com I presume you actually sell hardware when it's required for people's cloud infrastructures is that correct?

**Tom Homer**

Yes.

**From the floor**

So next question are you technology neutral or do you favour CISCO over HP for blade servers and other servers etc.? Because you talk about hybrid and integration and being technology neutral or suggesting that.

**Tom Homer**

Yes, we're -- so I guess the first part of the question is yes, we do sell hardware when it's required to fulfil customer requirements. We're not really a hardware reseller. We're a service provider. So I would say we're providing hardware to customers as part of managed hosting solutions in a lot of scenarios where we are independent of hardware vendors.

Our own platforms, so our own cloud platform is CISCO-based, CISCO, EMC, VMware. But when it comes to managed hosting we give our customers choice. When it comes to co-location we give our customers choice.

**Manek Dubash**

Okay who's next?

**From the floor**

[Inaudible]. [On one story] like this. are telcos flexible enough to embrace these new evolutions?

**Tom Homer**

I think that's a very good question. I think the next panel is talking about software defined networks and the kind of transformation that's going on in telcos. And I think one of the things that again needs to be addressed is the ability for telcos to make decisions quickly enough, to keep up.

And I see the way that some telcos like Telstra are addressing that is to create new businesses that are maybe more nimble and fleet of foot. If you're a 40,000 person business, you can try really hard to move fast, but it's quite difficult sometimes. And so I think increasingly we see telcos address this by starting up something new.

In our case, we started a ventures business and a software business and we then empowered the people running those businesses to make those decisions much more locally. But I think it's tough when it comes to, let's say, you make a decision to deploy a software defined network across the board in a telco that then requires you to or then it gives you the ability to be able to make quick decisions about product development. But does that then -- does the operating model of the telco actually fit it?

So I think there's probably a huge opportunity for a lot of consultants to come and help that transformation because it would be fair to say that telcos are a rich hunting ground if you are an Accenture or a Deloitte or an Infosys or others. So I think yes, it is a challenge and I think it's one that probably not that many telcos have faced into yet.

**Manek Dubash**

So is that saying, just on that point, is that saying that the engineer within the telco is becoming less and less important?

**Tom Homer**

Look I'm not an engineer so it's quite easy for me to say no. But I think this whole world of moving towards software does mean that the traditional telco engineer is less relevant than that kind of next generation software engineer. Yes, I think hardware is -- hardware full stop becomes less relevant.

**Manek Dubash**

Okay. Any more questions?

**From the floor**

[Inaudible]. So I just was wondering if you could -- I have a two part or a four part question depending on how you look at it -- give us an example of, give us a use case example of someone who's adopting hybrid cloud and sort of a general comment on adoption of hybrid? And a use case of someone who is already or planning to adopt inter-cloud and a general comment on the adoption of inter-cloud?

**Tom Homer**

Okay, I'll give it a go. So a use case of a hybrid cloud, we signed a deal with a customer who are a joint venture between a UK and a US pension fund and an asset management company. And they were starting a new business, a 500-person new business and they wanted an entire infrastructure. They wanted it all to be new, but for whatever reason they had to carry some legacy forward with them.

So what they were able to do was put all the new into a infrastructure as a service cloud and some of it they had to keep in a co-location service that they were managing themselves. So I guess that's number one.

Then your second question was around CISCO inter-cloud. I mean the hybrid cloud is -- it's just starting I'll tell you exactly what's happening. What's happening is customers say I would like to buy infrastructure as a service. Our sales and solutioning team get together with them and the customer says actually I want this, I want this, I want this, I want all this bespoke different clever stuff. And they end up buying managed hosting instead of infrastructure as a service. So I would say adoption is mixed.

I think pure infrastructure as a service adoption is not as fast as some of the industry analysts probably would have you or the expectations that were set by the industry analysts a few years ago. I still think it's driving a lot of conversations that turn into a managed hosting or a co-location deal for telcos and cloud providers. We're not really seeing that many pure infrastructure as a service although we signed a deal last week with a global petrol station operator who had an end of life platform, chucked it out, and is starting from scratch with a brand new infrastructure as a service platform. So I

think the timing, obviously there's a huge timing issue with any of this, like with any legacy platform.

And in terms of CISCO inter-cloud, the take up it's too early because literally we've just been to trialling in Australia at the moment with customers. So it's too early to say, customer take-up. Lots of interest obviously. But in terms of have we got hard customer numbers and use cases, we only announced it a few months ago. So we're only at the trial stage with customers.

### **From the floor**

Do you have a hypothetical use case for inter-cloud to help folks understand it?

### **Tom Homer**

Yes, I think any of those ones that we've just talked about would be a classic situation where you've got a customer that's got legacy apps that need to go on a managed hosting platform. And then they've got, I don't know, let's say a SAP Hana kind of platform that they could use, an infrastructure as a service platform or that they might want an enterprise grade infrastructure as a service platform. And then file storage, that they put in an AWS cloud or a CISCO inter-cloud maybe. Those are the scenarios I think that exist.

And also I think these hybrid cloud solutions will come -- will have a phased approach to implementation. I don't think -- I think a lot of them will be, we'll pick some and then we'll gradually over time migrate over like customers do with networks. I think there's a lot of similarities that are becoming more and more apparent now in terms of how we sell, how we provision support and deliver.

### **Manek Dubash**

Right, one more very quick question, then we're going to move on to the next debate. Unless there are no more quick questions in which case I'd like to say last chance. No? Okay. I'd like to say thank you very much, Tom Homer for talking to us and I think you're going to stay here for the next panel.

[End]