Are you Future Ready? Join our financial services and insurance virtual roundtable to debate how cloud powers digital experiences.

Speaker	Content
Cat Dutton	Warm welcome to everyone. Hope you're all well, especially in the current circumstances in which we all find ourselves. My name's Cat Dutton, Vice President of Marketing for Financial Services and Insurance within Atos - and I'll be your chair for today's session. This session promises to be very insightful, but also practical. Examining the challenges and opportunities of an effective multi-cloud strategy for the financial services and insurance sector. We will begin with a presentation of the report that's been conducted by Forrester and commissioned by Atos and VMware, which focuses on the challenges and opportunities from creating a cloud strategy. This will then be followed by a discussion, during which we will examine three key themes raised in the report and look at how they can, or are being, best addressed. Now, I would like to introduce you to the panel of speakers today. • We have Adrian Davis, who's Atos's Global Financial Services and Insurance leader, for Consulting and Digital Practices. • We have Himanshu Vyas, who's Chief Strategy Officer for our Global Financial Services and Insurance division within Atos. • We have Jean Pierre Le Treut, who's Group Industry Solution Director - Cloud & Digital Workplace, Global Financial Services, Atos. • We have Matthew O'Neil, who's Industry Managing Director at Advanced Technology Group, Office of the CTO. • And finally, our guest speaker Paul Miller, who is Principal Analyst at Forrester. So, opening up the event today, the report by Forrester uncovered that while the benefits of cloud are well-recognised, extracting value and realising those benefits is more challenging than many enterprises has realised. Forrester's research reveals that fewer than a third of leaders believe that organisations are very effective at using cloud to support the many digital transformation goals that were investigated. To understand why this is the case, the challenges faced, and to gain a view on the best approach to address these challenges, I'd like to now hand over to Paul from Forrester, who's going to talk us through the findings of the research.
Paul Miller	As Cat said, this is sort of drawing out some of the key themes and key findings from a piece of work that Forrester conducted on behalf of Atos and VMware earlier this year. As I'm sure everybody listening knows, cloud has been around for a while. Cloud has been of interest mostly for

	net new projects, start-ups mostly, but with any enterprises like those here, it's been mostly used for net new projects or it's been used for simply virtual machine replacement. So, as you move out of your own data centre, you use a cloud provider to take some of that heavy lifting. We've seen that play out for a number of years, but it hasn't actually embedded down into the real mainstream digital transformation of these traditional enterprises. So, what we wanted to do with this study was to look and see whether that's changing. To look and see whether within, particularly regulated industries like financial services, insurance, healthcare, whether they really are starting to make use of the value and the advantages and the potential offered by cloud. So that's what the study set out to explore, and that's what I'm going to talk about some of the highlights from, over the next few minutes. There is a longer report to go with this research that will be made available to you. So, in terms of who we spoke to, we were looking across regulated industries, specifically financial services, healthcare, and insurance. We were looking across North America and some major European markets. We looked at the US, Canada, Germany, France, the UK, and the Netherlands. We were looking at large organisations. So more than half of the respondents were from our organisations with 10,000 to 15,000 employees, but about 20% of the respondents were from organisations with 20,000 or more employees. Our respondents were also fairly senior, two thirds were director level, a quarter were VP level, and almost 10% were from the C-suite. All of the people we spoke to were involved, in some form, in cloud strategy within their organisations. 28% said they were the final decision maker, 59%, they were a part of the decision-making team, and then 14%, influencing those decisions in some way. These are people who know what they're talking about. These are people who have done it, and these are people who understand the implications, both good and bad of their journey to cloud. And in total, there were 109 respondents completing this survey, which gives us a good sample to make some solid concrete conclusions. The first thing to say, is that for all of these respondents, cloud is playing quite an important role in driving and enabling the digital experiences they're looking for within their business. The chart here on the right is a little confusing, so let me explain what's going on here. The green bars are for people who have said they use cloud for more than 50% of a particular workload. So, at the top there are for example, AI and ML, artificial intelligence and machine learning. That's 49% of the respondents to this survey saying they run more than half of their AI and machine learning workloads in the cloud. 39% of respondents, saying they run more than half of their database services in the cloud. Then right down at the bottom, 36% saying they run more than half of their analytics workloads in the cloud. So, this is solid, pragmatic, practical

	work at scale, enabling the social digital transformations that these organisations are looking to enable. This does not mean they're doing all of their back-end processes in the cloud. If you're in financial services, you're not moving the entire core banking system necessarily to the cloud, but where you're doing some of this innovative, interesting future gazing, digital transformation stuff, like AI and machine learning workloads, for example, we're absolutely seeing more and more investment, and more and more reliance on cloud for these workloads. And that's interesting. So that suggests the direction which our organisations are headed is to draw more and more reliance upon cloud as they start to offer these newer customer-facing applications. We can dig into that in a bit more detail, but I think that 49% saying more than half of their AI and machine learning workloads are in the cloud, is really interesting and a really strong message. However, all is not wonderful, all is not gold, and all is not great necessarily. What we're looking at when this chart, firstly in the lighter green, is respondents saying cloud is a significant enabler of our particular piece of work. So, 70%, for example, saying cloud is a significant enabler of their AI projects. 70% saying cloud is as significant enabler of their IOT projects. Just under half, think cloud is a significant enabler of their customer experience or flexible architecture projects, so that's quite good. These late green numbers are great and tell us a positive story. The dark green numbers are respondents being asked, are you effective at unlocking the potential around cloud here? So IOT, for example, 70% say cloud is important for their IOT, but only 24%, less than a quarter, are saying that they are effective about unlocking all the potential here. Only 24% are really managing to make use of cloud to drive their IOT projects, and similar numbers for the other areas as well. 17% effective are using cloud to drive CX. 20%, a fifth effective, are using cloud to drive a flexible architecture. So, a clear recognition of the potential, a clear recognition of what's possible, and a clear recognition as well of the process workflow mindset within their organisation is standing in the way of taking full advantage of what's on offer here, and that's important. I think these numbers are much more significant for large traditional enterprises, especially in regulated industries, like the ones we're talking about here. If you were talking to a start-up, or a FinTech, or something like that, they're much less worried about effectiveness because they don't have a legacy. They don't have regulators breathing down their neck. They don't have a large workforce that's been trained and has gained experience in another way of working. So they're much better to recognise the advantage, but then also to maximise on it. The other challenge for established organisations like the ones we're talking to here is all those legacy applications. All those systems that have grown up over decades for a particular way of working, it's not necessarily easy to just move those into the cloud and take full

	advantage of what you find when you get there. So, the chart on the right here, in terms of people describing obstacles to taking advantage of cloud: 44% are saying it's hard to migrate our legacy applications. Yes, it is. 39% saying that things like security and governance are a challenge for them. 36% inflexible legacy technology systems and processes. So, there are barriers and blockers here that need to be worked around to take advantage of the potential they very clearly said they recognise. We then have a much broader problem, and this is the whole area of 'accidental multi-cloud' as we've been calling it at Forrester. I think a lot of our organisations moved to cloud in the early days; it was experimental or it was devolved to individual teams, and as a result, we got multi-cloud entirely by accident. You had one development team with a credit card and they went off to AWS and started doing stuff there, and got on just fine. You had another team with a different credit card and they went off to Microsoft Azure, and off they went, and again, got on just fine. Another team went to Google, another team went somewhere else. Another team went to the local colo provider, and each of these teams was probably doing okay. The problem is, once you start to look strategically at this across the entire organisation, you begin to recognise that you have a problem. You have 'accidental multi-cloud', and you have an inability to manage economies of scale. You have an inability to draw upon learnings from one team and apply them to another team, because there's no joined-up view of what's going on. In the data, we saw very clearly, 58% of respondents trying to manage three or more cloud platforms, and that's too much. They want to be bringing that down to two or three, probably not one, I would suggest. Very few organisations will go to just one. But what you often find and what we see very clearly in Forrester's research, both here and elsewhere, is you find organisations picking one as their preferred cloud and then allowing teams and decision makers, stakeholders, to make a case to use a second. Or possibly if there's a really good case, a third, but not very large numbers of clouds. Then, the other important data point on this slide before I move on, a third of respondents saying they have limited visibility over the cloud deployments in their organisation. So, they're managing three or more clouds, but then a third of them say: "actually there might be a fourth or a fifth, or a sixth out there, and frankly, I don't know if it's there." And that's a problem, particularly in regulated industries, where you're managing customer information, where you're having to demonstrate compliance. How do you demonstrate compliance to a regulator when they say, "how many clouds have you got?" And your honest answer is, "I don't know." Very difficult to be compliant with anything, if your answer to any question is 'I don't know'. So, clear requirement to gain visibility into the number of clouds you have. Clear requirement to start exerting some control over that, to minimise the number you have. So, you go from accidental multi-cloud to strategic, conscious, deliberate multi-cloud. Once you've

	done that, some of these other numbers on the chart start to come down a bit, as well as things become a little more manageable. Here, we asked respondents what they think the advantages might be if they had that optimised cloud strategy. If they had a view over what was actually going on across their organisation and started to exert some control. More than half, very clearly recognising that if they knew what was going on, if they had a clear optimised strategy, it would improve operational efficiency straightaway. Actually, the one thing I would say is, I'm surprised it's only 51%. But then you see other numbers as well; 48% saying that optimised cloud strategy would allow them to improve their ability to use emerging technologies - things like AI and machine learning, they were so important and so positive at the start of the presentation. 43% would be able to reduce their overall cost of IT, because it starts to optimise where workloads went. 41% deliver a more seamless customer journey, and so on. Clear recognition of some of the value propositions here, once you start to take control and have a strategic view of what's going on, and where it's running. Also, one of the things that came through very, very clearly in the data is the importance of cloud choices and cloud decisions in effect in the customer journey in understanding how you deliver value, and engagement to your end customers out in the market. 26% of respondents said their cloud choices have a critical impact on their ability to instil trust in our own data security. 50% saying that's important. So, altogether 75% saying they are conscious and have an understanding of what's going on here, is important, or critically important, to having customers trust what you're doing with data security. 28% critical importance of cloud and delivering personalised customer experiences, and so on. But just over a quarter, only a quarter, consistently evaluating the impact of cloud as they start a new customer-facing project, or customer-facing journey. So, all of the data on the right, saying how important this is, the sentence on the left saying; 'but only a quarter seriously think about it upfront' - that's a problem. We need to be taking the customer journey and the customer value proposition into all of this planning, right at the beginning. Cloud is just a place to prove some cheap virtual machines. It's not just a case of saying; "where's the best place to run some machine learning workloads today, technically?" We have to be thinking through the implications on the customer and the customer journey to deliver this value. Now, as I said at the start, there's much more data in the longer report. Much more explanation of what we think this means in the longer report, but this is what I wanted to share with you at the start of this conversation today, to see the conversation, to see some input from the other experts we have on the call here. Also, to see some of your questions and some of your thinking as you look at how you embark on

	the cloud journey within your own organisation. So, with that, I shall pass back to Cat. Thank you.
Cat Dutton	That's great. Thank you, Paul. A really fascinating presentation and some really brilliant insight coming through. As you mentioned, there's the opportunity there. Clearly, from what Paul was saying, there're enterprises in these markets, which are really facing some hurdles on how they can create a cloud environment that supports their business objectives. But also, some real opportunities as well to deliver incredibly powerful customer experiences and engagements. Adrian, I'd like to just ask you a question, which is: does this reflect what we're seeing in conversations with our customers and partners in the sector?
Adrian Davis	It does indeed, Cat, and what a great piece of research. It's pretty much spot on from my perspective. And I think, before we try and start thinking about how we resolve this, let's just take a minute to consider how we got here, because we got into this position with the best of intentions. There's a lot of initiatives that are across organisations, be it the TMO or the CIO, they are wanting to respond quickly to the challenges of the organisation and markets that they existed in. So, multiple priorities, many different initiatives across many parts of the business. At this point, it's highly complex, it's inefficient, and it's not living up to the ambitions that the organisations have when they found this job. But we see the benefits as well, that's very clear from the research. But, how are companies resolving these problems, just briefly? I'm going to suggest that actually the answer isn't really about cloud, or technology, or conversations with CIOs in many cases. We're going to turn the telescope around. We've got to start elsewhere, and we ought to think about where we're heading as an organisation, and what are the business priorities that underpin digital transformation? How can we align those digital capabilities with the business imperative? To have a very clear vision of the future, what their customers need, especially today's changing environment. For example, digital is going through the roof. The need to creatively change their offerings and their propositions, the requirements of each of the customers. And for us, what I see more successful organisations doing is gaining consensus around that vision and the business imperative, designing their class strategies through Atos - not the other way around.
Cat Dutton	Thank you. Matthew, does this sound familiar in terms of what you're seeing as well?

Matthew O'Neil	Yes, it is. I particularly like the term, the ‘accidental multi-cloud’. I think that resonates really well. I think it's clear, the ambitions of average, let's try to reduce costs, let's improve agility, let's try and break free from legacy. But, I think, it appears that lots of teams, lots of people have all gone off and done that independently. So, what we're really seeing is the problem of legacy IT re manifesting itself in the cloud. The problems of too many silos, too many database teams, too many server teams, and they all got consolidated by enterprises. There now appears to be too many cloud teams, and there's obviously an evolution there. I think that's only exacerbated by the size and complexity of our FSI customers. So, if you're in more than one geography, you have more than one regulator or more than one central bank. So, you've got the rules that you're trying to fit in there, as well as, obviously, what customers will or might want to do, what cloud services are available in those locations as well. So, I think with the best of intent, we've created this multi-cloud problem or ‘accidental multi-cloud’ problem. I guess the final sobering thought before we move on though, is from an accountability point of view, if something goes wrong, who's going to be the one accountable, let's say? So, I think the board where we're expected to be the CIO, but the CIO may not have had the strategy, or the architecture, or the ownership of that implementation directly, because it could well have been a line of business. It could have been a third party, it could have been completely outside of their view. So again, I love the term ‘accidental multi-cloud’, we've got to help to fix that.
Cat Dutton	Thanks, Matthew. So clearly there's a wide range of challenges, but also some benefits as well with having the right plan and strategy that we can bring to financial services and insurance organisations. I think the bigger question we've got is around how can cloud strategy be optimised to increase operational efficiency, avoid unnecessary costs, and deliver an enhanced customer experience. So, I'm thinking Himanshu and Jean Pierre, perhaps you can kick things off by talking about how an improved customer experience and a multi-cloud approach can really help organisations with a primary concern for many right now, which is that of cost reduction. So perhaps, Himanshu, would you like to take that question?
Himanshu Vyas	Sure. Thanks Cat. I think, let me first say, amazing study. I really enjoyed it. And thanks Paul for giving us a background in that, on the call. I think when you were presenting that, there was one piece of data that, it's like an earache - it keeps on hanging in my head, right? It says, fully realised potential. Can I have reach here without spending so much money or less money? Am I doing it the right way? Is there something better we can do? I think that's one of the questions we have explored in multiple environments. I have personally looked at, and particularly

	regulatory environments, because it becomes interesting. Putting efficiency in the regulatory environment is much more complicated than a simple environment. So, we run operations for banks, we run operations for insurance companies, we run operations for asset managers. And there's a recipe we found out which we realised that actually gives us the right way of doing things. The recipe is, how do you bring business operations and business outcome together? What we found out was, you do that through customer experience. So, the way I have seen some of this interesting thing working is, setting up a customer experience lab at the heart of the operations. Bringing the business operations guys into the customer experience lab to clearly understand what the customer journey is. Once it is clearly understood, then we overlay the business outcome on it. A couple of interesting things from the study itself: Are we trying to quickly deploy new services? Are we trying to deliver consistent customer experience? Are we trying to deliver real-time customer experience? What exactly are we trying to do? Once your business operations people understand the customer journey, and are very clear on what is the expected business outcome to be delivered, I think that's when they can look at what is the most efficient and most cost-effective way of doing it. I think one of the mistakes we have seen a lot of people doing, is they tried to come into a process, try to create a segue, try to do something there. And as you said, there's a good multi-cloud strategy, and as you said, there's a multi-cloud strategy by accident. I think most of this multi-cloud strategy by accident has been done in that view where somebody comes in, creates a segue, as you said, has a credit card, set it up. Where we have seen that being successful is, each of the people who run the operations, the customer journey, overlay the business outcome on it, and then put the multi-cloud strategy in place that delivers that business outcome through how the business operations are being dealt with. So, let me hand over to JP here, who is our technical expert in that area. JP, you have something to add, some examples here.
Jean Pierre Le Treut	Yes, of course. Speaking about cost reduction, of course cost reduction has always been the true promise of a smart cloud strategy. What I do see in the financial services industry, is that this objective of cost reduction is still hard to reach. If you only take the benefit of a private cloud, private cloud is CapEx investment, it is your cost and you don't have a pay-per-use model using public cloud. So, to reduce cost, you must use widely and smartly public cloud. When I say market smart, I mean a seamless integration of public cloud, we've seen a global hybrid multi-cloud framework and operating model of the bank or of the insurance, which is not an easy task to set up at IT level. So, hybrid cloud is complex, but if you want to take the benefit of public cloud, you must

	integrate and facilitate the use of public cloud as such it would be a private cloud. Smart means also to associate public cloud with financially strong financial management, the famous 'Philips practice', which is a heading necessary to take advantage of multiple and complex cloud pricing models. So definitely today, I would say that the first benefits, and it's fully in line with what Paul did explain, the full benefit of public cloud is agility, short term application life cycle, and innovations, which will allow to develop and improve customer experience. To re-stress that, let me speak about Atos field lab. I had the opportunity to manage Atos Sandbox, which is a platform dedicated to support innovation within financial services. And on which we onboard FinTech within disruptive customer journey. This Fin lab was initially set up on Atos private cloud, in 2016. And we had the opportunity to migrate, as a bank would migrate. It's a call against a system to take them to the cloud, to public cloud, namely Google cloud platform in 2018. And it's very exciting to see how we discover GCP services entering the full public cloud ecosystem. We had the ability to head to FinTech chat bot, AI, data analytics, which are part of each public cloud ecosystem. And of course, all these innovations came out from large public cloud portfolios that a customer can hardly develop by himself. So yes, a public cloud approach and a multi-cloud approach will reduce costs, but first, it will allow a strong innovation.
Cat Dutton	That's great. Thank you. Some really interesting insights there, and I'm just picking up on Himanshu, you were talking about an accidental cloud strategy. How can you address an accidental cloud strategy to really accelerate that cost reduction while improving performance and agility? Adrian, does the concept of an accidental strategy reflect what you're seeing organisations currently struggling with?
Adrian Davis	Yeah, I definitely can, on a number of levels, actually. I think JP and Paul articulated very well the benefit that comes from a more thought out balanced strategy. And Himanshu just hit the nail on the head in terms of designing our strategy. I think the question is; "how do we move from where we are today to a better place?" I think that's the real challenge. Even if you've got a consensus, even if you know exactly where you're going, even if everyone in general, you can't rewind the situation from where you're at. But I think for me, the more successful organisations have a clear view of where they are going and they set up the right way to manage this, not just on an ongoing process, but reviewing past work and saying to themselves; "is it aligned to our business strategy solution?" If it isn't, what do we do? Create, reduce to eliminate, to erase. There's a number of avenues to base your decision on.

	For me, it's very much about figuring out what outcomes you agreed to work, model, but at the same time, you must keep on referring to the requirements of your customers.
Cat Dutton	Matthew, have you got anything that you'd like to contribute on top of what Adrian's mentioned as well?
Matthew O'Neil	I absolutely agree with everything that's been said. I think the other dimension here as well, is it's not just the services that are being designed by our customers and then implemented in the cloud, rather than implemented in their data centres. This also affects all the software as services that they're consuming as well. So, this isn't just a one sheet of paper and we can kind of fix all of this. This is a big web of mess that's come about, and it actually requires an architectural view as to how you bring this together or make sure that everything's aware of what it needs to know about. And I think I'd previously seen here, part of the problem here, is that we are effectively creating a new legacy debt issue. The number of silos that we're recreating in the clouds are problematic. So really, it does require some action working with some partners and making use of it, of experiences of others to see how you push your way through this, rather than just trying to go it alone.
Cat Dutton	Thank you. I guess one of the areas we've not really touched on is security implications and issues really, and I think they're real critical aspects of any financial services technology change. I think what's positive is that in the research that Paul talked through, that 56% of respondents in the research view cloud as critical to be supporting their security and privacy efforts. But I think the question here is around what are the security and compliance opportunities, and also the implications that you guys are seeing from having a multi-cloud strategy. I'm wondering, Matthew, do you want to kick off the conversation and discussion on this around what might our customers be missing, or really overlooking, when it comes to cloud security?
Matthew O'Neil	Okay. So unfortunately, that for the majority of the customers that we're talking about here in financial services, they're pretty much the number one target for criminals and for hackers, cyber threats, et cetera. And as such, there are tons of resources being put in on the bad side to try and break in, and obviously any gap, any crack, any opportunity for exploiting the security vulnerability, or even a misconfiguration, can lead to island hopping. It can lead to all sorts of problems for our customers. So, I think really, promoting the role of the cyber security professionals, giving them per view as to what's going on. Trying to get some consistent tools and monitoring. And really that word 'consistency' is really important, because if you kind of know what part

	of the solution is protecting you from, you can then better see where there may be gaps, rather than just assuming everybody's done it to the standard. Because I'm guessing if everyone would've done it to the standard, you wouldn't have quite so many cloud implementations now. So, I think you've got to bear in mind that the criminal fraternity are going to make the most of the ambiguity that we've created here. That's a massive opportunity at the same time of which increasing regulatory regime, increasing regulatory interest in what's going on. I think that the time is right to take stock of what's been done, before you end up finding out about it when you look at your Twitter in the morning.
Cat Dutton	Brilliant. Thank you, Matthew. Adrian, is there anything you wanted to add in here as well around what might customers be missing or overlooking, particularly when it comes to cloud security?
Adrian Davis	I think I was just going to say briefly there for any financial services or insurance institution then using compliance are fundamental, they're not optional. I think also, because they're so important to the business, and business planning, they have business outcomes, right? Security, you've got to keep data safe. And compliance? You've really got to act within the regulation. When we talk about bringing governance together and having a common view or picture of cyber, and of regulations, it needs to be part of that conversation. It can't be enacted to direction.
Matthew O'Neil	Yeah, absolutely.
Adrian Davis	Himanshu, maybe you have a view on this too?
Himanshu Vyas	Security, in itself, is a very interesting topic, and I think Matthew referred to it, right? That people are spending such an amount of money in the back-end to just find a way again. As you rightfully pointed out that when you talk about a cloud strategy, yes, I mentioned about the business outcomes, but then the other part, which is extremely important, is the cybersecurity and other piece. That when you are doing these migrations, when you are moving to these public clouds. And this has been one of the reasons for later adoption of public cloud in some of these environments, that if it's your own data centre, you know when something goes wrong. You know how to go and fix the problem; you are in the trenches. If something goes wrong on a public cloud, you are on a phone on the other line with somebody who you don't know who that person is and how to fix it, and that has been a psychological barrier for a lot of organisations to go down that path. But having said that, and without taking names of any vendors here, there has been a lot of progress that has been made. And now it becomes a very important component of the cloud strategy that depending on the workload you are taking in, depending on the security

	requirement, depending on... is it just a general testing workload? Is it a production workload? What are you putting onto the cloud? There are various versions of that, that you can put on it. So, just repeating two points, this has been a huge psychological barrier in the past, but I think the last couple of years now that the kind of public cloud implementations that are coming into the market have been slowly reaching to a point where they're solving the problem that customers have a choice. And depending on the cybersecurity strategy they want to follow, they can choose specific vendors and do a multi-cloud or a hybrid cloud solution. Something goes in public cloud, something doesn't, something goes in a different cloud, depending on what the security requirements are.
Cat Dutton	Thanks, Himanshu. Paul, I'm not sure if there was anything that you'd like to add in as well around security?
Paul Miller	Yes, absolutely. Thanks Cat. This sort of builds on what Himanshu just said. So clearly, we started off this session talking about some data that Forrester had gathered for this particular piece of work. Forrester gathered lots of other data as well. One of the surveys we do consistently is looking at cloud adoption across enterprises of all kinds, and consistently, for as long as I can remember, security and privacy has been the number one concern around moving to public cloud. Every year, number one concern; privacy and security. What's interesting though, is we also ask about drivers for adoption of public cloud and, exactly to Himanshu's point, for the last couple of years, the number one driver for moving to public cloud has been security. A recognition that actually, particularly the hyper-scale cloud providers, especially when they're working with partners such as those on this call, are actually pretty good at this stuff. They actually know what they're doing and can lead on the tools, and the policies, and the procedures to allow their customers to be as secure as their own data centre, absolutely. And often more secure than their own data centre. No, the customer still has some responsibility. I've heard some of the hyperscale cloud providers say, for example, they build a house, they provide all the locks, and the doors, and the alarm system, and all the rest of it. If you, the customer, walk off and leave the front door wide open, that's not actually their fault. That's on you, the customer. But importantly here, clear recognition, the hyperscale cloud providers are as secure as people can manage on their own if they do it right.
Jean Pierre Le Treut	Yes. The good news is that, on the compliance part, there were major out dates in 2019 by each regulator in Europe, the UK, and the US, concerning public cloud and financial services. It's interesting to see that

	the requirements on outsourcing and on public cloud for financial services has been merged as one. It's a kind of outsourcing, and it's also a sign of maturity of public clouds. So, public cloud is now authorised by the regulators and seven key requirements have been formalised when using it by a bank or an insurance. I would focus on the last one, which is contingency plans and exit strategy. What does that mean? The bank should not be only linked to one unique cloud provider in terms of technology framework ecosystem, and be able to switch from one hyper scaler to another, or to his own data centre. Which is the typical reversibility clause of any outsourcing contract. This will be definitely a big stake in the coming years in adoption of public cloud services by banking insurance.
Cat Dutton	Brilliant. Thanks JP. We're coming towards the end of our session, but we've had a question through, which is around are there any organisations out there who we really see as kind of leading in this space? Who's really kind of got this right, in terms of the strategy that they're deploying? So, I'm just wondering, is there anyone that would like to take that question, and I'm thinking potentially, Adrian or Matthew?
Adrian Davis	Well, Cat, I mean, I think a number of our clients come to mind. There is a diversity of ways through which this is being approach. And as I said, it's more centralised, consensual-driven, future-based, most definitely.
Matthew O'Neil	We're working with all the big names, as well as a lot of the smaller ones. I think that beyond just moving virtual machines, as Paul had mentioned, we're helping build out their futures in the clouds, be that through what we're doing with Kubernetes, or with the build side of our application modernisation business. So, we're doing a lot to help people move there. But as I said at the beginning, the architecture is the really important thing, spending time now. I'm going to say spending time upfront, but the upfront, that one's already gone. But spending time now to understand what it is you're trying to build out and to build that out safely, securely, and JP's point gives you that reversibility, exit ability, moveability; they're just part of the non-functional requirements that you have to kind of think about as you're building these solutions out, I think.
Cat Dutton	Great. Thank you, Matthew. Has anyone got any further points or any further comments they would like to share?
Himanshu Vyas	Sure, Cat. So, on the last question that was asked, organisations which are very successful in putting their multi-cloud strategy. There's a trend

	I've seen in my experience, and I'm normally talking about some very large ones. They're organisations who, at the board level, divide their businesses in a portfolio form. And, just to explain a little bit, and use some terms without naming the customer I think people who know the industry would recognise. So, they would divide their businesses, something like saying, okay, this is my managed for value business. I don't want to do significant investment in technology, but I would like to generate significant cash out of it in short. This is my managed for growth business, this portfolio. I want to do investment in technology because we want to create and go to a platform that allows us to scale. But this is a short term in, 12 to 18 months after that investment, I want this business to start generating significant amounts of cash without asking for additional technology investments. Then the third is, the businesses for future growth. These are the areas we are experimenting in right now. We need to look at different market strategies, different growth strategies, and all that. Now, what I've seen is that at the board level where the CTO or the CIO has a position at the board, and they are able to link their cloud strategy to this business strategy, I've seen people becoming more successful. Just to give you an example, when you are experimenting with something and multiple environments, if you put it on a different kind of cloud strategy, it requires a completely different approach to infrastructure. Then someone says, I don't want to invest anything in migrations or anything. I don't expect the business to grow significantly. I just want to get cash out of it. That's the broad expectation, a CIO or CTO involvement at the board level to drive a cloud strategy that mimics the business strategy, where the businesses that achieved that combination - I've seen them delivering a much better outcome than others who have either tried to build this in isolation without clearly understanding the business strategy, and just focusing only on the technical side.
Adrian Davis	Yeah, I agree with Himanshu. That's quite right. We often get asked by organisations to benchmark where they are on maturity to that level. They have to work in a competitive market, and the team will understand how well they score and it's a particularly interesting piece of work we've done for FS&I organisations recently.
Cat Dutton	Brilliant. Thanks, Adrian. We've had a question come in, which is one for Paul. Which is: looking at the state of the world we're in, what do you think is the most important thing that organisations like Atos and VMware can provide to their customers?
Paul Miller	I think for organisations, large organisations like our Atos, like VMware that have done this stuff before, a lot of what they can offer their clients

	has experienced a lot. It's having made the mistakes before, hopefully on someone else's dollar, and you're bringing that experience. You're bringing that knowledge, and that understanding of what works to the next client. And you're also bringing an understanding of where some of the areas you might get tripped up are, so you can work around them and head them off before you get there. But, broadly, experience is a big advantage here, and understanding that, technically yes, you can stitch all these cloud services together. It's just an API call, it's easy, isn't it? The reality is there are issues and challenges that have to be worked through, and when you've done it before you deliver that experience to your clients.
Cat Dutton	Brilliant. Thanks, Paul. I'd like to thank everybody for participating in the discussion today. Special thanks to Paul as well for sharing the results of the research, and also our panel of experts for the follow-up discussion.