



## Conversation with Scott Mullins

**Scott Mullins** - Managing Director, Worldwide Financial Services, AWS

**David Wright** - President, EUROFI

### David Wright

Scott, welcome, and thank you for your support of Eurofi, which is much appreciated.

Scott is the Managing Director and General Manager of Amazon Web Services Worldwide Financial Services. He is responsible for leading the development and execution of AWS's strategic initiatives in the financial industry all around the world. He comes from many years of experience in capital markets as an equity trader and as a product manager; he has worked for Nasdaq, JP Morgan, Merrill Lynch, Penson Worldwide and has done a whole lot of different jobs.

A lot of them, I think it is fair to say, Scott, have been involved in innovation and frontier-type developments in the financial industry, and I think that is what we really want to get your perspective of today. Tell us how you see the pace and the direction of technological change, given that you are right at the frontier of this; you are developing it every day. What are we seeing here? We see AI, we see distributed ledger technology (DLT) and we see many other new types of applications beginning to emerge. We heard earlier from London Stock Exchange about building new types of digital platforms. Where is it all going? How do you look at this?

### Scott Mullins

David, we are delighted to be here again to support Eurofi and to be part of the exchange of ideas.

It is always interesting to hear your CV read back to you, and I appreciate the way that you couch my career as at the edge of innovation. As I view it, I look at the roles that I have had in different organisations as roles that were subject to change. Unfortunately, it seems like in my career, and I do not know if anybody else has felt like this, that the minute that I dedicated my career to a specific thing, that very specific thing changed.

For example, you mentioned that I started my career as an equity trader. I like to tell people that I picked the exact

wrong time to become an equity trader in the United States. It was the late 1990s, and at that time we had two major changes in the way that capital markets worked in the US. We went from trading in fractions to trading in decimal points, which compressed margins for equity trading in the US, which is a very large change for us at that time. Very shortly after, we made another change in the capital markets, which really impacted human traders, in that we went to something called Regulation National Market System, which is the current rule that governs US markets. This meant that we had to route orders to the best price in the market, rather than 'turtleising'. That completely changed the way that we do capital markets in the US, and it changed the way that we trade and who trades. In fact, it led to the rise of electronic trading.

You rattled off a number of different things that have been on the scene for some time. I think, for some of these things, it is probably not fair to call them innovations anymore; it is more apt just to call them technology. Cloud would be one of those things. We are now in the second decade of cloud adoption in the financial services industry. DLT and Blockchain have been around for some time, and even AI, even though we are talking about generative AI now, has been around for decades.

I think what we are seeing the most is that it is not necessarily technology that is driving change in the industry. What is driving change in the industry is the expectation of consumers; the expectation that they have the ability to choose. Now, more than ever before, we, as individual consumers, including us financial consumers, we have a choice in how we transact with each other. What we do in those transactions and how we want to be served by the institutions that serve us is driving the need for iteration and experimentation within financial institutions.

Today, you may have seen that Citigroup just announced a complete transformation of the way that they are organised within the bank, which is the biggest transformation and reorganisation within the bank in the last 20 years. They are doing that because of the

expectations on the organisation from their customers, so to me, what is driving change in the industry is really the expectations of our customers. What is enabling it to be possible to iterate as quickly as we are is technology. You can look at the subject of generative AI at the moment, and in Stockholm we were not talking about generative AI, and that was in April. The advances that we have seen in this particular space over a very short period of time, just four and half months, now it is all that we talk about. That is enabling all of us, including financial institutions, to rapidly change.

### David Wright

When you look at this, and as a user of your services, one of the great advantages is just the incredible simplicity. Is that what the consumers want: a very simple process where you can execute your demand immediately, quickly and efficiently? One-click stuff. Is that where it is coming from?

### Scott Mullins

Think about the last time that you interact with anything on this device. If anything gets difficult in an interaction in an application or a website, what is the first thing you do? You just close it and you go to the next thing, and so I think the answer to your question is obviously yes.

That also goes for organisations. AWS's role is to provide an ability to take away undifferentiated heavy lifting from institutions in the financial services industry, but also in other industries, and from individuals who begin building businesses from scratch as start-ups. We are there to provide services that you can use to build a small business and scale it to the largest business on the planet, if you would like to. Doing that without having to outlay large amounts of capital to go and build a datacentre, to buy equipment, to rack, stack, power and maintain that equipment and then depreciate that over time is an enabling quality that allows for simplification in the way that we build into play applications, but also in the ways in which we work.

One of the innovations that we are seeing in this space is the application of generative AI to the way that we develop software applications. AWS has an application that we call Code Whisperer. There are other applications like this in the market as well. This particular generative AI application will sit alongside developers and recommend code snippets and improvements to their code to actually improve the quality of code, but also the speed at which that code is delivered from a software development lifecycle perspective. We built this for Amazon itself and then have externalised it for our customers; it is available right now. Even at Amazon, we saw a 50% improvement in the delivery of software for Amazon when we deployed this for ourselves.

As we continue to move forward, simplification, especially of tasks, is going to be very important for our knowledge-base workers around the world.

### David Wright

Thank you. Let us talk a little bit about Europe. The European Union has recently adopted a set of rules on so-called Digital Operational Resilience Act (DORA), which looks at resilience and so forth. Are you happy and

comfortable with these rules? Are there things that you do not like and things that you do like? What is your take?

### Scott Mullins

We are very pleased to see this now in level two, because level two means implementation. We were just talking about simplicity, and we are now at the point of talking about implementation and what the rules that we follow are actually going to be; the rules are the road for all of us: for financial institutions, critical third parties and not just cloud services providers, but all providers of critical services to the industry. Now that we are at the point of being able to articulate what that framework is, and we appreciate the opportunity to provide our point of view on this, that is exciting for us.

We believe that DORA has the potential to provide a framework that is going to be beneficial for all parties, because it is going to provide certainty. When you have certainty, then you can build confidence. Uncertainty is the enemy of confidence. You and I were just talking about certainty and uncertainty, and the one thing that markets and market participants hate the most is uncertainty.

To me, DORA represents the promise of simplicity, hopefully, and getting to a level of certainty of what is expected of all of us as we move forward together. That is very encouraging for us at AWS.

### David Wright

From your perspective, do you see any risks here to your business? Are you fully supportive of the whole package or do you see some areas where some change would be, in your view, commercially sensible?

### Scott Mullins

I think it is going to be something that is actually additive to our opportunities to serve our customers. As I mentioned, any time that we can remove complexity, whether it is us removing complexity in providing IT services or removing complexity in what it means to use those services in a way that complies with regulations, I think it is a positive thing.

Now, on the other hand, what I am concerned about is the next step. The next step is that we cannot look at DORA in a vacuum. If we do then we have failed, because Europe is not one single place. It is made up of 27 member states, and those member states have financial institutions within them that do not just work in those 27 member states. Many of you in the audience are operating in other jurisdictions. How is DORA going to mesh with the regimes that exist or that will be developed in other jurisdictions around the world? Will organisations that are subject to DORA, whether that is a critical third-party provider or a financial institution, have the ability to harmonise across the responsibilities they will have in these different regimes? If not, we are back, suddenly, to complexity. We know that complexity leads to uncertainty, and uncertainty leads to a lack of confidence, and a lack of confidence does not let us all get to a new level of comfort in progressing the digital agenda here in Europe.

### David Wright

You are sounding very European here, Scott, because we had panels earlier today where we were talking about

creating a common set of rules for capital markets and so forth. One of the issues is exactly that, which is, how do you implement the rules? You can have rules on paper, reams of complex legal texts, but they have to be implemented in a consistent way. One of the views, certainly in the securities area, is that more powers are probably needed to give to the European supervisory authorities to ensure that. Common implementation is really important for a business like yours, otherwise you fragment, and you end up responding to 27 different sets of rules, which is expensive as well.

### Scott Mullins

Standards are important. When there is a standard, we can map to that standard. Again, it is about simplicity. When there are 27 standards or 127 standards, that adds complexity. Complexity also always adds costs, as you mentioned, and so we are very encouraged by any efforts to find harmony across regimes. We are also very encouraged by the opportunity to continue to simplify rules.

There is no need for rules written on paper to be complex. In fact, if we write rules on paper that are complex in the beginning, we have probably already failed, because rules on paper then have to be converted into actions by organisations, whether that is financial institutions or regulatory agencies which are going to have to interpret the rules and then provide oversight related to the rules. If we have written a complex rule, then we have probably not done ourselves any favours.

### David Wright

One issue we were talking about earlier, and in a way it is a good time to do this as we prepare for a new political cycle in Europe next year, is the need to look at the consistency of financial and digital rules. In other words, we need to look in a cross-sectoral way at the coherence. Is that something that you think is necessary to do now?

### Scott Mullins

I think yes, if you are going to talk about financial rules, then you must talk about digital rules. All finance is digital today. In fact, I was in Madrid before I came out to Santiago, and I had a conversation with a customer of mine there. This customer made a statement to me that I found to be very telling about where we are in financial services with some organisations that are moving far ahead, and that statement was simply this: 'Scott, digital is our legacy'. We have moved past digital, and we are onto the next thing, so if, when we consider financial rules, we do not consider the impact of digital, because everything is delivered to us in that way anyway today, then we have already failed.

### David Wright

Let us conclude: where do you see the biggest risk to your business as you look forward in this incredibly fast-changing digital perspective? What are the risks that you worry about?

### Scott Mullins

The biggest risk to our business is the same as the biggest opportunity for our business, because that is actually how it usually works. Opportunity and

challenges are usually the same thing, and it depends upon how you react to them.

The biggest opportunity that any cloud service provider has, including AWS, is the opportunity to serve our customers and to provide services that not only meet their current needs, but hopefully through proper planning will meet their needs well into the future as we iterate with them. Based on the way that we provide our services, and I am not just speaking for AWS, I am speaking for other cloud providers or service-based organisations at this point, we provide those services on a consumption-based basis, which means that if we are not meeting our customers' needs, those customers can stop consuming our services at once. We have consistent and constant good pressure on us to make sure that we are delivering value to our customers every single day. In fact, not even every single day, because we build some of our services by the hour, and so at any hour, at any minute, if we are not meeting our customers' needs, they can turn them off.

### David Wright

A final question. There is a lot of white noise out there about strategic concerns and US companies strong in the cloud. Does that worry you at all? Do you think that is just passing in the night? Do you worry about the politics of this?

### Scott Mullins

I do not worry that US companies are very good at providing information technology. I think there is truth to that. I also think that there are other companies around the world that are also good at providing information technology. I think it is very easy for us to get a bit focused on a certain set of companies because they might be those that are the most noticeable or recognisable in providing a certain type of technology, but if you look at the financial services industry, there is a broad spectrum of companies that are at the leading edge of providing solutions and services to the industry that are technology-based. You can look at Nasdaq, for example, or some of the newer players in this space like Thought Machine, 10x Banking or Temenos, where those organisations are taking themselves from the way that they deliver the solutions that they offer to the industry.

No, is the answer to your questions, because this is a very vibrant industry that has technology at its very core and across all aspects.

### David Wright

Scott, it has been a great pleasure to have you with us again. Again, we thank you for your support of Eurofi. The next one is going to be in a football stadium in Gent, apparently, so you do not need to bring football boots or a football, but we certainly want to get your perspectives of how the world will have changed by next February, in six months. Is that okay?

### Scott Mullins

That is okay. It might be awkward for me, and I am glad you explained, because my football kit might be a bit different to the football kit you would expect me to bring if I came straight there.