

Technology Innovation in Large Banks

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Speaker 1: Tech Reimagined, redefining the relationship between people and technology, brought to you by Endava. This is Tech Reimagined.

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Bradley Howard: Hello and welcome back to Tech Reimagined. I'm Bradley Howard, and I'm very pleased to welcome you to the latest episode of our show. We're now running into season three, in which we explore how technology is influencing the fabric of our society, the way we work, the way we live, and the way that we do business. Stay tuned on every podcast platform to listen to our subject matter experts this season. And speaking of expert guests, today we've got planned a special episode of Tech Reimagined, and I'm glad to be able to introduce you to Stephane Malrait. He's the MD Global Head of Market Structure and Innovation for Financial Markets at ING, and a colleague of mine, Toby Dixon, Delivery Director of Finance, Banking and Capital Markets at Endava. Together, we'll be discussing the current state of technology innovation in large banks. Hello Stephane, hello Toby. How are you both today?

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Stephane Malrait: Hi Bradley, nice to be here. Thank you for the invitation.

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Toby Dixon: Hi Bradley, very good, thank you. Just back from my summer holiday, so raring to go.

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Bradley Howard: Fantastic, looking forward to it. So Stephane, can you tell us a bit more about yourself and what you've been up to lately?

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Stephane Malrait: Yes, of course. My background and experience was I started in technology quite some time ago, probably 25 years ago in banking. And through my career, I moved toward more electronic trading, electronic distribution, when it started really in the year 2000 with the first internet boom. And develop on that front, I (inaudible) the electronification of the capital market industry. And now, in the last two, three years my focus have been more on the innovation and further digitalization of our market. So looking at disruptive technology, looking at partnering with FinTech companies, but also looking at how can we improve the roles of sales, traders and how we interact with our clients by using more technology has we did in the past.

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Bradley Howard: Right, okay. Well, I look forward to hearing about some of that experience soon as well. And Toby, can you give our listeners a bit of a background into your career?

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Toby Dixon: Yeah, sure. So I'm a Delivery Director in Endava. I've had also 25 years experience in working my up from project administration up through project and program management and into taking various delivery roles through financial services organizations into banks, and working my way through into capital markets as well, implementing trading

systems and the like. So quite a lot of background there. At the minute, I'm based out of Frankfurt in Germany, and I work together with a talented team of industry experts in Endava. So most recently, we've been spending some time working out where the industry is headed, particularly right now, and how we can be best positioned to support its needs over the coming months and years.

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Bradley Howard: Thanks very much, and welcome to the show Toby. Stephane, can we start with yourself. What technology innovation is happening within ING at the moment?

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Stephane Malrait: So it's quite a lot to be honest. ING have been a bank who was always very innovative. Mainly through the ING retail bank, the retail franchise, because they have created the ING Direct, were the first internet bank if you want, more than 20 years ago. And so it's part of the DNA of the bank to be quite innovative. But what we found out, probably five, six years ago is while the retail bank was extremely digital, the investment bank and the market activity of the investment bank was not at the same level of the digitalization that it had to be. And this is for many reason and it's not just ING, I think it's global to our market. So what we are looking at now is how do we reimagine an acceleration of the digitalization (inaudible)? And the type of technologies that we do, as part of this innovation, is a mix of more disruptive technology like trying to push to use more artificial intelligence, exploring DLT technology, exploring crypto asset technology but also reimagining our existing electronic business and how do we put it on steroids.

Looking at more algorithmic trading, looking at more automation of our chats with our clients to be able, and looking at data. I think the role of data is very important. And while we used to have a lot of data in banking in the past, we probably didn't leverage the information that we have at our fingertip to be able to improve the level of service we have to our clients. Now, I think there are a set of technologies that are available to us to make a big leap using those data, and to be able to go even further to where we used to be in the past. So that is the kind of innovation we are looking at. We'll go in more detail later but I think it's important for us to do that mix of looking at the far future and more disruptive aspect of technology, but also looking at the present and see how do we augment, improve from where we are, with our existings of technology.

And the reason for that is that the capital market environment started automation probably 20, 25 years ago when Toby and I started in our market. When I started, it was still the telex, it was still mainly on mainframe, and we were writing the trade on a black book to record all the transactions. But quite quickly, the new set of risk management system booking system arrived. But now, they're 20 years old, so all those systems are arriving at the end of their life and need to have a refresh. So that's why I think the timing's quite good to be able to work on those technology stacks.

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Bradley Howard: And do you always start with a technology innovation? Do you always start with a new technology and see how you can use it? Or sometimes do you look at challenges within the business and think, "Oh we can solve that using X, Y and Z," which doesn't always need to be the latest technology?

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Stephane Malrait: It's a very good question and I think it's a mix of both to be honest because sometime you have the technologies to, as a business, what is your pain point?

What should we fix and give us (inaudible) ? But if the business is not aware of what is available to them as new type of technology, you will never move. A good example is when the iPhone came out. Everybody was on Blackberry and we were very happy to be on the Blackberry phone. They didn't know they needed to change but then a new tech arrive and everybody jumped to that new tech because they were a lot more functionality in this new type of solution.

And I think here it's the same. It's the case that sometimes the demand comes from the business, system is too slow or too outdated and we need to change, and then we push to make some automation or change the technology, but other time is the other way around, and we find technology company or FinTech company, we have very good solution and we say, " Oh, it can help us to dramatically improve the way we do business so we should integrate with them." A good example will be natural language processing. In NLP, we have a lot of text, we have a lot of data, and we didn't know we could do a lot more with that type of information until we discovered there are NLP solution out there who can help to get more that translating, unformatted data to formatted data point based on the text or the chat that we have, and then using this data to improve the customer experience. So this is more technology led than business led, but at the end, the result is the same, you have an improvement that you want to have.

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Bradley Howard: So Toby, Stephane has mentioned a few different technologies in the podcast so far. What's your view on some of those technologies?

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Toby Dixon: I think to absolutely agree with some of those points that Stephane has picked up there. Certainly data is something that we see as a significant theme across capital markets, across financial services generally. And the technology has now got to the point where that starts to be far easier to provide those kind of data services to the organization, that can serve up the data to the right part of the organization at the right time. That's projects that we are working on now and have been since cloud-based data platforms became possible, and probably think in the last three or four years we've really got into that space. So absolutely agree with that.

I thought it was fascinating, the point that Stephane made about it's kind of the push and the pull of innovation, if you like. It's the business need can be as simple as I was talking to somebody not too long ago, hedge fund manager got an iPad for Christmas in 2010. Guess where the organization went very, very quickly, in terms of wanting to be able to offer those services on an iPad for both the internal people, who are just as important sometimes, but also for their client base. So that's much more the business pulling that through and driving that agenda. But yeah, it's absolutely right. So I thought automation is a key piece of where capital markets firms are looking to go in order to make everything more efficient, more cost effective. And as they shift from a people cost base to a platform cost base, automation is part of that.

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Bradley Howard: Right. And Stephane, can you share some learnings from the innovation programs that you've been part of, both good and bad, for us?

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Stephane Malrait: Yes, happy to be open on that. And I will start with the bad. I didn't realize when I started in innovation, to focus really on innovation a few years ago, that it's really hard. Innovating in a large organization, it's extremely hard because we are not used to pilot and fail. In a capital environment, capital market environment and in banking, you recruit people who want to be winners, you recruit people who just want to make things work and create more revenue, more value, et cetera. But in innovation, it's a different principle. So you have to explore a lot more and you have to learn how to fail, the same ways (inaudible) the kids before he learn how to walk is going to fall on his butt a few times. But that part of the learning process. In innovation, it's the same thing. So this was the first realization for us where we launched 5, 10 projects and we were hoping that all those 10 projects will be a success, but in fact, no, only probably 1 or 2 of those 10 were going to go to delivery.

All the other one, through the learning, we learned that either it was too expensive or too complex, or it was not the right partner, or not the right time to implement. We had to stop those initiatives. But the one who are succeeding are proving real value. So they are still lesson to learn to do that. And the second lesson that we learn, and that's why I said in the beginning, our delivery innovation strategy's really to look at disruptive but also looking at the present, is that only looking at the disruptive serve is probably too far away in the future and may not get the benefit that you want right away. We'll talk, I mean, in other episode about DLT, AI, who are important subject for us. But value creation probably is in a few years time, and we cannot wait. When you work on the trading floor, the trader is P&L is on a daily basis. So risk management activity in a real-time thing.

So I don't want to know what's going to happen in three years time, they want to know what can be delivered in three months time. So we need to be able to reply to that demand and to be able to improve with new tools of what we can end today. But we also have to prepare for the future because if you don't start to think about what's going to happen in three years time today, you will never achieve that in three years. And I saw that when I started to see the electrification of our business 20 years ago, the effects market didn't become fully electronic, or the equity market didn't become fully electronic overnight. It took many years to get that adoption. But now, it's a given that if you trade effects that you trade equity, you trade it on electronic trading venues. So that's why this was a second learning for us, focus on the present and what you can improve now with new tech, but also prepare for the futures.

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Bradley Howard: Toby, does that resonate across your other clients?

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Toby Dixon: So we're following the industry trends, and we're also trying to understand where our clients and the market in general is looking to place their bets. We look at things in terms of what are the necessities that you've got to be doing now versus what are the things where you're placing a longer term bet. And I think Stephane nicely gave some examples of some of those, where the market knows that over time they are going to become important but they're not going to shift the dial right now. I found it interesting, Stephane, you're talking about three months time. In my experience, with the trading floor, it's normally what can I get done in the next few days or in the next few hours? Yeah, which actually in itself raises a very interesting and serious point. If you hit problems, as well as if you need to introduce change fast, probably in the dynamic market, you do actually need to have the technology that can cope with that.

So it's as simple as you need to have automation regression testing so that you can make a change quickly and actually get it out there quickly. So there's all these foundational elements that come into play as well to hit the present as well as the future. And it's making sure they're in play at the same time as looking at the things that probably, Stephane, you're being asked about by your colleagues who need to have an answer to, "What is our position on blockchain and what is our position on X, Y and Z?"

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Stephane Malrait: And cloud technology is another great example. So (inaudible), your first episode of your podcast three years ago, people were still a bit reluctant at that time to say how we adopt cloud technology in a capital market environment because you have to externalize the data, which is very private, with this you have to be very secure, et cetera, et cetera. So three years ago, there was still a lot of questions to be answered to migrate technology to the cloud. Today, it's not the case anymore. It's a well done deal that you have to move, you have to have a strategy, you have to have your system on the cloud. So that way, you always have to be prepared to know what you plan to do for the next three years.

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Toby Dixon: And that's definitely accelerating, that's moving faster and faster in terms of how quickly things go from maybe, maybe not, to, "Well, we're being left behind if we're not doing this." That's where technology's accelerating from my perspective.

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Bradley Howard: And Stephane, do you find it easier to say to other people within the bank, "We really should do this because it will open up extra opportunity"? Or do you find the stick sometimes helps, which is, "We really should be doing this, otherwise this is likely to happen and might be overtaken"?

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Stephane Malrait: (inaudible), and that's why I came back to this, it's hard because as human beings, we normally resist change. When you have your own habit and there is a system which has been working for 20 years, why should you change that system? And so you really need to have compelling reason to do the change. And normally, a human behavior will be, "Yes, I will do the change when I see everybody else doing it." So you wait until you get as many proof points as you can to be able to say, "Yes, it makes sense now, the industry is moving, I should move it." But a lot of time, if you wait to that day it's too late because as, Toby, you probably know, a large change project can take times. And if you wait until the others, your competitor, have done it, then you are behind the curve. It's going to take you three years to do it, and they will move to something else.

So you have to make some risk, you have to make some decision knowing that probably sometime you are going to make the wrong decision because you think, I don't know, somebody is going to move to a new set of technology and it will not happen as fast as you hoped or you predict. So your timing is going to be wrong. So that's why I think it's very important to continue to explore, and it's quite important to make the right bet and to learn. When I started 20 years ago, and I don't think people don't go to that extreme, but I was working in a bank that they were not sure which set of technology to use. So they put two teams delivering the same functionality based on two sets of technologies. And they told those team at the end, "We see the one who succeed to go faster to

market with the cheaper to implement. And this team will continue, the other one will probably cease to exist at the bank."

So it was a big, big bet that the bank was making, but it's to show that approach that you are not going to get it right all the time. But you have to be able to prepare and test the market, and to validate your assumption on the way and then you succeed.

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Bradley Howard: It's really interesting you gave that example about having multiple teams with the same focus because apparently, anecdotally, that's how a lot of the very large tech companies work, Apple, Amazon, et cetera. Apparently, they have very similar organization. Why do you think it works in tech companies rather than large banks?

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Stephane Malrait: So tech company, have by design a very large R&D budget because that's their business model. And so they have to innovate, continuously innovate, and because of that, they have to have teams testing and piloting new stuff all the times. As a bank, it's not our business to invent new tech and our R&D is very small. So I think it's one of the reason we prefer to deliver. And I think because of that, banks, when I started in the industry, in banking, a lot of banks were developing technology in house, to the point that some of the large bank had their own operating system, that they had their own database. Some of them had their own development languages, but now I think we see a much bigger shift toward partnering with tech company, buying software externally. So you want to develop in house something who are very key to your own IP, but the rest you can work with partner, or you can buy it from large FinTech vendors.

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Bradley Howard: Toby, any final thoughts on Stephane's response to that?

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Toby Dixon: No, I agree. I think that, across the industry, there is a place for the standard package systems which will get you something faster than if you were building it yourself. But your differentiation comes from how you take that and you weave in your own take on that. And so that's probably where we spend the majority of our time. We're not going to build a general ledger, but we are going to help organizations work on the differentiation that they bring to the market, and accentuating that through the use of technology. I think that's important, and I completely agree with what Stephen was saying, Let's not forget, not too long ago, technology was a cost center. It was to be a likened to the post room, whereas now it's an enabler. It becomes a product in and of its own rights. And so that's a big shift that I think has happened over my career.

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Bradley Howard: That's a really poignant way to wrap this up. Stephane and Toby, if any of our listeners want to get in contact with you, what's the best way? Stephane first.

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Stephane Malrait: Yes, I am on LinkedIn quite a lot, I'm on Twitter as well, so probably is the best way to find me and to contact me. I'm happy to connect with as many people in this industry as I can.

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Bradley Howard: What's your username on Twitter in case people do want to get in contact?

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Stephane Malrait: It's @ smalrait, my first initial of my first name and my last name.

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Bradley Howard: Thanks very much. And Toby?

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Toby Dixon: Same, LinkedIn, or by all means, they can contact me through Endava, my details are on the Endava website.

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Bradley Howard: Right, to both of you, thank you so much for joining us and sharing your insights on how innovation can be approached in the banking industry from a dual point of view. To all of our listeners, I really hope that you enjoyed this episode of our Tech Reimagined Podcast. Thanks for joining us today, and looking forward to doing so next week as well. If you enjoyed today's episode, we hope you did, then please recommend us to your colleagues, friends, and family. Until next time.