Jorian Murray ([00:01](#)):

Hello, I'm Jorian Murray, and welcome to Good Things Happen, the show that invites change makers and enablers to share their inspiring stories of progress.

([00:12](#)):

Whilst change can be uncomfortable, unexpected, and at times disruptive, it's inevitable. And more often than not, change is for good. We'll be hearing from people from all walks of life who have been at the forefront of change, including their journeys to get there and their motivations. Because when people work together for a common cause, good things happen.

([00:35](#)):

Today on Good Things Happen, we're joining Citi's 11th Annual Digital Money Symposium to be inspired by thought leaders from across the financial services ecosystem who'll be discussing the future of finance and money.

([00:50](#)):

We invited Alex Miller from Citi's Global Insights team to be our guest host. He's joined by Bin Ren, founder and CEO of SigTech, and Ronit Ghose, Citi's head of future finance, to discuss the emerging role of artificial intelligence in global banking and more.

Alex Miller ([01:10](#)):

Welcome Ronit, Bin to the latest episode of Good Things Happen. And we're here at the Digital Money Symposium here in London discussing the future of finance, and we've just published a report of course. But you've been writing about this topic for six years, back in 2018, AI in Finance. What's changed since then, Ronit?

Ronit Ghose ([01:25](#)):

Sure. 2018, we wrote a report called ABC, and the A was for AI. And we were excited, put it out, and then crickets. Nothing much happened.

([01:37](#)):

What's interesting is we've just published another big report now on GenAI as well as AI. And in that six year period, a lot has actually happened. And if you disaggregate media attention from work being done in enterprise or big banks, there's quite a difference. In our report, we have a chart. And in that report, we show SEC filings. Mainly in the US, but some other non-American filings as well. And those began to spike in 2018. So we wrote the report because -

Alex Miller ([02:09](#)):

Something was happening.

Ronit Ghose ([02:10](#)):

... something was happening, and there was a real step up on AI mentions in corporate filings by FIs and banks. Media commentary only really picked up in Q2 2023.

([02:25](#)):

So what's different this time around? Yes, there is obviously GenAI. But GenAI putting UI and AI together into the palm of our hands, but more importantly senior decision makers on ExCos and boards and politicians, that's changed the debate. So people like our colleagues in the innovation centres and labs,

they've been working on this for years. But this time around is it's just taken it to a higher level inside the organisations I think.

(02:54):

And that's a reflection of and led to lots of media interest, and hence we're discussing it. I think we've had like four or five panels so far at our Digital Money Symposium. AI is featured in most of them, if not all of them.

Alex Miller (03:05):

Well, maybe let's take that as the launch panel. You published the big report, the Citi GPS, pretty much overnight. What are the big messages that you're trying to get out to, whether it's policy makers, corporates, consumer systems?

Ronit Ghose (03:15):

Sure. So we're looking at how do we use AI? And then think about it, you can give them the wow. "Wow, AI is amazing," to, "How are we going to use it?" And avoid the ow.

Alex Miller (03:28):

You're really getting into the weeds of it.

Ronit Ghose (03:31):

And we do the how and the ow. Not so much the wow. I think we've done the wow now for 18 months or so, the hype cycle, the Gartner hype cycle. We've done the hypes.

(03:43):

In the report, we say, "This is undoubtedly good, GenAI and AI, for clients, particularly consumer and small business clients." And I'll come back to that later in the discussion. It's good for clients. It's good for us in our lives. It empowers us. The internet commoditized information. The information's out there, we just don't have time to think about it. And when it comes to money in particular, unlike say leisure or holidays or entertainment, we don't want to spend time thinking about it. What AI does is commoditizes intelligence. And so it's going to give us a lot of more decision-making tools. And that's going to be great for us as users of a finance in our lives. So I think users, consumers, the client benefits.

(04:29):

What we say in the report is I don't... It's unclear if the companies, the shareholders of the incumbent banks, benefit. And it's equally unclear if we as employees of banks benefit. I know it's a cliche to say on the one hand, on the other hand. And we delve into that in the report to say, "ho's going to win, who's going to lose at an enterprise level, at an employee level."

(04:57):

And there's one kind of stat I'd like to throw out there which we... Our colleagues in the services, our TTS division did this proprietary survey of about a hundred FI clients. And it's amazing-

Alex Miller (05:08):

Financial institution.

Ronit Ghose (05:08):

Financial institutions, thank you. Financial institution, mainly banks and some non-banks. And it's amazing, 93% of them said, "We're going to make more money. This is a good thing for us."And I was thinking, ooh, aggregate profit margins are going to improve. Not a lot. They said if you took the mean estimate weighted, it was about 9% increase in profits. Translate that into billions of dollars. The bank sector globally is obviously huge. In our time horizon, the survey was next five years, it implies a couple of hundred billion dollars of extra profit. And I'm like, "We're all going to make more money?" It's one of those things like all our children outperform, right? It's a little bit of that.

([05:53](#)):

What we're saying in the report is, "Whoa. Some incumbents who'll be," cliche, I know, but, "agile, fast follow, they'll win." The big techs, the FinTechs, whatever you want to call them, the digitally native companies, they're going to win. Just like we've had this 2-year journey, 15-year journey of FinTech. In China, in Europe, in America, that was really about the mobile internet. And if the mobile internet was an operating platform, this is the next operating platform. They're going to be new companies. We don't know what they are. There may be existing big ones, they're going to win. Some of the banks are going to win. But heck of a lot of existing players are going to lose market share. Which is why I think that overall headline number of 93% and a couple of hundred billion --

Alex Miller ([06:40](#)):

Hides a lot beneath the surface?

Ronit Ghose ([06:42](#)):

I think there's a lot going on beneath the surface. And the same for us as if we don't upskill, I think we've tried in our careers. It's up to people to discuss whether it's successful and all. But if we don't carry on upskilling and reskilling and we stay as we are, we are going to fall behind. We are going to fall behind. Because just like when I started my career many, many years ago as a financial analyst, my boss didn't use a spreadsheet. He used a scientific-

Alex Miller ([07:12](#)):

Extraordinary to even think about that. Yeah.

Ronit Ghose ([07:12](#)):

He used a scientific calculator. And the outputs, he would hard code into the spreadsheet. And he didn't use a mobile phone. That was my first value-added job at Citi.

Alex Miller ([07:21](#)):

That's incredible. And this shows you how far financial markets have changed just in our careers.

Ronit Ghose ([07:26](#)):

And so we've had this explosion in information. The value that hopefully we add is not compilation of data and basic communication, it's analysis and value-added analysis.

Alex Miller ([07:35](#)):

And insights drawn into that. Yes.

Ronit Ghose ([07:37](#)):

And that's what hopefully we'll be able to keep up with, but it's not a given.

Alex Miller (07:42):

No.

Ronit Ghose (07:43):

If we don't keep learning, keep reeducating ourselves, we will fall behind. And some of that's already happened to many of our peers.

Alex Miller (07:52):

Well, this is perhaps a great opportunity to bring Ben Ren, founder and CEO of SigTech into the conversation, because obviously you're right at the forefront of what's happening in this revolution. Maybe you could just briefly explain to us what SigTech is and then how you see your offering able to enable what we're talking about here.

Bin Ren (08:06):

Thank you, Alex. So SigTech, we provide solutions to front office users in capital markets. And most recently, we do a lot of new products using GenAI. And we really think it's fundamentally changes how people work, and there will be huge implications, both in terms of boosting the productivities and managing the costs. I think what happened is AI has been through, last 40 years, been through ups and downs, different types of progress.

Alex Miller (08:36):

This is not new, is it? It's been around.

Bin Ren (08:37):

It's not new. People have been working so hard at it for decades. I think the last time we had a major breakthrough with deep learning. People realised suddenly instead of focusing on handcrafting very narrow algorithms ourselves, just build generic deep neural network and just give it a lot of high quality data, it will actually end up outperforming. I think that was a huge surprise.

Alex Miller (09:01):

It was a major step forward, wasn't it? Yes.

Bin Ren (09:03):

Major step...

Bin Ren (09:03):

It was a huge surprise for the world.

Alex Miller (09:03):

It was a major step forward, wasn't it?

Bin Ren (09:03):

Major step forward. That's 10 years ago. And then ever since then, we are in an era of deep learning until the last few years, generative AI, because they actually scaled the deep learning neural network by another factor of a thousand or something. Suddenly, we see this dramatic inflexion point in performance.

Alex Miller (09:21):

That's incredible, that factor you mentioned, isn't it?

Bin Ren (09:24):

Yeah, I think this scaling, because it's exponential scaling both in terms of the amount of capital and computing resources required to train it, but also the output, the performance intelligence. And because it's nonlinear, so it's not like we improve a system 10% a year or 50% a year. We see these gradual improving capabilities. Actually, a lot of the capabilities in large language models, they emerge suddenly once we hit a certain threshold, so it's quite interesting.

Alex Miller (09:55):

Maybe you could help illustrate this capability with some examples, maybe what's working now and also perhaps things you look to solve for down the line, which we can't quite yet.

Bin Ren (10:04):

Yeah. I think when GPT-4 came out I think a year ago, and they had this very well-written technical paper on the capability of GPT-4, which by the way is already one year old. And they said they passed all sorts of university and graduate school-level exams.

Alex Miller (10:19):

There was a qualification-

Bin Ren (10:21):

They passed the New York bar exam, I think, which is pretty shocking. And for example, at SigTech today, we build autonomous AI agents that can pass the chartered finance analyst exam at 90th percentile performance.

Alex Miller (10:36):

The famous CFA.

Bin Ren (10:37):

The famous CFA, which takes like 1000 hours for a human to prepare. It's been many years since I sat there. Yeah, it's been a couple of decades, so I don't think back to that one. I think people spend thousands of hours, and it takes about eight hours to do the exam. Our agent can do the whole exam in 30 minutes, and they'll score at 90th percentile plus.

Alex Miller (10:57):

So there, you've got the capability of a CFA licence holder.

Bin Ren (11:01):

Yes.

Alex Miller (11:01):

And are you seeing applications of that that you're looking to deploy in perhaps the world of research or investing?

Bin Ren (11:08):

For the foreseeable future, I think we need to balance the power of this tool with expertise from the humans, so I can see two major change in the way we work. One is human will be always in the loop, especially in front office. The humans are certified by the regulators. Ultimately, you are responsible for the work, because I don't see how regulators are going to regulate autonomously a functioning piece of software.

Alex Miller (11:39):

And that's a key point, isn't it, is who's responsible?

Bin Ren (11:42):

Human has to be in the loop in our industry for the foreseeable future. It's a bit like commercial pilots. Given how much automation in the planes we have seen in the last decade, but we still need two human pilots to sit there. They are ultimately responsible for the safety.

Alex Miller (11:59):

That's a great parallel. Maybe Ronit, I could ask you to pick up what Bin was talking about in terms of gen AI and applications, and I guess in the conversations you're having with banks and fintechs, what you hear as being most exciting.

Ronit Ghose (12:12):

And just to pick up on the pilot analogy, it's a very important one. We need two pilots. Partly maybe it's human psychology that we are happy to be on self-driven trains and cars. Many public metro systems don't have drivers, but on a plane we need a driver. And the society and regulators treat banks like planes, because if we crash, it's a big, big deal. And we can't have complete automation, at least for now. The policy and regulatory world requires there to be a human that they can point to. But it's accountability is a better way to say it. And there will still be that need, whether it's that final investment decision, portfolio manager, capital allocation decision inside a company or a risk decision, there'll be a human.

(13:14):

But two pilots. There used to be how many? Five, six people in the cabin? I don't know. Not the cabin, the cockpit. Maybe not five or six, but there was more than two before. There'd be a couple of pilots, there'd be someone doing communications and there'd be a lot of people. And that's what's going to happen in financial services because there'll be some roles where we go from four or five pilots to two, and then there'll be other roles where we didn't have those jobs.

Alex Miller (13:45):

And that opens up that whole Pandora's box around jobs, and there's obviously the dystopian views around there will be no jobs left and of course there's other more Panglossian views. What's your sense,

Bin, when you think about the way in which gen AI and your company's capabilities will help enable activities to be done more efficiently or better? How do you think the nature of jobs perhaps begin to change?

Bin Ren (14:08):

This is a super relevant question. I think if we continue the analogy, given how far the technology in aviation has come, what happened is we had more pilots, not fewer pilots.

Ronit Ghose (14:21):

In aggregate.

Bin Ren (14:22):

In aggregate, because the cost-

Ronit Ghose (14:23):

It's less on a plane, but more planes.

Bin Ren (14:25):

That's right. Because the cost, it has gone down. The service become cheaper, more people use it, more volume. Therefore, actually the demand for pilots have grown over the years, not because of the automation. Actually, we have more pilots.

Alex Miller (14:39):

[inaudible 00:14:39] now just the introduction of ATMs back in the sixties and seventies, isn't it?

Bin Ren (14:42):

That's right. I think the financial services is especially relevant to our industry because I would say a large percentage of our cost, the industry is human capital. So when a technology like generative AI help boost the productivity, essentially creating more output at a lower cost, suddenly a lot of the businesses become scalable. A lot of the services we provide become scalable, so more people will be able to access it. There'll be more liquidity, more volume. I think in aggregate, gen AI is a huge opportunity to scale the industry. T

Alex Miller (15:22):

There's two great points you pick up there. I'd like to ask one to you too, Ronit. So when you think about that nature of skills and the way employees in financial services and perhaps beyond need to think about gen AI, any key pointers that you would draw upon?

Ronit Ghose (15:37):

When it comes to skills from a finance and banking context, what we've already seen happen in our industry is this shift, like in other information-rich or data-rich industries, from compilation to analysis. So as a young analyst, when I started my career, a lot of my time was spent literally data input, having physical documents. I was a bank analyst, so I'd get central bank documents, balance sheet of Bank of England or RIX Bank or wherever, and typing in the loan numbers.

Alex Miller (16:12):

Literally data entry.

Ronit Ghose (16:13):

Literally data entry. There weren't direct feeds from Bloomberg or Reuters or Datastream. Literally data entry. And that would take up 80, 90% of my job... Now, move on 20 years. My junior analyst didn't do that, or 15 years from when I was doing that, because they could just click a few macros and it would feed directly from an external data source. They spend more of their time on analysis. And if you think about what gen AI does, the internet commoditized information. Gen AI commoditizes intelligence, so we'll hopefully be able to do more creative analytical tasks. Now, I know that sounds Panglossian. And this is your earlier point, Bin. You were referring to it. I think it's called Jevons Paradox. I probably mispronounced it, but it won't be just that we'll be able to do it cheaper. For every unit of output, our unit of input will be cheaper. Our clients will have these tools, and sometimes our clients will have it before we do. So they're going to create, actually demand themselves.

(17:16):

Sure, for basic creative tasks, content tasks, whether it's coding or research or analysis, we'll be able to do 30 to 50% productivity boost if you believe the forecasts from many leading consultants. But our clients might be asking us way more questions. Our regulators might be asking us way more questions, our partners, our counterparts. So yes, hopefully without sounding Panglossian, we'll spend more time doing more interesting jobs. But I don't think the amount of jobs will change that much. In fact, if you look at financial services jobs in the US where we have the best data over the last 20 years, the massive revolution we've had in technology, as a percentage of the economy, it's broadly stable. It's amazing. Now, commercial banks within finance has declined-

Ronit Ghose (18:03):

... commercial banks within finance has declined as non-bank financial services companies have grown. So there's been a mix shift at an institutional level, and then within the institution, there's been a mix shift. But the overall amount of GDP or employment in money-related businesses seems remarkably constant in the US, despite all the change we've seen.

Alex Miller (18:23):

It's incredible that, isn't it? And maybe we can talk about some of those innovations of late, one of the things people talk about, of course, is that mass personalization and the excitement there is around what autonomous agents and GenAI could bring to wealth managers, to banks, and again, beyond finance as well. How do you think about that, Bin, today, in terms of where we are today and the capabilities, and where you think people want to get to?

Bin Ren (18:45):

Yeah. I think that generative AI as a piece of software can be quite counterintuitive, because when we normally use a piece of software, we think it's deterministic. We think we click this button, it would do certain things. If it doesn't work, we know it's broken in some way. But the large language models is fundamentally stochastic, so if you type the same question twice, you may get different answers, that's just the way it is. But this provides unprecedented way for a user to actually customise it. For example, you can make it behave like a persona. You can say, "Hey, behave like Steve Jobs for the next 10 questions." And then, you can ask very personalised questions like, "What's your biggest regret, Steve?" And it will actually answer those questions in a very authentic sense.

(19:37):

So when we provide these large language models to consumers or institutions, I personally divide the style of those agents from the capabilities of those agents. So the capabilities is normally provided by a company like Citi or by SigTech, so we focus on what this agent can do in a specific domain, what kind of datasets it has access to, what kind of tools it can use, and how it can use the tools in the right way, so those are capabilities. But once that's done and wrapped up as a product, the consumer can instruct this particular agent to behave in a way that they want, they can say, "Hey, give me a response to my research problem in a way that I can just copy and paste it in my email to share with my colleagues," or, "Write it in a more formal fashion because I want to use it in my research report." So that infinite, almost huge amount of customization driven by the user experience, I think that challenges our existing principles for user interface, so I find it quite fascinating.

Alex Miller (20:49):

So one of the other applications that we hear about is in the world of cost and customers' perspective of fraud. Do you see GenAI applications coming through in terms of fraud detection, fraud identification, that side of things?

Bin Ren (21:07):

I think since 18 months ago, people have been thinking, oh my god, a large language model will enable more deepfakes. So if anything, people are thinking, if anything, the-

Alex Miller (21:16):

Sitting at that dystopian end, just as we're all being asked to use our voices as encryptions.

Bin Ren (21:20):

That's right. So if anything, people are using the large language models, probably they're trying to do more fraud.

Alex Miller (21:25):

Yes.

Bin Ren (21:26):

So that's-

Alex Miller (21:26):

The mal actors.

Bin Ren (21:27):

... unfortunately, the negative side of the technology. On the other side, I think there are technology being developed to watermark and trace signs of AI-generated content-

Alex Miller (21:44):

Yeah.

Bin Ren (21:44):

... because they sometimes leave, actually most of the time, leave certain signatures. So there are actually applications already, if you copied and paste in a thesis written by university student, it can say what percentage probability that is written by a large language model, so your professor can say, "You have failed," or, "You have not."

Alex Miller (22:04):

AI against AI, yes.

Bin Ren (22:04):

AI against AI. I think that's inevitable. I think that will be, as the capability of the generative AI improves, there'll be corresponding technologies developed to try to-

Ronit Ghose (22:15):

It's a kind of race between-

Bin Ren (22:15):

It's a race.

Ronit Ghose (22:16):

... as the cliche goes, good guys with AI, with bad guys with AI, and we have that with all technologies. But the challenge for us now is we've all spent the last 20, 25 years in this digital world, where we got used to voice on phone, video on phone, video on tablet, and we now respond to in a way that maybe our grandparents wouldn't.

Alex Miller (22:38):

Without thinking twice about it.

Ronit Ghose (22:39):

Yeah. In the context of phishing or social engineering, we're seeing this already, in enterprise, corporates, and personal lives. You get a call from your mother or your daughter or your son, "Mum, I've been, whatever, kidnapped, I need..." And then, our human basic instinct-

Alex Miller (22:59):

Emotional response kicks in.

Ronit Ghose (23:00):

... because the voice sounds very similar. Now, maybe our phones will have a AI detection tool which will tell us, but that moment, our animal brain kicks in and we don't really stop and methodically... Going back to the pilot, I guess we all need checklists in a way. We were discussing this at a family event recently saying, "We need a family code word."

Alex Miller (23:26):

Yes.

Ronit Ghose (23:27):

And then, of course, we put it on WhatsApp, and we were like, "Oh my God, it's on WhatsApp," the family code word.

Alex Miller (23:32):

[Inaudible 00:23:33].

Ronit Ghose (23:32):

I know. Quick, quick, change to another one. We need to get around the campfire and share that code word in person. But today, the deepfake... We're, as humans, imperfectly imperfect. A machine tries to mimic us, they mimic the imperfections perfectly, and so they look at tonality, voice duration, et cetera, and they're trying to work out, this is probably a machine. But of course, the machines will keep getting... That's why it's a race between the good guys with GenAI and the bad guys.

Alex Miller (24:05):

Maybe that's a good point to ask how our regulators are thinking about this. And of course, regulators are not a single uniform beast, they're different in Dubai from Singapore, Hong Kong, US, and Europe. Do you find, Ronit, that regulators are around the world generally of a piece in terms of how they think about this, or are there quite distinct regional differences perhaps?

Ronit Ghose (24:27):

Well, there's... Without giving too much of a plug to our report, we have a whole chapter on the regulatory piece, chapter four, if you're looking at the report. Regulators around the world have very, like with everything, we see this with all novel or emerging technologies, they have different views, there's no single consistent views. There's a bigger picture question as to do we regulate AI, or do we regulate... We don't regulate electricity-

Alex Miller (24:55):

Yes, or the internet, per se.

Ronit Ghose (24:57):

Yeah, the bank's usage of electricity or internet, we regulate activities, so what is it we're doing? Whether it's fraud or consumer protection. So there's that more big picture philosophical question is actually-

Alex Miller (25:12):

And there is an argument that says that as any regulated industry is used to risk, that in theory, finance should be well-placed to handle that.

Ronit Ghose (25:21):

But of course, anything with money and finance, because we're a hyper-regulated industry, like pharma and others, change, pace of change and adaptation will be slower than in some of the lighter regulated industries, which is why in our GPS report we say maybe some of the tech companies, the fintechs or whatever we want to call them, the non-bank financial companies, let's put it that way, they might

actually be more willing, for regulatory reasons or just organisational cultural reasons, to take those risks, because a lot of big companies will say, "Let's get clarity and guidance."

Alex Miller ([25:57](#)):

Well, maybe, Bin, that's a nice one for you to think about, because obviously you operate around the world in different regulatory environments as well, how do you think about that challenge, and also the fact that perhaps some of the banks you're dealing with aren't always at the same place as you are?

Bin Ren ([26:09](#)):

I think in terms of regulation, I do agree from a philosophical point of view that they should be regulating maybe human-in-the-loop-driven activities. When was the last time, is there example the last time they tried to regulate a specific technology, can you think of any example you like?

Ronit Ghose ([26:29](#)):

Well, you could say blockchain, the whole debate in many countries around how to regulate blockchain, which is...

Bin Ren ([26:36](#)):

But they focused on, for example, what they could do in crypto, for example, you can't stake, it's a security.

Ronit Ghose ([26:43](#)):

Yeah.

Bin Ren ([26:44](#)):

They don't regulate, say, how do you do hash keys and link the blocks together, or you can only create one block every 60 minutes, they don't go into the technical aspects of it.

Alex Miller ([26:55](#)):

And philosophically, I guess, those can change over time-

Bin Ren ([26:59](#)):

Yeah, exactly.

Alex Miller ([26:59](#)):

... so you don't want to pin yourself down as a regulator.

Bin Ren ([27:00](#)):

Right. Otherwise, the regulator will be writing a tech spec for the technology, which is-

Bin Ren ([27:03](#)):

Otherwise the regulator will be writing a text spec for the technology, which is-

Ronit Ghose ([27:04](#)):

Yeah, and that's actually interesting and important point because when I've dealt with regulators, regulators historically, like bankers, like particularly senior bankers or seniors, finance, regulators and bankers tended to be finance people or legal people or accounting people. They didn't tend to be tech people. And that's a challenge.

Alex Miller (27:22):

This is the same understanding in the room. Yes.

Ronit Ghose (27:25):

Because some regulators, without naming any, have been more proactive at going out and hiring from the tech industry or the consulting world to bring in that talent in house because the senior regulators, if they joined those senior bankers 15, 20, 25 years ago, they didn't have that expertise. They were interested in that field. They'd have gone out and probably joined a tech company or started a tech startup. So how do you bring in that expertise is a challenge for the regulators but also for all of us in, call it, the traditional financial institution world.

Alex Miller (27:58):

And I know, Ronit, after the crisis, you were talking about the way in which the relationship with FinTechs changed for many banks. They understood the need to bring them more into the financial sandbox. Do you see the same happening here as we move into this new AI, GenAI age?

Ronit Ghose (28:17):

Oh, absolutely.

Alex Miller (28:18):

And then, I'd love to get your perspective on that, Bin, too as well.

Ronit Ghose (28:20):

Yeah, absolutely. We have a lot of smart people internally working on GenAI and AI.

Alex Miller (28:25):

From multiple backgrounds as well, multiple career perspectives-

Ronit Ghose (28:26):

Multiple backgrounds, multiple geographies around the world, it's industry-wide because there's a way... It's sometimes hard. We're very good at companies like us scaling things or doing things at scale, but developing new product sometimes is easier to do in a slightly more loose, relaxed environment.

Alex Miller (28:46):

Particularly when you have a lot of legacy infrastructure as well.

Ronit Ghose (28:51):

There's legacy technology. There's, we say, tech debt. There's also org debt and culture debt, there's all of that. It's not just all the-

Alex Miller (29:00):

All the things that you bring to the table. Yes.

Ronit Ghose (29:03):

Legacy is another way of saying this thing works, it's business as usual, it works, the machine works. But that car needs to be upgraded or we need to maybe move from the car to the railway-

Alex Miller (29:14):

[inaudible 00:29:15] the future as well.

Ronit Ghose (29:15):

... or the railway to the plane. It's hard to build it sometimes internally. So we are, like all big companies, investing as well.

Alex Miller (29:22):

And Bin, you yourselves, you talked to a lot of different financial companies, Presumably, some are more open-minded, some more receptive than others. How do you navigate that landscape?

Bin Ren (29:32):

We focus on the technology and then we try to always show our customers how much productivity they can gain out of it. We do work with them individually actually, to put in the guardrails. I think this is one thing I want to just talk a bit more because it's quite interesting because I think in terms of change management or the regulation on this topic, I think it used to be the case that the change management is designed around what we should do. We have almost like a long checklist that say, if you want to do anything new, follow these guidelines. Step 1 to step 38 or something, everybody, those of different people, I need to check it off it. It's built around what we have to do, what we should do. Whereas in GenAI, what I realised is that maybe the whole process has to be inverted, instead has to be focused on what we shouldn't do because the capability is so many.

Alex Miller (30:30):

Don't limit yourself.

Bin Ren (30:31):

Don't limit yourself. Instead, focus on the constraints. Set the constraints or set the constraints so anything falls within the problem space can be easily solved, but focus on setting the constraints. And on this, ironically in my opinion, that it's actually very relatively easy to set constraints for generative AI, large language models because you literally just take the entire documents. You can say, here's the regulatory requirements that this, just give it and say, read it, follow the guideline as closely as you can. If you're not sure, ask for my permission. Actually-

Alex Miller (31:08):

The power of the prompt.

Bin Ren (31:09):

The prompt, you can basically follow it and if you're not sure and ask me. So I find it quite interesting because if you invert it and then actually make the whole thing actually work really well. Very ironic.

Alex Miller (31:20):

Interesting. So quite positive in that perspective.

Bin Ren (31:22):

Very ironic. Yes.

Alex Miller (31:24):

Interesting. So as we think about going forward the next three, four years, we're going to get a lot of headlines, we're going to get a lot of claims. What do you think, Ronit, we should be most focused on?

Ronit Ghose (31:34):

Yeah, I think you're going to see a lot of big companies use this technology, whether it's GenAI and AI and a distinction nomenclature will just kind of converge at some point anyway or collapse into each other. We're going to see a lot of incremental change or attempts of putting this technology, whether LLMs or others, into existing processes. Now that's, not to be poo-poo with that, that's good because in many of our more automatable roles we will create efficiency gains and savings.

(32:07):

What's going to be really interesting is whether it's existing companies or new players who say, how do I create new processes around this technology? And we've seen this with lots of other general purpose technologies. So steam engine arrives, productivity doesn't take off until we re-engineer the production chain around-

Alex Miller (32:26):

It all has to fall into place.

Ronit Ghose (32:27):

Yeah. And same with electricity. Same happened with compute and computing. So will we do that or will we watch others do it? In the FinTech revolution so far, when it comes to money and tech in the consumer space, it was led by non-bank players. In the institutional space it was a mix. And that's the really interesting bit of the pie, not the faster horse. And we'll all probably be working on the faster horse. Someone's going to come around and go, I've got this thing that looks like a waggon without the horse in front. And you'd be like, what is that thing? And that's going to be the interesting point is. And I don't know, that's going to be an existing big tech company. We had this UK CEO of a very big FinTech, and she said, of course it's going to be... I hope it's going to be us, she said. Of course I'm going to say that, she said. But will it be, will they become the incumbents? [inaudible 00:33:29]

Alex Miller (33:29):

And I guess that's the intrinsic uncertainty of being at the cutting edge of such a revolutionary technology.

(33:34):

Well look, Ronit, Bin, thank you very much for what was a fascinating discussion. And obviously watch this space, read the report,

Ronit Ghose ([33:39](#)):

You read the report, [inaudible 00:33:40] on the report.

Alex Miller ([33:41](#)):

Get in touch as you'd like. Yes. Thank you very much both.

Bin Ren ([33:44](#)):

Thank you, Alex.

Alex Miller ([33:44](#)):

Thank you.

Jorian Murray ([33:47](#)):

Thanks to Bin Ren, Ronit Ghose and our roving reporter Alex Miller for today's episode, which completes the fourth series of Good Things Happen, and what an absorbing series it's been. We've met some fascinating guests on a wide range of topics. We've discussed what's being done to help tackle global hunger with the World Food Programme, learned how doors are being opened to careers in finance to attract and enable people from more diverse backgrounds. We met extraordinary para athlete Lauren Steadman, who will soon be competing for Olympic Glory in Paris. Explored new frontiers in artificial intelligence, got an insider's view of the new space age, explored the tech revolution in healthcare, and learned how city's wealth managers are preparing to meet the needs of the greatest wealth transfer in history.

([34:41](#)):

Thanks to all my guests for taking time to share their stories. And thanks to you for tuning in. It's time for us to take a break for summer in the Northern Hemisphere, but we'll be back later in the year for our fifth season. If you've enjoyed listening, please subscribe and follow Citi's social media. Until then, take care of yourselves and let's make good things happen.

Speaker 1 ([35:05](#)):

ENDS