



#### TRANSCRIPT: EPISODE 311

9 May 2024 (pre-recorded 1 May 2024)

Below is a transcript of the episode, modified for your reading pleasure. Please check the corresponding audio before quoting in print, as it may contain small errors. Please remember we've been discussing individual companies to bring investing to life for you. It's not a recommendation to buy or sell. The fund may or may not still hold these companies at your time of listening. For more information on the people and ideas in the episode, see the links at the bottom of the post.

#### [NTRODUCTION]

**Staci West (SW):** Welcome back to the 'Investing on the go' podcast brought to you by FundCalibre. With AI dominating conversations globally, our guest this week sheds light on its evolution and provides insights into the investment landscape today, from ChatGPT to healthcare and more.

**Chris Salih (CS):** I'm Chris Salih, and today we are joined by Chris Ford, manager of the Elite Rated Sanlam Global Artificial Intelligence Fund. Chris, once again, thank you for joining us today.

Chris Ford (CF): Not at all. Thanks for having me, Chris.

#### [INTERVIEW]

**CS:** So, A and I, probably the two most popular letters in the alphabet in 2023. You've got the launch of ChatGPT, strong returns from the Magnificent Seven, which all of our listeners will have heard about, but obviously you've been investing in this space for a number of years. I mean, is this all your Christmases come at once? Has this evolved into what we're seeing now? Give us a bit of insight into the evolution of AI and where you see it at the moment.

**CF:** Yeah, so I mean, we've been focused on AI since 2016; we launched the fund in 2017. So you know, some of us have been running around telling anybody who wanted to listen that this was coming for quite a long time now. So, certainly what occurred last year didn't come as a surprise to us, and actually, particularly with respect to natural language processing and natural language generation, which are the foundational technologies which stand behind ChatGPT, which most people will have now encountered. You can trace the history of success, technical success, if you like, in the artificial intelligence world over the course of the last five or six years through the succeeding capabilities of natural language processing, natural language generation platforms.

So really, you know, GPT-3, which was the foundational technology from OpenAI upon which ChatGPT sits, when it was launched at the back end of 2022, that was really just the next iteration of a process that had been observable and ongoing for a number of years by that point. So it shouldn't really have taken the market quite by the surprise that obviously it did.



#### TRANSCRIPT: EPISODE 311

So, it's been a fairly extraordinary 12 months as Microsoft on the back of their partnership with OpenAI launched the ChatGPT product and, if you like, kind of ripped the bandaid off where previously companies like Alphabet [Google's parent company] particularly, had been seen to be leading in the field of natural language processing and generation but tiptoeing quite carefully into that world, I think, for fear of not wanting to overstep from an ethical perspective.

Microsoft took a different view then, here's this extraordinary powerful technology; we're going to make it available to you, we're going to democratise it, we're going to monetise it, and in so doing, they opened Pandora's Box and all this stuff came flying out that we now have been engaging with for the last 15-16 months. And of course, as with Pandora's Box, you can't put the lid back on. So this is now technology that's in the world. We might wish that we could curate it a little differently but it is here, it's here to stay and we now need to find a way of engaging with it safely and of bringing it to address the corporate process issues problems that we think it can address very, very successfully in a number of different areas. So it's been an extraordinary year and one which really suggests that we are just in the foothills at the beginning of what's going to happen in the artificially intelligent world, not at the end of it.

**CS:** Well, that brings us nicely onto the next question, which is, you mentioned that Pandora's Box has been opened only 15-16 months ago — what is the current state of AI? And I guess you can look at that from two angles. Firstly, as an investor: is it still early stage? Is it still very, very early stage? And from a company perspective: are companies only just getting to grips with AI and, you know, we're not worried about big winners and big losers straight away in terms of companies being bought and sold, is it still very, very early days in terms of how they make use of this new technology?

**CF:** Yes, I think we can think about it in three ways. It's the kind of technology angle, you know, where are we in the development of AI from a technical perspective? Then, where are companies in respect of their engagement with AI? And then lastly, from an investment perspective, how do we engage with that in the investment world?

So, in the technical world, the achievements of AI continue unabated. And, of course, some of the more obvious examples of this would be the achievements that Google in particular has managed to achieve through DeepMind in the world of material science or in the world of protein folding, for example, within the last 2-3 years. So the pointy end of the spear, if you like, from a technical perspective, continues to become ever sharper and there's no sign of that dwindling.

But at the same time, those companies that are investing in those leading-edge technologies, perhaps now have a sharper focus on how those technologies will be monetised. And that is a change in the course of the last year. And really, Alphabet is the company really at the focus of that drive. They've achieved an awful lot in AI, but I think investors got to the point whereby they were perhaps a little bit disappointed by how much of that had been falling to the bottom line. So there is a greater focus now on these large platform companies in respect of making sure that where there is



#### TRANSCRIPT: EPISODE 311

development dollar being spent from an R&D perspective, it's with a clear focus on them, what can can be delivered from a cashflow perspective.

The companies are very early in their delivery and engagement with artificially intelligent systems. And there are nested levels of impediment, if you like, to engaging with AI. Yes, you've got to have the technology, but you've also got to have the data because there's no use having the AI without the data to which you can address that AI to wring something that's useful and actionable out of that information store. But that's not good enough either: ideally, you want to have well-curated data, and if you've got that scale of data in a well-curated place, you've then got to understand a lot about your own business to understand which of your business processes can be successfully addressed to improve those processes using artificially intelligent technologies.

And then the last thing you've got to have is a really change-minded culture, because if you don't have a change-minded culture, then it's very unlikely that, as an organisation, you'll be successful in your ability to deploy artificially intelligent systems to change that culture and deliver those improvements inside the inside the business.

It was very interesting on Microsoft's recent conference call, which was, of course, heavily inflected with AI activity all over the place. And the CEO there, [Satya] Nadella talked explicitly about this in the case of cultural change, and he said that one of the interesting rate limiters is - in terms of the adoption of AI inside organisations - is cultural change within those organisations. He specifically went on to say that what he meant by that cultural change was process change, pointing out that, at the end of the day, companies need to take one of those processes, simplify the process, automate the process, and then apply those artificially intelligent solutions to that process. And so a lot of what we spend our time doing here when we are thinking about AI is, of course, looking to understand the technology but it's also looking to understand how we can find those companies that are capable of actually embracing that technology, bringing it into the business and delivering that corporate change.

**CS:** I just want to ask a quick question off the back of that. So, you've got sort of the companies that are developing the AI solutions and the companies that can make use of the AI solutions. I think I spoke to someone recently, he said that AI is something that is a solution to a clear problem, whereas something like crypto is a solution to something that we perhaps don't know what the problem is yet. The sort of growth of AI has been so fast and so rapid, and you mentioned the big data and things like that, et cetera, does it mean that, from the development side, there's already quite significant barriers to entry ie. the Magnificent Seven along the line? Or can there be other winners on the development side still at this stage?

**CF:** There can absolutely be winners on both the development side all the way across the food chain, if you like, from an AI perspective. AI is a deeply, deeply unfair set of technologies. And if you are a company that is capable of engaging with AI in a meaningful [way, there are] just extraordinary nested advantages available to you relative to your peers, for those using or looking to



#### TRANSCRIPT: EPISODE 311

use the technology to engage to improve their business processes, the source of that competitive advantage might be the availability of the technology. It might merely be not so much the availability of the technology, but a deep understanding as to which of their business processes might be addressed by that technology. It might not be those two things, it might instead be the ability of that corporate culture to engage with the change.

On the tool development side, clearly there is a rapid degree of innovation there. And so I think one of the perceptions has been that when ChatGPT was launched by Microsoft at the beginning of 2023, it was almost as though the curtain had come down, history had ended, and Microsoft had won. And that's not of course true. We saw AI come from, for example, from Alphabet, but also companies like Hugging Face in the private world deliver really, acutely capable AI models in the language modelling space. So, we continue to see that that kind of leapfrogging behaviour that's been a characteristic of the artificially intelligent world for, I mean years and years and years and years now. And we don't see any kind of significant change there.

What we do see, however, is in and amongst the Magnificent Seven, and they amongst themselves are by no means <inaudible>, we see an opportunity to monetise, to commercialise these artificially intelligent platforms, particularly in the enterprise context, perhaps sooner than would be the case amongst smaller companies.

**CS:** You mentioned one example there. I mean, obviously a lot of our listeners will have heard of Nvidia - they'd probably be very happy if they invest in Nvidia! - but can you maybe give me another example or two of a company that investing in AI that, or benefiting from AI perhaps maybe not as direct perhaps as some of the listeners maybe expect?

**CF:** When we think about the Magnificent Seven, we think about them differently. Not all of these companies are engaged with AI to the same extent. So on the one hand, obviously you have Nvidia, as you mentioned, you have Microsoft, you have Alphabet, Meta arguably as well - we don't own that in the fund at the moment - all of them very heavily engaged with AI and are pretty well understood. On the other hand, we have some really interesting companies who are using AI inside their business significantly to improve those businesses, and where we think that that adoption of AI largely stands ahead of us. So for example, we're thinking here of companies like John Deere, for example, in the agricultural equipment markets. You know, we think that we're still very early in the process of Netflix, beginning to really benefit from the artificially intelligent systems that they have inside their business.

One of the more recent additions to our fund has been an Australian utility company in the integrated utility space - not perhaps the most obvious part of the economy that you would expect to find fully engaged with artificially intelligent systems.



#### TRANSCRIPT: EPISODE 311

So, if you're looking at the market through the right prism, we can see great examples of artificially intelligent competitive advantage being delivered in lots of different geographies and right the way across the economy. It's a very exciting time from that perspective.

**CS:** Okay. You kind of touched on it slightly there, but I want to go a bit deeper. Obviously, maybe talk through some of the companies you feel might be possibly hurt or the areas that might struggle because of the growth of AI. And then by the same token, maybe areas that are going to benefit that perhaps people haven't discovered yet. I mean, you talked about John Deere and the agricultural side there and things like that, but maybe just give us a bit of insight on both of those please.

**CF:** Yeah, so we're already seeing companies significantly undermined by the the presence of, I mean, at a very kind of basic level data science-led solutions, but more specifically artificially intelligent systems. And this has been ongoing for a long time now. You know, if you look back even 15 years to the advent of the online travel agencies such as Expedia and Priceline and TripAdvisor and so on, those companies sprang forth without really a brand, without any market share, but with a data science-led approach to addressing their market. And in the face of that data-led onslaught, Thomas Cook, with the best, longest-lived brand in world travel, simply couldn't compete, and by the time it woke up and understood what was going on, it was too late and, of course, that company now no longer exists.

People will be well familiar with the disruption that we've seen in the retail space wrought by Amazon and Mercado Libre and Alibaba and Pinduoduo [PDD Holdings] more recently, all of it led by companies that have artificially intelligent systems really at the core of what they do. So, we've been living in this world of disruption from AI for some time.

We're now seeing AI begin to disrupt the healthcare industry very, very significantly, both in respect of drug discovery, for example, on the one hand or alternatively disrupting the means by which medical imaging is delivered to patients, to streamline that process, drive the use of medical imaging more broadly across the medical environment, but also increase the accuracy of the interpretation of that medical imaging to the end of delivering better healthcare outcomes for patients - AI being used to manage hospital supply chain. So, really healthcare is an industry where we think there'll be very, very significant disruption both in terms of delivery of healthcare, but then also in respect to the way in which it's financed in the insurance business, particularly in North America. So, we're finding this in lots of different places.

You asked as well about some of the ... there's some obvious losers there, I suppose. When we look at some of the further flung parts of the market, places like the insurance industries, for example, stand a huge amount to gain from their employment of artificially intelligent systems.

One of the things that we find perhaps a little frustrating is the relatively slow adoption of robotic process automation tools from companies like, I mean, people here on this call might remember Blue Prism [Group] here in the UK market a few years ago, now UiPath over in the US. These are



### TRANSCRIPT: EPISODE 311

tools designed to use data science and AI to significantly improve the relatively mundane operational processes inside large organisations. And of course, if you think about something like an insurance company, these are effectively huge bureaucratic organisations, very regulated, lots of paper being pushed around or virtual paper being pushed around every day. If all the economy were to do were to thoroughly engage with a relatively lagging-edge example of artificially intelligent systems such as robotic process automation tools, the impact in respect of the efficiency in the middle of the P&L would be absolutely enormous.

So, whilst we spend a lot of time focusing, you know, all of us in the press and so on, on the kind of pointy end of the spear, the extraordinary things that things like ChatGPT can achieve and have delivered over the course of the last 15-16 months, actually, there's now a large-ish body of relatively lagging-edge AI tools - and by lagging edge, I mean those that are merely 5 or 6 years old rather than only 1-year-old. You know, these are not things that have been around for decades, but that have not yet been fully deployed - and that is a massive opportunity for companies to improve the way in which they do business.

**CS:** Just to pick up on one point quickly, you mentioned AI in drug discovery. Can you maybe just give us a bit more on that, please, just explain what that entails?

**CF:** Yeah, so we're seeing artificially intelligent platforms being delivered into drug discovery organisations, sometimes at the large pharmaceutical organisations of course, as you would expect, but also in relatively newer businesses, to increase the accuracy with which R&D dollars are spent towards a particular therapeutic end, and to hopefully reduce the time it takes to take a molecule from the point of discovery to the point that it's going through human trials and working towards full authorisation. So the goal here is better efficacy, but also shorter time to deliver drugs.

And one of the interesting things for us is, of course, you know, when we went through the pandemic period, two of the companies that were most successful in developing vaccines in really very, very short time periods compared to what you would traditionally associate with them with drug discovery were BioNTech and Moderna, both of which have very significant data science-led efforts inside those organisations, as well as some other things which you differentiate them perhaps from a more traditional pharmaceutical effort.

**CS:** A lot of people immediately when they hear AI of recent times will think of ChatGPT. Maybe just talk me through what you think the next version will look like in terms of when it's expected to launch soon - are you excited, do you think investors should be excited about the next version of that?

**CF:** Yeah yeah, but I think, you know, we are continuing to see the field of natural language generation as one of the crucibles if you like, within which those at the leading edge of artificially intelligent activity seek to burn brightest. So, it's a really kind of blue ribboned activity, if you like, within the AI field.



#### TRANSCRIPT: EPISODE 311

One of the things that I think is really interesting about what's going on in the field at the moment is, for the last 5 years we've been focused on the increasing synaptic density of large language models. And it's the complexity inside these large language models that on the one hand has facilitated their ability to achieve what they have, but on the other hand, has brought with those achievements some fairly conspicuous issues, such as power consumption, heat consumption, and so on. Electricity availability is now becoming a real issue for those at the leading edge of AI. So one of the things that we're very interested in is what's being done at the real leading edge at the moment in terms of looking to prune those neural networks back to use networks of lower synaptic intensity if you like - sometimes referred to as small language models - to deliver outcomes of similar acuity but without some of those complexities that lead to the operational drawbacks that I've alluded to. And so I think that now the capabilities of the natural language generation processes delivered through large language models are lending themselves to, perhaps, they focus on efficiency rather than focus on raw performance. And I think that's something which will be very interesting to see over the course of the next couple of years.

**CS:** Okay. Older of us remember the dotcom bubble, there is a bit of a history of people getting, let's say ahead of themselves when it comes to the next big thing in tech, you know, into 3D printing and the like. Is there any danger of that happening with AI? I mean, there's this big, big mound of cash and there's a lot of people looking at it and going, I want some of that cash. There's going to be some who perhaps don't come with the rights, you know, they've come with a me too or something that's a bit behind the ball. I guess what it comes down to is are you a) worried about that? and b) how do you maintain a valuation discipline that goes, you know, this is still early stage, but I can see faults in that versus that, even if it is early stage - maybe just talk us through that in your process.

**CF:** I think the first thing to say is that it would be specious to suggest that there won't be disappointments along the way, of course there will, that's the nature of any kind of leading edge technology and to suggest that everything that's flying around at the leading edge in the field of AI at the moment will be ultimately commercially successful would be wrong. But it isn't the same as the dotcom bubble. You know, I'm old enough to have been running money back in the late 1990s and the critical difference here is that the companies that are characteristic of the leading edge of endeavour in the artificially intelligent world, some of the Magnificent Seven that we've mentioned already, Nvidia, Microsoft, Meta, Amazon, and so on you know, these are not small companies, they're not newly formed companies, they're not new IPOs, they are not companies that have yet to turn a profit. In fact, many of the companies I just mentioned are some of the most profitable business models that the world has ever seen. And neither are they uniformly expensive, even when looked at using traditional measures.

So if you look at Alphabet, for example, it's trading broadly speaking, in the middle of its evaluation range over the course of the last 10 years and around 20 times earnings. So, it's actually trading at a discount to the market at the moment in the S&P. On the other hand, Microsoft is expensive, Meta and Amazon, somewhere in between the two - and Nvidia actually looks cheap relative to its recent



#### TRANSCRIPT: EPISODE 311

history. So, we have some very significantly different circumstances sitting in front of us at the moment than those which existed in the late 1990s into 2000s, so I think it's important not to conflate the two.

**CS:** And does that same valuation discipline come in for those sort of companies beyond the Magnificent Seven, just examples of smaller [companies]?

**CF:** Yeah, I mean, the last companies that we've been adding into the portfolio have been coming in on low double digit PEs [price-earnings ratio], kind of low teens PEs 12, 13 times earnings.

So, one of the things that's very nice for me managing the fund that we do here, is that we have a really rich and diverse investment universe standing in front of us, [which will] continue to get bigger and broader and deeper and better over time. And that means that we are not ghettoised at the very expensive end of the market in the way that maybe some others might feel that they are, but we have the opportunity to move elsewhere. And there's nothing magic about running an AI fund that sets it apart in terms of the day-to-day blocking and tackling when compared with running any other sort of long-only, global equity fund: we use the same valuation tools as other people do, and things every now and again get too expensive and equally, every now and again, things get too cheap and they provide the opportunities for taking positions in respect of the stocks in question. I suppose the only thing that is a little different is that we have an investment universe, which is characterised by very high levels of long duration, persistent revenue growth. And that does lead one to have high conviction visibility into some fairly near-dated economic performance, which is perhaps in excess of that which you might more normally associate with the broader market.

**CS:** I want to finish, you mentioned the investment universe there. Just maybe tell us how much that's grown in the last 18 months: is it significant? And then maybe just talk us through what you see as the next stage for AI as well, please.

**CF:** Yep, so our investable universe has changed over the years. So, when we started our fund in 2017, we launched with an investable universe of about 250 companies, give or take, globally. That list is now about a thousand companies. Now, that thousand companies is a subset of between 20-25,000 equities that conceivably we could choose to hold, they would have the liquidity characteristics that we might need to own at the fund, so, just removing 95% of the liquidity-adjusted opportunity set by specifically looking for only those companies that are meaningfully engaged with AI. But the universe has got bigger over time, and I think that's healthy for us. Certainly it means that the bar goes up in respect of those companies that we look to hold in the fund, and that's hopefully to our own fund holders' best interests.

In respect of what's coming down the pipe next, I mean, there are a number of things that we think are happening right now. What we're seeing at the moment is the building out of the infrastructure upon which the artificially intelligent world will sit. So, we're seeing the communications infrastructure invested in, we're seeing obviously a huge amount of money spent in the data centre



#### TRANSCRIPT: EPISODE 311

infrastructure which is required to facilitate the delivery of these platforms. But, of necessity, you can't begin to deliver the products and services until the infrastructure is built. So, if you like, the activity that we're seeing, the huge CapEx [capital expenditure] numbers we're seeing from some of the big guys at the moment, the massive revenue success we're seeing in Nvidia, that is, if you like the proof point that shows us that we are just now building the infrastructure.

So, what we're going to see, we think, over the course of the next, shall we say, 4-6 quarters, is to some extent a pivot away from this kind of maniacal focus on the infrastructure build - which unquestionably will continue for some time - towards those services then being delivered. And we think that Microsoft is one of the most interesting areas of focus: can they deliver against their promise of AI in the Copilot space for example, over the course of the next 3-6 quarters? But equally, we'll start seeing more and more AI-facilitated services delivered probably first in the software space and then broadening out into other parts of the economy.

So, we're going to see I think a less kind of squeezed market, if you like, in AI, where it becomes less about the Magnificent Seven and less about Nvidia and less about AMD [Advanced Micro Devices] and less about SMCI [Super Micro Computer Inc] and so on, and more about those companies that are going to be leveraging that infrastructure.

And I think that to your point earlier about the parallels with the internet bubble, whilst the internet bubble unquestionably, obviously with the benefit of hindsight, was a bubble, the vast majority of the economic value that's been created from the internet wasn't created in 1998, 1999, and 2000, it was created by those companies like Amazon most famously perhaps, that have subsequently built entire business models on top of the infrastructure that was built at that time. And I think what we're likely to see in the artificially intelligent world is exactly the same thing happen here, that we'll see business models created disrupting existing industries, facilitated by the infrastructure that's being invested in right now.

**CS:** On that note, Chris, thank you very much for your time today.

CF: Not at all.

**SW:** The Sanlam Global Artificial Intelligence fund uses AI systems in its fund process to help find companies whose business models are aligned to benefit from the growing world of AI. A particular stand out feature of this fund is its ability to look for companies that incorporate artificial intelligent systems into their business, rather than simply those companies making AI today. To learn more about the Sanlam Global Artificial Intelligence fund and read other thought pieces on the topic of AI, please visit fundcalibre.com