

Michael

BACKGROUND

Good afternoon, Michael. How are you this afternoon?

Yeah, I'm good. How are you? Thank you for having me.

Thank you for making the time. It is Friday, the 2nd of October, and the time is 13:37 in the afternoon.

Thank you for agreeing to do this interview and as I've already alluded before, your feedback is very valuable and I appreciate you making some time to participate in this research. The title of the research is, Exploring Data-driven Decision-making in Uncertainty – and as you can imagine, this has been inspired what 2020 has been mostly characterised by, and in short, being the uncertainty brought about by Covid-19. So particularly in light of this uncertain and all other uncertainties that people encounter, literature has shown that during periods of uncertainty, the most ideal decision-making techniques are actually (0:01:12) and therefore we're actually trying to espouse whether, and explore whether data-driven decision-making as a technique, can provide value to organisations in times of uncertainty, as opposed to, or in addition to, right.

Right.

You'll find the informed consent form that I've sent you. There are some objectives there and then I've also gone on to say, made mention of the fact that it is exploratory in nature. You are encouraged to speak freely, knowing that as much as the information will be used, your identity as the provider of this information shall remain confidential and anonymous. You may withdraw at any time from this interview without any prejudice, and please note that we will be using a third party to transcribe this interview for us, but we assure that the confidentiality is maintained through a non-disclosure agreement. My supervisor is Dr Charlene Lew. Feel free to contact her should there be anything that you probably need clarity on, or any concerns that you may have.

Alright.

INTRODUCTION

Thank you sir. So now we're getting into it. I think as we get into it, it's mostly really just to get an understanding of your current role, your organisation, so it's things around your role, your responsibility, level within the organisation, the company, industry or sector, as

well as size of company, be it turnover or staff complement, whatever information you have at your disposal.

Okay. Do you want to fire away the individual questions and I'll just answer those, in terms of who I am? It's easier than trying to remember the list.

Great. You are Michael Trehurn.

Yes.

Michael, what is your current role and what do your primary responsibilities entail?

I'm a portfolio for a small boutique asset management firm based in Rosebank, Johannesburg. We've got a staff complement of 4 professionals and 2 assistant staff. So the organisation size is 6 in total. Our assets under management are roughly R6 billion.

That is a lot.

The weak rand has helped us. So 85% of my assets sit in US dollars and the remaining 15% sit in rands. We only invest in large blue chip companies, both on the JSE and in the US. It's simple. We try and keep things not complicated, and yeah, we've got probably a client base of about 700 clients between those two asset classes.

That's impressive, I think, for what you term a small boutique asset management firm; it's actually quite impressive, so well done on that.

Thanks. Yeah, we used to be 4 people with 1 ½ billion under management, now we're still 4 people with 6 billion. It shows liability to scale, I suppose.

Well done. Very well done.

DISCUSSION

And then I just want to set the scene so that you get the feel of what we're really trying to get out of this research. In terms of literature, uncertainty relates to constant change; it relates to hard-to-predict scenarios – scenarios where there's ambiguous conflicting, unavailable, or in some instances even unreliable information and key pieces, the

unavailable part. And this brings to, I think, a simplified sort of statement of the unknown unknowns, right.

So you differentiate between uncertainty and risk there?

Yeah, yeah. So for you, I think there's a general consensus that Covid-19 has had some contribution to uncertainty as far as obviously the future is concerned. In you guys' case as an organisation, as well as in your individual capacity, how has Covid-19 contributed to the use of data in your decision-making – if at all?

Yeah, so I'd say it's not much of a change. What it has done is it reinforced the idea that those fringe risks that's still coming, come true. So the risk, or the uncertainty of having a pandemic, you know, any risk model would have shown you that risk and chance, their impact; so to say that it was unforeseen that you'll have a pandemic isn't probably entirely accurate – there is always a chance, but until it comes true you assume it's never going to happen. So what it's forced us to do is to review our contingency measures to make sure that we've taken account of the fringe risks to our business, to make sure that those – even in the very unlike scenarios – we've got a backup plan that limits the impact on our business. So that's how this has impacted us.

Okay, cool. Quite interesting. I'm just trying to hold the thought, you've probably had to reassess.... just the last part, and I'm trying to bring it into my next question. So data-driven decision-making refers to the use of data to support the decision-making process, right...

Yes.

...in your organisation. I think the last part of your point, how and then when? How and when do you rely on data when making decisions in uncertainty? Because I mean, that's the reassessment part. So in uncertainty, how and when do you rely on data?

So I suppose we have to break it down into two different segments. The one segment is our operation model, our operating ability – that would be your day-to-day running of the business. And then the other part of it would be decision-making around what investments to put our clients' money into. Those are two different choices. So we looked at it from an operation perspective, particularly around the risks of working from home and having a lot of information on Cloud and that sort of thing, to make sure that our redundancies have redundancies. So it's not directly using the data models like you're talking about to make decisions, it's more about technology respect there.

So you've stopped using the conventional models, is that what you're saying?

I would say it's more of a case of highlighting the risks than before. So it's using data to reinforce that there are risks there, instead of just ignoring it and saying that it will never happen.

Very nice.

We're a very, very simple business. In terms of forecasting, so for example with our clients we use data all the time, and that data, you're looking at long-term trends. I think the field that you're more looking for is short-term trends, and that's not really a place that we play. Yeah, any forecast that you make, you're guaranteed the forecast is wrong – all that you don't know is how wrong it is. And that's sort of how we operate. We say that we can't make short-term calls, and as long as our long-term calls are roughly right, we're okay with that. Yeah, like lots of data and that sort of thing is not really our realm.

Okay, it sounds good. As far as reliance on data... I want to try and marry these. So the one contributes to my current question, but I want to just link it to my next question which is around what sort of challenges or obstacles do you experience, you know, how you link data to make decisions, especially now in uncertainty – and it links to, I think, as a sub-part of the previous question, reliance on the data, you know. So any insights on that?

I think we're living in a world where there's hyper-data, or where data is collected at very, very fast speed. Your first challenge is to store the data, and then be able to clean it so it's usable. We see it in our industry where there's lots of data around and it's very, very difficult to know what's relevant and what's not relevant – and that's something that us as humans have to do. So if you can get a way of having a machine really know what is relevant and what's not relevant, it will definitely improve the decision-making; whereas humans have this tendency of focusing on small things and blowing them out of proportion and then that distorts your decision-making ability, instead of taking a step back and seeing the whole picture. So, particularly when it comes to investing, if you can see the whole picture, you can position yourself correctly for future. The problem is, data comes in sporadically and it comes in large quantities and it's very difficult to marry everything together so that you've got a timeous big picture of who or what's going on.

So there's volume of data, there's a fast pace. There's also that it comes sporadically, which is like different chunks, and for you to actually to paint the big picture becomes... because it's sort of, the big, probably the most challenging piece to it, right?

Yeah, for sure. I mean, let's take Covid for example. There's so much data being collected now around transmission happens, how you get cured, who actually was infected, how many people are infected – data scientists don't know; and if you piece all that information together, I'm sure you'll get a big picture, but as it stands at the moment, different laboratories over the world are seeing different part of the puzzle. And until all of those

pieces come together, we simply don't know. And what means from an investment perspective is, if you can forecast what Covid would be like at severity, how quickly it will go away, if you'll need a vaccine, all of those sorts of things – if you had that information upfront, you can then position yourself to take advantage of that. It's very, very difficult. Even your healthcare workers, they don't have it – they deal (with it? 0:13:32) on a daily basis.

Okay. And then, let's talk about Covid as a challenge. Are there any specific insights? And this is something that came up in some of my interviews as well – if we are to focus, hone in directly on Covid, the period of Covid which we are in right now, are there any insights really from a data perspective that you can say are sort of relevant and useful? Or we are not yet there because we are currently still within the period and there is no hindsight for us to actually reference and say, okay, we did this then and this is what it meant, or this is how it sort of turned out? What's your take on that?

Yeah, I think it's probably the latter of your question. I think we're still finding out. We don't know what we don't know.

Exactly.

At least we know we don't know. But yeah, I think Covid highlighted again the importance of having quick information and readily available, because I suspect that... I mean, really, if doctors knew what they know now at the beginning, we probably wouldn't have had the same lockdowns.

Correct.

If you have a look at just the mortality rate of people that have gone into hospital, not only have mortality rates decreased, but the lengths of stay in the hospitals have decreased. And that is purely because of new data and healthcare professionals learning new things. Now can you imagine the impact it would have if we had quicker data to get to everyone and we knew what was going on in the time and spaces?

So I think what that sounds like is – and I don't know how relevant this is to your organisation or industry – inasmuch as data becomes very fast-paced, and we're now talking big data, but I suppose you sort of explained it in the chunks, you know, sporadically, it's how quickly you get the relevant data, or how quickly you decipher all of this data that's in front of you to get to what's critical and important that actually becomes very useful in a period of uncertainty like this – if I hear you correctly.

Yeah, correct. I think Covid is obviously an extreme example, but in any situation data itself is useless – it's how you interpret the data and what you can do with it that matters. And

that's what it comes down to. I would forecast that going forward, the real revolution that computers and AI will bring, will be able to... would be the cyber things where AI would be able to do the heavy crunching so that we can find the nuggets of value in data.

Absolutely.

Yeah. The better the quality of data you have, the better the quality of your decision. At the end of the day, you can only make a decision within the parameters that's been given to you. And if data doesn't narrow those parameters then you'll be almost flipping a coin. So if you can use data to narrow your parameters and reduce your option, the chances that you'll make the correct decision will greatly improve.

Understood. That is very insightful. It sort of brings me then to the next question. I'm looking more for one of your success stories. So despite all of these challenges that we've sort of highlighted, specific references you made to Covid, in your sort of organisation and day-to-day, have you gained any benefits from using data-driven decision-making as a technique, especially during these times of uncertainty? Maybe perhaps some success story that you wouldn't mind sharing? It could be the Sasol one, who knows?

(Laughs.) No, I wouldn't say that our business revolves around using data. It's using data to make an informed decision. I don't think it's changed much over the last 2 years. We don't use algo's and AI and all of those sort of things. All the data decision-making that we make is, we go out and look for data ourselves and then we do our own number-crunching, and then try and make an informed decision from that. But we do it on the basis that we know our data has got holes in it, we know that our forecast is *(inaudible 0:18:59)*. All that we hope is that we're in the ballpark. Given that we're very long-term investors, there's a good chance that we're in the ballpark. If you pick long-term macro trends, those sort of things have momentum behind them and macro trends don't change quickly; so we don't need to be highly accurate to be successful long-term. You pick a long-term trend and then you say, okay, that's probably going to stay, how do we position ourselves to that? So I'd say, if you get to a situation where better quality data allows you to pick shorter term trends - that's maybe something we would look at. But we try and keep things as simple as possible. There's less things to go wrong and less things to adjust in our spreadsheets.

And I just want to focus on two things, and I'm just linking stuff that you said earlier. How does data-driven decision-making from your day-to-day, help you sort of... okay, would you say it gives you a benefit of actually reducing the risk? Because I hear the ballpark sort of setup and being a long-term investor, or long-term sort of game that you guys are in. So it sounds like there is a benefit of reducing the risk of going completely wrong by obviously using data-driven decision-making, and I suppose in your case, that's where you are looking at the macro trends so to say. Am I on the right track or not?

Yeah, correct. Yeah. And it doesn't mean we get it right all the time. You know, we were invested in Steinhoff and that went up in flames. And you can argue that if we had better quality data we would have done things differently. And in that particular case it was fraud – so the data we were using was fraudulent data and the auditors hadn't picked up it's wrong. So in the financial community you're using fraudulent data to make an investment decision, and it simply means it's wrong data, resulted in a wrong investment decision which ultimately led to a massive loss in our portfolios.

Absolutely. And this actually poses a bit of a challenge, because obviously that's the quality of the data issue, but I'm going to come to that as my last question. I just want to hold on to this question a bit longer. So there's obviously the reduction of the risk, there's obviously the type of game that you play for obviously long-term, so it helps you in the long-term. Is there any grounds to presume - and obviously this will have to come from you – are there any grounds to presume that it also allows objectivity? Because you're going to need a guy like me, and I'm going to say, oh Michael, I have a really good feeling about this horse, I've got a really good feeling about this stock, let's do it? I suppose, especially sort of in investment decisions and asset management which you guys do as a business, it actually allows or helps make more objective decisions, as opposed to subjective?

Yeah, obviously, the best decisions that you make are objective instead of subjective. And this is a debate that we had in class last year where the question was asked, do you want someone who makes consistent decision where they're right 80% of the time and wrong 20% of the time, or do you want someone on a once-off basis get it right regardless of their decision-making process? And I think in real life it's never just a once-off. Real life is about multiple decisions. So if you can be objective in your decision-making abilities, it means that you're consistent. It means that if you set up the correct systems, you'll be right more times than you'll be wrong – and that's ultimately what you want. As soon as you introduce subjectivity, your decision-making abilities fluctuate, which means your consistency fluctuates and it's more likely involved. So it's very difficult though, because I can give you the same set of facts that I read, and ask you to be objective, and your own vices will mean that you see certain things that I won't see, and I see other things that you don't see in the same data – but which is wise to see things that agree with our way of the world. And that is where computers come in where they are unemotional; they're set up to crunch – they're only as good as their operators. So if your operator's advice and decision-making or basic questions (0:24:36). That's where the big problem lies – flesh and blood and areas (0:24:42) is subjective and biased, even if you don't want to be.

My next question was somewhat what you were talking about now. I mean, there's challenges, there's obviously benefits which you've obviously explained, but based on those two, what can be done to enhance the use of data-driven decision-making in uncertainty – both on individual and organisational level in times of uncertainty? So yes, flesh and blood is subjective in its very nature, but what then can be used? Because I mean,

we've said that the benefit is that it does make, or help make an informed, maybe more objective decision – how then do we enhance the use of this? How do we do it?

Yeah, I'll give an example. When I bought my house, before I even set foot in any houses, I had drawn up a very long list of things – must-have's, nice-to-have's, don't want. Then you weight it. So before you even had it come back, before you're in a time of crises, or you're in a time of need to make a decision, you need to have built a decision-making parameter, versus when you're not in those times of crisis, you can be far more neutral. So you build your matrix, so you know exactly what your parameters are and if it's outside of those parameters then you buy, if it's inside the parameters do X. You set those up when you're not emotional. So when you walk into the new house and it's got an amazing view, it's got an infinity pool and exciting kitchen finishes, but it costs a lot more money that you wanted it to, or it's in a wrong neighbourhood or whatever the problem is, you go back at your list and say, what was on our list? How does this house stand up to what my list said? And if your list says you shouldn't be buying the house, you don't buy the house. And it speaks to the ability of preparation. Yeah, you want to properly prepped for those times of uncertainty.

So that's the first time I'm actually hearing this, and it's – when I think about it – awesome from an objective perspective. I find it extremely valuable. So it's always important to have a reference point, and I think what you're speaking about here is something to always test your objectivity or subjectivity, you know.

Yeah, correct. Yeah. And if you don't know, if you hadn't thought about this in a time of being unemotional, there's no ways you're going to be objective during a time of crisis when you are emotional or you're under pressure. Actually, I don't think we have that ability.

That's really insightful. Thank you for that. Anything else that you've gotten? That can help?

No. I'll let you know when I publish my book. *(Laughter.)*

Can I say something that came up in another interview, and maybe you can give me your thoughts on that?

Yeah.

It speaks to what you were actually just saying now. The respondent had mentioned that, I think what can enhance the use of data-driven decision-making is the ease, as well as... firstly it's the access of data.

Yeah.

As well as the ease of access to data, to support you making promises;

Yes.

...because she feels, you know, based on that alone it's easy for a human-being to default to your bias if it's going to take probably too long, or it's difficult to actually get something else to counter whatever it is that you're actually sort of testing or trying to make a decision that's supported largely by data. I don't know what your thoughts are on that.

Yeah, I mean, I'd say that the biggest thing that leads to inefficiencies... I can't quite my words here. In economic models the assumption is that there's perfect data and because there's perfect data, humans operate efficiently and logically, and corporations do the same. And you and I know that that's not the case. One, because there isn't such a thing as perfect data, and two, humans aren't objective, so subjective. If you go and have a look, go and speak to any big data firm and ask them the cost of their data – you'll be amazed how expensive it is. I don't know if you do it in your day-to-day, but data is expensive.

Correct.

To collect data is difficult, to then summarise data is even more difficult, and then to put it into a format that people can easily read without having to read 50 pages, is extremely difficult. And that's what it comes down to. And what you might find is that your bigger firms, because they've got bigger resources, are able to be better at this, because they can spend more and they can store it better. If you look at this on a corporate level, the reason that Google is so difficult to beat, because Bing Strike and Bing's funded by Microsoft, so it's not like they're short of money, but Google's got a lot more data on you than Bing does, and as a result who runs a better search engine? So how do you think? You can't bet against that.

Yeah.

There was something else that I wanted to add, but I've forgotten. Repeat the question, I'm sure it will come back to me.

It's basically about what can be done to enhance the use of data-driven decision-making in uncertainty – and this in individual and organisational level. Then we spoke about the ease, firstly the access to data, as well as the ease of the access to data because human-beings obviously by nature – wild assumption that human-beings are by their very nature...

Oh, I remember what I was going to say. So human-beings' default is to find data that confirms what we know, instead of trying to disprove what we know. I mean, Kerry Chipp spoke about it quite a bit and Ben (Monarch?) as well – at a business leader level Warren

Buffett and his partner - particularly his partner, Charlie Munger - speak about this all the time, and when it comes to making decisions, you need to be looking for data that disproves your assumptions, instead of trying to find data that supports your assumptions. So because we live in a world of lack of data, when we go search for data we're looking for the wrong stuff. So even if we had more data, the odds are, would we even be disproving our own theories? And unless you're aware of your biases, we're not going to be doing it.

Correct.

So I think it was (Monarch) when he gave us that riddle in class, and he said, what's the next number based on certain criteria? And he asked us how we went about it, and I think just about the whole class was looking for reasons to support what their assumption was, and not one person was looking for reasons to reject the assumption. And that just goes to show we're all using this, we all have the access to the same data, but we came to very, very different conclusions because we were using the data incorrectly.

And we default to what we sort of know or think we know.

Yeah.

And another thing that you said, I think, it's partially implied but somewhat explicit, but I just want to confirm. Definitely one thing that can enhance the use of data-driven decision-making is a lot of investment in big data analytic capabilities. So you said like a big chunk of data, but then for the larger firms, as you say like your example of Google, where you can then narrow it down to actually just give me just what I need, you know. And I suppose that can definitely help, firstly definitely on an individual level, but then also enhance it at an organisational level, if that investment does exist within the budget of any organisation.

I don't know how expensive it would be, but the more data you have to crunch, the better your AI algorithms are, and that's just how it works. If you speak to AIX, they speak about how China is now streets ahead of the US in terms of AI capability. And the reason for that is the Chinese government has so much information on all their citizens that, when they put it through AI, their AI can learn so quickly and so much, where in the US, even though it's going around Netflix at the moment about how people... they will pick how certain companies are and how they're stealing your data. Even with the data they have access to, it's nothing compared to what the Chinese government has, and as a result, the US companies are now behind China in terms of AI and data analysis. And it's because they have less data to use. So the more data you have, the smarter your machines can be, which then means the better interpretation of your data.

Sounds good. Thank you so much. From my perspective, I've gone through a lot of the question that I have, well, all of them literally. I think you gave some very, very valuable

insights. I particularly like the defaulting part and I think it's question number 6 and 7 on my list. So this has been really, really good – possibly also the longest interview I've had, so thank you for that.

Perfect. Pleasure, mate. And I'd say the last thing to add is from a practical perspective – you can have the best AI machines around, giving you great insights, but if the people using those insights don't understand how the insights have been gained, or some of the inner workings, you're just set up for failure; because if you don't understand where the assumptions are, you don't understand where your weak points are. So that's possibly one (0:36:40) of who's the big data, so people get lazy and they just take what the machine says, instead of understanding the process the machine went through. Yeah, so I think that would be my closing thing.

That's good. That's really, really good. Mike, I appreciate your time. If at any point you want a copy of this audio recording, or the transcription, I'll be more than glad to share this with you, but on my end this definitely brings us to the end the semi-structured interview. Thank you so much.

Perfect, mate. Happy to help.

Thank you so much. I'll chat to you about other stuff after this, but thank you very much.

Sounds good.

Sounds good, thank you.

Ends