# Thembi



## **BACKGROUND**

Good morning Thembi, how are you doing?

I'm very well thank you!

Thank you for agreeing to this interview, your feedback is definitely valuable and will be greatly appreciated and valued. I have already sent you the consent form which you have sent back, unfortunately it is the unsigned version, so I think the signed one is probably sitting somewhere else.

Ja, okay, I will check, and let you know.

So basically going through the consent form it is formalities I need to do at the beginning of the interview, the title of my research is exploring data driven decision making in uncertainty and as you can imagine, it is inspired by the year 2020 where the entire world has actually been hit by the Corona virus pandemic. The general consensus is that this as definitely cat a lot of uncertainty in the business world, as well as for general and life as we know it.

Yes.

And therefore the main objective of this research is to explore and understand whether data driven decision making as a technique, can be applied to offer value to organisations in times of uncertainty.

Okay.

So it really speaks to what you have been doing during these periods of uncertainty when you are making decisions, what your experience has been, have you found any value from using data to support your decision making process, as well as what your challenges etc have been.

Okay.

The research is qualitative and therefore the interview is semi structured for the primary reason of being exploratory in nature. You are therefore encouraged to speak freely and take comfort in knowing your identity will be kept confidential and anonymous. We will be using a transcriber but have maintained confidentiality through an NDA agreement, but you are welcome to withdraw from this interview at any time.

My supervisor is Dr Charlene Lew, her details will be on the consent form as well. Other than that are we good to go?

Yes, ready!

Thank you so much for participating!



So to kickstart the interview, I would like to please ask you to give me a bit of information on yourself as well as your organisation and your role. It is a series of five basic questions of your current role, I know your name, what is your current role and current responsibilities?

So my current role is I am the head of information risk for Africa at Standard Bank.

#### Well done!

My responsibilities include looking after the information risk exposure of the 17 countries within Standard Bank. This means that as a business, where we process customer information and which we do within our premise and also with external third parties. We are as a bank obligated to maintain confidentiality, integrity and availability of this information and the information is used to fulfil our strategic objectives. So my role is to ensure that the confidentiality of the information is not compromised, the integrity is not compromised and the information is available whenever it is needed either by the business or the customer itself. In addition part of my role is also looking after the regulation which is privacy, in the SA context, which would be POPI, to make sure that we also comply to the relevant regulations within each country.

# Okay.

I am not sure if you want more details or if that is sufficient?

Great! You have quite an interesting portfolio and set of responsibilities to discharge as your role requires, which is really good – congratulations again, I know it is a new appointment.

Yes, thank you.

Okay, and where would you place your role in the organisation? Middle, senior management?

I would say senior.

Okay, well done. And then I know it is Standard Bank so sort of the public information – we know it is financial services, company age I can look up on the internet, as well as turnover and staff complement.

Yes. Not that I know!

# Understandable I mean it is a large organisation!

I don't know, ja, I heard something around the regions of half a million for staff complement but I haven't checked.

I will get all that information, I am sure it is publicly available.

Okay.



Okay, so as we delve in, I just want to give context, so uncertainty relates to constant change, how to predict scenarios, ambiguous and often somewhat unavailable or unreliable information. These are unknown unknowns.

Yes.

So the first question is how has COVID 19 contributed to the use of data in your decision making, if at all? The reason for COVID 19 in that question is from a general consensus of COVID 19, an uncertainty perspective, has this contributed to the use of data at all?

Sorry, let's just go back specifically to the question. How has COVID 19 influenced my use of data in decision making?

Correct. Contributed is the word, not influenced.

Contributed, not influenced. Can you unpack that, I just want to make sure I understood.

So COVID 19 is brought in from an uncertainty context so has this uncertainty actually contributed to your probably using data more, or you have already been using data, or you have used less data as a result of that.

Okay, so I have always appreciated using data as a form of decision making. My professional back ground, previously I was a senior architect for business intelligence and analytics for a mining organisation, so you would imagine that at that time my job was to enable the business to use information to make their decisions. So then it goes the same for me, that I really appreciate the power, how information gives you insight and puts you in a better position to make decisions that could add much more value. So with COVID 19, okay my reliance on data for decisions has increased.

# Okay.

Because unlike in the past where I think had I joined my organisation under normal circumstances, I would have had to travel to each country to understand what is happening, to understand the financial position of the business and engage with people and understand the risk exposures and understand where the business is going and what those risks could mean in prohibiting the business from where it is heading to. But now I can't travel. So the only way I can still have this view is for me to look at data, which gives me what I would have done in personal interactions, now I interact with data to get the similar insights. So the answer would be it has increased.

Okay. That's really good, I like how you have unpacked it: you have always used but now because of circumstances you aren't able to travel.

Yes.

From an uncertainty perspective, despite you always using data, are you still using the same sort of judgement rules that you already had, or even the playing field in which you need to make decisions has also changed as a result of uncertainty? And I am just coming back to the use of data.



Yes, so from an uncertainty perspective I actually need more. I need more. So for example in the banking space and also in risk and privacy, the rate of cyber security attacks are increasing across the world because everyone is now online and that means my risks are also increasing and I need more information that will guide me as to where my weaknesses are in the organisation. And as a result I am finding myself asking the information risk managers at each region to give me more information so that I can feel a little bit more certain. I have to tell you, I think for me the way I interpret uncertainty is uncomfortable, it makes me uncomfortable. So the more information I can get, the more comfort in business terms, the more assurance – the more assurance I have that either the external third parties are doing the relevant things to secure our data, to secure our customer information, and to ensure that we are compliant, or the information risk managers and their information security managers are doing the right things to give me the assurance that I need.

# Absolutely.

In times of uncertainty.

Sounds really good. So I just want to keep going with that, because it ties in nicely with my next question. So I think data driven decision making refers to the use of data to support the decision making process, and this is obviously a direct extract from literature, right?

Yes.

In your organisation, especially from the cyber attacks to you getting assurance and that sort of thing, how and when do you rely on data when making decisions in times of uncertainty? So let's give a couple of contextual examples like you rely on data in such and such an event, or you use data to fight cyber crimes, or maybe you need to check exception reports, etc – stuff like that.

Okay. The question is loaded! What are the two constructs?

So the two constructs, it is really the 'how' and the 'when'.

Okay, so let me start with the 'how.' Currently we have a tool that because I am new I am not sure how it is populated but currently the tool tells me the level of effectiveness of the security controls.

Level of effectiveness of internal controls you say.

Yes. Internal controls.

#### Okay.

I hope you are following because I am sure as an accounting you have a bit of auditing skills.

# (laughs)



I hope you're following.

# Yes, I am.

So the level of effectiveness of the controls. So on the 'how' then there is also the stats that I receive from the advisors that tells us what is going on across the world in terms of the threats, the threat landscapes. So I look at the threat landscape that I receive from the external supporters, I look at the threat landscape, I then take the information risks and what the information risk managers are analysing in terms of the likelihood and the impact on the organisation. Then I look at the world map tool, the controls, and then I synthesise these three to see where we sit.

#### Yo!

Huh?

# Sounds like quite a lot, very nice hey? Synthesise the three.

Yes. But the next level I am not sure, you must tell me if I am giving too much information — the next level is because some of our projects in the organisation of transforming were in the pipeline and COVID has in terms of now using data, COVID has kind of accelerated the need, the next level is this synthesising of all these different data points should occur automatically — and that is in the pipeline.

# Oh very nice.

So we are looking at tools like robotics process automation that could collect data points from these three things and then analytics layer to then .. there is something called a cube from business analytics, where you take these different data points and then you give me the consolidated view or the intelligence, because the intelligence comes from taking these different data points and we are not there yet, but ja. So that is the 'how'. So should I get to the when?

# So far so good, I am with you.

You're good?

# I'm good, ja. So let's get to the 'when'

The 'when' is because there are 17 countries and it is a lot, I try to at least look at this six weekly, so I have a forum with all the information risk managers who fall under my portfolio. So then during the forum we would then discuss the view for each country. So that is the 'when'

But six weekly sounds to me like often enough right? It doesn't sound like you just look at data today and look at it next year so it is frequent enough and I am sure there is some form of benchmarking from a practical application and periodic update, etc, etc. Right?



Ja. Let me tell you, I think if this thing was completed automated from my view, right, if I could get a consolidated Africa regions view, I would look at it every day. I would wake up in the morning and I would look at this view, and then I would decide whether I can relax for the day or whether I need to crack this.

There are a couple of threads that are not being attended to. Okay.

Ja, (laughs).

So I like what you said because it also speaks to the next question and then let me unpack it. So the question itself is what sort of challenges or obstacles do you experience when making data driven decisions in times of uncertainty? And I think what you have just alluded to now is in as much as information is being made available and you are looking at it, there is a bit of a six week sort of lag in between this point and the next time that you actually sit with the forum or review it. But I think just looking at your... you know when you say it was fully automated you say you would look at it every single day.

Yes.

So is it safe to say one of the challenges that you face is the speed and frequency at which you currently get information?

Absolutely, and also ease, speed and frequency – ease.

Let's talk about them in a bit more detail.

So ease is ... I wish I could just get all this information at the click of ... well a click of view, one or two clicks then the information is just here right in front of me. I know that in some capabilities within the organisation maybe they have that, I would think that where in the customer facing or rather let me say in capabilities that are intently customer facing, they should have that I believe, where you can just see what the customer wants and within the click of a few buttons you can get a view of exactly what you need. But in my space it is still a maturing capability where I can just click and then I see my status. So that is the combination of the ease and the speed.

# Okay. And have you had any issues with credibility of data?

Credibility of data. Um...it is I think some of the ... because you know I am trying to see how deep I should go because I am also kind of like a tekkie. So there is manual, sorry...

Sure, go as deep as you want, we have all the time in the world.

Okay, there is manual intervention, a lot of manual intervention still in place. Like for example testing the effectiveness of the controls, that is subjective; it is the information security manager who is telling me how effective it is. It's a judgement. So now the tekkie part is where I say I am going deeper: in an ideal word for me I get an IOT tool.

IOT



Yes, infinite of things. Because those are like the sensors where I can apply sensors and then collect data points and then aggregate information and then they tell you how effective the control is. But currently it is subjective.

So there is speed which is how quickly you are getting data, frequency – periodically – how often you are getting the data, and ideally for at what speed; the ease of the data being 1/2/3 or 2 clicks and there you go I have my information. We have spoken about data credibility, I think you have explained that as there is still human intervention so part of it makes it subjective.

Yes.

Okay. I mean in your space where you have 17 countries and let's use the COVID 19 uncertainty as a realm, have you had conflicting pieces of information? So let's assume you have got two countries in the east African bloc, right, have you gotten two conflicting pieces of information for that reason, like to say maybe Kenya there is thread XYZ where is Tanzania which is just the neighbouring country says we don't know anything of the sort?

Yes, I think I can say I would regard it as conflicting, and maybe as an accountant you would know, so 1) you have a policy that stipulates how work should be done so that is information on its own right? So it tells me how they should be let's just say conducting business. Then you get the subjective controls or the effectiveness of the controls so the information security managers then give you a rating of how effective these controls are, right?

# Okay

And then there is an audit report that tells you that it is not what the information managers is. So they actually tell you that the control is actually worse.

# Okay.

Ja. So those are the conflicting points. But maybe now the beauty of it now from our perspective is what we call combined assurance; you want three lines of defence to ensure that if first line doesn't catch it, second line doesn't catch it, then third line catches it. And I would imagine that in future where everything is automated, even those three lines would fall away. But for now we have these three lines as catch rails or catch nets.

Okay. So in laymen's terms what you and I could both relate to would be triangulation. Right?

Yes. Yes.

Okay, cool. So next question..

I don't even know if I am triangulating with my research!



We are getting there, we will get there. So despite these challenges where pace and speed is a bit slow and the frequency is you desire the ease itself, have you gained any benefits from using data driven decision making as a technique?

Absolutely!

## Tell me about it!

Absolutely! So I get a view, right? Be it accurate or not accurate at least it is something that is guiding me, that is guiding my thinking, guiding where I should be focusing and what I should prioritise.

# Okay.

And obviously, like I said, there is a question of accuracy but it gives me something, it gives me direction. So it is not like I am sitting here. Imagine if I was sitting here and I didn't have a view at all.

And I think what you are saying is actually very, very valuable because I think coming back to the research itself it is uncertainty.

Yes.

So we all don't know what is going to happen, right? Very unsettling. But you have an idea and you have a view, and let me not put words in your mouth, I think carry on.

Yes, and you know with me how... if you think about companies like Google and how they use data, I think as maybe businesses, we still need to advance a little bit more. So an email from an information risk or an information security manager in Nigeria, is in itself information, right? So I am...it's data, so how then... companies like Google, they use AI to understand just even my communication doesn't understand what Thembile is doing. They use that as a data point. Right?

#### Hm.

Even if maybe ... I don't know if you have noticed sometimes if you click on Takealot and then you are shopping for diapers, then the next thing you go and Google and you have a lot of adverts for diapers. Because there was a data point for them.

#### Okay.

Do you understand? That is a data point. So I myself even consider things like emails, that is some form of data that I am receiving and in future, imagine if I had like state of the arts artificial intelligence where I am getting all these emails from these guys and then it gives me like maybe an analysis of what all these guys are saying to me. But that is like in the future, so let me bring it back to here.

One of the things for me, from a benefit perspective, which I have gotten from other interviews, and I suppose it comes back to your initial thing to say it gives you a view which is some guide. Other participants feel there is a benefit of sort of espousing, making options more explicit. So



with the view that you have I think then you start to play around with 'okay can I, can I not – A, B or C and that sort of thing'. Is that your experience at all?

With the view that I have ... so you are saying in terms of alternative options and then selecting an option?

Correct, as well as maybe scenario planning to say... so if this is really what is happening out there then I should probably do this. And if this happens then you know, coming back to your challenges, the combined assurance, 1-2-3, so you then know 'okay I need to focus on this on level 2 or 3. Is that your experience at all?

I wouldn't say so. I would say it helps me restructure my priorities. So in my space I wouldn't say that I have had to create multiple scenarios. I would say it is more in terms of ... so in the risk fraternity you always want to see where you risk exposure is. And then you act in terms of what you should do to reduce that risk or to protect yourself.

## Okay.

Yes, I am not looking at maybe launching new products, and then deciding. No, I wouldn't say that. I think it is just prioritising and making decisions as to what we should do next, what we should focus on. Because I think it is also our environment, you know this thing called VUKA?

#### Yes.

Vutality, it is very volatile. Extremely volatile. Like yesterday we received ...let me not share too much but we received apparently an information breach that could potentially cost us I think currently they are calculating around the regions of 3 billion or something. So it is extremely volatile. I am not sure if you know, there was an experienced data breach, which we were affected.

#### Some time ago.

Yes, and so these things, it is uncertain, so it just tells you okay now I must change my direction and you always have these strategic choices that you are talking about but I think for us in terms of the choices you know, we are not always mapping up new scenarios every now and then.

Ah, lovely. I like the volatility piece because it is exactly that, you never know when it is coming. So today, tomorrow, and it can all change by this afternoon.

Yes.

# Ah.

You can get hit right now, like if it is COVID!

Okay. So let's go back. So thank you for this, still got a bit of time but literally left with one more question, can I just dive into it or do you want to stretch out a couple more things?

Yes.

Dive into it. Okay. So you have mentioned how, when and you have mentioned there is definitely an increase, you need more data now that you know now that there is quite a lot of uncertainty. To some extent, I think especially in your role and industry, with the impact of COVID, I think



there is now a sort of hunger for delinquent behaviour out there where people really want to make a quick buck without actually working. So I am sure there are a lot of people that are actually trying to breach security points to get people's money in an unauthorised or fraudulent way. So you have mentioned the challenges, you have mentioned benefits that you have experienced, that you have obviously gained? So based on all of this what can be done to enhance the use of data driven decision making in uncertainty, and this enhancing, is both at an individual level being you, as well as at an organisational level which I think speaks to what you mentioned earlier, or alluded to, which is the automation and that sort of thing. So let's talk about that.

So I think... I need to take this slow because I am going to lose my train of thought. So let me start at high level, I think I would like at high level at some point to touch on data quality, I would like to touch on technologies, I would like to touch on also fast tracking some of the projects that are associated with improving our capability to collect and aggregate and analyse and also predict.

# Aggregate, collect and predict - nice.

So can I start with the first one? I hope you wrote them because I wasn't ...please remind me!

#### I did!

Ja, so the first one, part of my job is also I was just talking about how I use data, right? But part of my job is like I said availability, sorry, confidentiality, integrity and availability. So I am very involved in our information strategy and data monetisation programmes and, and, and. Right?

#### Hm.

Because while we want to monetise our data and migrate our data to better services, I also need to provide oversight in ensuring we are doing it in a secure way. So part of that is a threat is now for our business, data quality.

## Okay.

Right, this is now for our business: data quality is one of the biggest threats and to improve this I am not sure, I don't have an answer, I will have to talk to our head of data strategy, but that needs to be addressed. How, I don't know, but I know that we have to address our data quality issues, and some of those issues comes from data definitions that are inconsistent across businesses.

Okay, I like that. And that is always like the first thing, we might use the same word but it means two different things to different departments.

Exactly. And so it is that. And I think you touched on another one earlier, which is inconsistency in the meaning of data.

# Inconsistency in meaning.

So I think one KPI in one department reports X and then the exact same KPI in another department reports Y.

## Nice. Nice.

So ... what is this term.. I am thinking about my analytics.



## (laughs)

Okay, I can't remember the term, I think something about same truth. Or what what. But anyway. So I think that needs to be addressed, we need to dive into that. And then secondly I am telling you now about from the other side, not me. The second thing is the skills.

## Lovely!

The skills around how we... I told you earlier how companies like Google use data.

## Collating.

The data mining skills that we need, the data engineers if they may call them... and I mean in one of the recent... so this is obviously very confidential but I am going to share, in one of the recent steerco's I was involved in, we actually had a discussion around that, across the Africa regions. Because you know there is a huge demand for data skills across the world. We train people, we upskill them and then they get hired, they get scooped by companies in Italy or maybe in America you know? So that is one of the big problems. And part of it for me is to now this is in my background, and I think sometimes the technology teams haven't mastered it, but part of it is to empower the rest of the organisation to be able to do these things themselves, to have tools that are easy enough for people to be empowered. Remember what I said to you earlier on, that I wish there was ease. So I wish I had my own tools where I can mix and match, click, drag and drop, create my own reports, then boom, I have this view that I need and I don't have to go through the whole architecture lifecycle to get this view.

Okay, lovely. So just to touch on that, so I wrote it hear as analytic capabilities, which is the skills, the data mining skills, the data engineers and obviously there is a huge demand, and this speaks I think probably to what you were saying to enhance it, sort of increase the analytic capabilities at an individual as well as organisational level – wide enough so that in as much as people might be poached and what not, you don't lose out a lot in terms of what you have invested in for quite a while. Because from a huge demand perspective it then becomes HR remuneration issue, retention, etc, etc – which is all well and good but slightly divorced from this – but I get your point.

Yes.

So I get your point as the organisation needs to invest more in analytic capabilities.

Yes. And the capabilities both at technology and at human layer.

## Okay, and the technology is...

So you know that big data is part of AI?

# Yep.

So if you look at the sub components of AI, big data is part of them. Yes, so I think big data, neuro... I have to remember these things... I think it is neuro analytics, but if you look at the components of AI I can send you a quick thing, but big data is part of that. And this is now my experience: I am seeing now how SA – and I think we still need to advance – if you look at companies like Kojak, do you know Kojak?



#### No.

Okay, Kojak is based in Singapore, let me not talk too much, remember I am a tekkie, I am going to confuse you!

#### (laughs) Okay.

The long and the short of it is how Silicon Valley and the big tech giants, or the unicorn companies are not only using data as data analytics, but there is a huge artificial intelligence in using data and machine learning. So using machine learning to learn and make decisions. Okay so what was my next point?

So what I had here was three main ones. So it is data quality, technologies, analytical capabilities which speaks to aggregate, collect and predict data, and then you spoke about availability, integrity and reliability of data which is I think your specific role. We spoke about the data definitions and as a means to alleviating the inconsistency, meaning of data, as well as harmonise the KPIs because one department says this and the other is looking at that. And then we went into a sort of discussion around from an analytic capabilities it is both at a human level as well as technology level because there is a huge demand. So I think the business support should probably invest more in maybe teaching people how to use data for instance, as well as investing in infrastructure, technological infrastructure that actually allows you to get the data itself.

Yes. Ja. I think what also can help is I think with some organisations they get it right but some don't, so I think where I was they hadn't gotten it right but I think where I am at it is better — is to move away the data capabilities from IT.

# Okay.

Business is responsible for their own data.

#### Okay, explain.

So technology sits with IT. Let's take HR, right? Okay, let me make an example about myself: so I am responsible for risk and all the risk projects I should drive projects that are meant to empower my department and my teams in making data driven decisions, not IT.

#### Okay.

Because I found that IT tends to prioritise technology, they are not thinking about the business need, what my needs are, and how this is going to make my job or improve my decisions and priorities, and exactly what you said earlier on, the scenarios, what can I do out of this data capabilities. But often in some organisations that entire capability sits with IT, and it almost feels like you are knocking at the door of IT to help you give you your data so I can make my decisions. I think that needs to be like if you move it away from IT, IT is a technology enabler, and not the owner of data analytics.

I love that! I love that! I am writing that differently: separate responsibilities, IT is the tech enabler or data enabler?

No, just technology enabler.

Okay. And data is...



The data owners must drive all initiatives associated with the improvement of data analytics or whatever your call it – data analytics or business intelligence.

I get it. Okay. I am with you, I love it. Okay. If you still have some more you want to throw in there, we have still got time?

Throw in what?

More of your wonderful insights. So there is something quite interesting that I heard in conversation as we were sitting in one of our meetings here at work, so unrelated to research. They said data is data, what is important is obviously the insights you draw from that data, and would you say that would speak to the individual sort of enhancement of that? Because I think it is somewhat what you are talking about here: as a data owner I have got data, but am I really getting what I need from the data? And then you would say 'No, you know what, dear Mr IT, I know need this extra layer or that extra layer in terms of then driving the initiative.

Hm.

# Is that one and the same thing?

I am trying not to like... I keep on taking off my architect hat but the questions sometimes make me wear it, so please allow me.

#### Sure, sure.

So there is a difference between data and information, technically.

# Okay.

Data could be unstructured or structured data. It is just data points, right? But information is data in context.

#### Okay.

So let me make an example in mining, ne? In mining if we say five tonnes, that is a data point, but it becomes information once you start saying five tonnes per hour.

# Okay.

So for example you say 'No, Munya was only able to extract five tonnes.' That doesn't tell us... it just tells us Munya was able to extract five tonnes. But once I say 'Munya was able to extract five tonnes per hour' then I can now say okay, is Munya effective or not effective. Because I am now measuring it, I am saying 'per hour'. I can then compare what Munya extracts per hour vs what Thembile's able to extract per hour. Then Thembile does ten tonnes per hour. So you must tell me if it is getting too technical and is outside scope.

# (laughs) No, it's fine. Your examples are practical.

Is it practical?

It is.



So the analytics part is where you take different data points and you create what we call a cube, and you look at the five tonnes per hour, you look at it maybe at a section, you consider also maybe the quality of that, then we can also maybe start talking about maybe Munya's utilisation in the organisation. Then I am now measuring.

Ja.

So even I think... ja, let me leave it there before I confuse you.

(laughs) it's fine. So look from a set of research semi-structured questions, this is all that I had, thank you so much for the contributions you have made to this research, please remember to send the signed consent form and if at any point you would like maybe a copy of this recording or transcription, I can make it available.

Okay, okay, please, maybe, I don't know, I will re-talk to you once you're done – maybe like a summary of what are the findings, like the key findings.

Okay. Great stuff, will do.

It will be nice to read it.

That's fine. From my end this brings us to the end of this interview. I am stopping the recording now.

ENDS.

