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EP. 9: BIG DATA, LITTLE DATA & SYNTHETIC DATA

AUDIO TRANSCRIPT

RAY O'BRIEN: The marrying together about external and internal data, creating a better environment and allowing you to have a better data set for analytics. It's probably one of the biggest things that's happened over the last 10 years.

00:20

GEORGE MARCOTTE: Hi, everyone. This is George Marcotte. I'm the Lead for Applied Intelligence in Europe for Accenture. And I'm joined today by Ray O'Brien. He is the former Global COO for Risk and Compliance and the Head of Analytics at HSBC and is now doing a number of different projects in Fintech, technology ventures and he's a luminary of Accenture, where he advises the firm on a number of issues related to his expertise.

00:45

RAY O'BRIEN: Thank you, George. Absolute pleasure meeting you. How are you doing today?

GEORGE MARCOTTE: I'm wonderful and yourself?

RAY O'BRIEN: You know what, it's actually sunny outside in London, which is quite rare and I'm feeling good.

GEORGE MARCOTTE: That's great. It's really nice to have you here.

RAY O'BRIEN: Thank you very much. Always

happy to be here. Cool, so what should we talk about today?

01:03

GEORGE MARCOTTE: Well, I think we're going to talk a little bit about maybe demystifying from your experience and wisdom from your experience, a number of different questions around data and AI that from my perspective, I hear a lot of our clients asking about, talking about.

So the purpose of today is just have a general chat on those things and then, share your perspective, I'm sure many people will benefit from those insights.

RAY O'BRIEN: I'm looking forward to it. Hopefully, I won't bore the audience too much, but let's go for it. Let's get into it.

01:34

GEORGE MARCOTTE: All right, perfect. So, Ray, the first question I have for you is just in general, how do people go about unlocking value from the data that's inherent and trapped in many of their different systems?

01:46

RAY O'BRIEN: That's probably the number one fundamental problem for any kind of data and analytic strategy. So, first of all, you've got to explain a vision about how important data is to your management, your board, whoever they

might be. And the way I did it actually at previous organizations is I'm actually trying to describe it like the human body. So I said to them, you know, the bones is kind of like your technical infrastructure, your operational processes are kind of the organs and the blood that runs through everything is data. And if you can get that kind of concept across to them, when you say, look, it's not we need to fix our data. It's actually your blood. And if you don't have this working, nothing kind of works on your body. And all your kind of processes kind of wither and die. And so, you got to come up with some kind of very simple message to them that they really understand the importance. That's the first thing.

02:47

Then the second thing is you've got to come up with some kind of vision around your data strategy and your future. Don't go for the five-year program as a starting point. You've got to start small and build it up and you got to come up with some quick wins. And nobody will wait for five years for you to build nirvana, that you've got to have some kind of entrance there. You've also got to get trust, right, because a lot of these people, they're going right, okay, I've heard about it in the news. But am I really going to spend all that money in this area? And they want to see some kind of payback. They want to see something tangible along that journey.

And it's like with any relationship, as you build that relationship with a person, you build the trust, you build – and then, you can say, look, we want to do more, we want to make it bigger.

03:41

GEORGE MARCOTTE: Just to follow-up on that, you know, is the big challenge in getting people to buy the vision, just the mindset shift of how to think about data, not only as a costs doing business, but really something that's going to be providing that sustainable source of value in the future or what sort of are the big challenges that are to this vision.

03:59

RAY O'BRIEN: I always use the express stick versus carrot. And data should be the carrot, should be the enabler, should be the place where you can actually grow a business and do things. Sometimes I'm afraid it's the stick because it's so bad. And it is a little bit about it though, but they have to get familiar with those terms what it actually means and then feel that it's going to really make a difference for them and their business.

04:27

Some people get it, some people can see like digital strategies, which are data enabled that really change organizations and become disruptors, etc., in different sectors. Other people will sit there and look at you and say, aren't you the same guys who came to me about Y2K and everything else? I don't trust your visions. How much money do you want to actually spend? So you'll always going to get those type of people in the organizations where you have to build that kind of – I'm just going to use the word trust.

05:00

GEORGE MARCOTTE: We're leaders, sometimes the overlooked pocket in terms of some of my conversations with my clients is actually thinking about how to use external data versus the internal data that they have because they're often times on their phone and we're working with apps and Google and interacting and generating data that's consumed by those different companies for creating new products and services. Is that additional space to think about?

05:23

RAY O'BRIEN: I think you're absolutely right, George. I love that analogy. The marrying together about external and internal data, creating a better environment and allowing you to have a better data set for analytics. It's probably one of the biggest things that's

happened over the last 10 years.

But, here's the big but, most of these big data environments are full of rubbish. They aren't needed and actually, you don't want to store everything.

05:51

GEORGE MARCOTTE: That seems like a really practical tip, which comes maybe out of the next topic, which is who or where do you see companies or organizations getting this more right than others?

06:03

RAY O'BRIEN: So, look, I'm from financial services, but the financial services sector is not the one who is the lead in this space. I admit it. You know, I spent 30 years of my life in financial services. I would be proud as punch to say today it's financial. It's not.

Actually, the leaders in the data and analytics space right now are the retailers and also, the video game industry. The power of what they do and their metrics and the data that they have, that blows away some of the stuff we're doing for financial services. Now, don't get me wrong, we're catching up and actually, but it's a highly regulated environment, financial services, and also, all the security issues because the personal data, etc., it's harder, but we're catching up.

But if you ask me who's ahead, which sector? I would say retailing and gaming. But more to your view, George, would you agree with me or would you pick another sector?

07:01

GEORGE MARCOTTE: No, I think those two sectors you mentioned are spot on. I think the only other one that kind of traditionally comes to mind may be something where it's a bit behind traditionally, but there's massive advancements coming quickly, would be health and life

sciences, largely, you know, we've got COVID big catalysts for trying to move things forward at a rapid pace around leveraging data to create better outcomes for people and society. But I think at the same time, there's been so much desegregation of that information that that's why we see a lot of traditional companies looking to digitize the records of hospitals and so forth and so on, at pace, to get to use the power of AI as it's properly understood.

07:47

RAY O'BRIEN: Yeah, the other one I really love and I use this analogy a lot is the role of a surgeon and AI and in the actual surgery. And this is where you have assisted robotics, where you actually – you still have the surgeon, you still have the human there, but some of the elements are done by machines. And I think there's going to be an awful lot of that kind. And I use that analogy a lot when people say, well, we're all going to lose our jobs.

No, you're going to be assisted in your roles by whether it's a physical thing or it's some kind of virtual thing. You're being assisted to do your role in a much more optimal better way.

08:35

GEORGE MARCOTTE: That's right. When it's all a bit of the whole tomorrow's an innovation – well, today's innovation is tomorrow's drudgery.

RAY O'BRIEN: I love it. The other one on this when we're working the sectors is geography. So, I'm going to be contentious, George.

GEORGE MARCOTTE: I know your at least view.

08:54

RAY O'BRIEN: I know you're American and I'm Irish and I'm going to try to find a neutral. I think China is actually ahead in terms of financial services and analytics anyway, they're ahead. If I look at what they've done and the integration

they have in terms of their data sets and customer facing apps and things, it's quite incredible what they've managed to do.

You could say it's slightly unfair because their regulatory environment is a little bit easier, they're allowed to store an awful lot more information about people than other places around the world. But for the financial services space, I look towards China in terms of some of the things they're doing around data.

09:38

GEORGE MARCOTTE: And is that because they have a different approach or mindset around scale or is it that they have a different perception around regulation, what's appropriate to do with somebody's data relative to what that might be thinking in Silicon Valley or Dublin or London?

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RAY O'BRIEN: That's a brilliant question. I think it's a combination of both. I think regulatory plays, they're allowed to do a lot more things. So I'll give you an example. I was shocked that – did you know when you're doing a loan application in China, the banks can switch on the camera on your phone and do a lie detector test on the amount of blinking you're doing?

GEORGE MARCOTTE: I did not know that.

RAY O'BRIEN: Now, could you imagine implementing that in some of the Western countries? And the amount of customers that would be slightly upset that you're spying on them. Well, in China, it is acceptable. I mean that's an extreme example, but it just shows they have a much broader palate to play with in terms of doing things. Not that I'm saying that that's a good thing to do, to switch on a camera.

GEORGE MARCOTTE: I understand, yeah.

10:44

RAY O'BRIEN: But it just shows that it's accepted more. And then, they also think bigger. So let me take insurance as an example. They actually have people in major cities, at major roundabouts at 9 a.m. in the morning because they predicted that there will be accidents and they settle the claim on the spot when the accident occurs. And you just look at it going, oh my God. So you've got all the data and the analytics to predict what's going to happen and you actually have a person with an iPad there ready and they just settle the thing, no back office, no paperwork, none, you know, all the stuff. And you just go, okay, maybe you should take it a step forward and stop the accidents in the first place.

It's so there's massive disruption to what we would normally think is a standard process. And so, it's a bit of a – I just think.

11:37

GEORGE MARCOTTE: It's like how Amazon supply chain algorithms work around ordering things ahead of actual demand materialization rate. It's very fascinating.

RAY O'BRIEN: Yes, exactly, very similar analogy.

GEORGE MARCOTTE: Well, that's another way we can bounce onto the next adjacent topic which I think is a hype, like where is the hype and where do you think we are in the hype side in this whole space of big data, little data?

12:02

RAY O'BRIEN: I'm going to ask you about the hype side. Where do you think we are on this slope?

GEORGE MARCOTTE: Oh geez, I mean I think we are still on the way up actually.

RAY O'BRIEN: You think so?

GEORGE MARCOTTE: I do, I do.

RAY O'BRIEN: So you think we're still going up to – what's it called, the peak up inflated expectations.

GEORGE MARCOTTE: I think that's where we're headed still.

RAY O'BRIEN: You're still going up.

GEORGE MARCOTTE: I think there still is a little bit of go.

12:22

RAY O'BRIEN: I'm actually on the other side of that super slope. I think we're beginning to come down from the peak of – what's it called - inflated expectations and we're nowhere near a trough of disillusionment. Where we've come off the peak a bit because I'm seeing more and more people say, really, Ray, you know, how much money have we spent in that space? What we actually achieved? So I'm beginning to see a little bit of the shine come off of a bit.

12:53

GEORGE MARCOTTE: I understand. I mean I think for two reasons we're not there yet. One is I do think AI is going to be like electricity. I mean when electricity came out, it was a foundational shift to where from candlelight to electricity. It was pretty amazing. You have to think about like electricity strategy, which nobody does anymore.

RAY O'BRIEN: AC versus DC.

GEORGE MARCOTTE: So there's still a little bit ways to go. And the second, I think the second area is really my perception is clients may be spending in the wrong categories. There's a big trade off in terms of outcomes and speed. Do you build by partner? There's just different approaches to monetizing and getting the kind of outcomes that are not traditionally in play for normal critical IT projects and I think that's the difference there.

13:47

RAY O'BRIEN: I agree with you actually. Let me take a particular bug of mine, big data. The term big data.

GEORGE MARCOTTE: Lay it on.

RAY O'BRIEN: I just don't like it, George. It's just because it leads to quite sloppy strategy around it. Let's just store everything forever in this big huge database full of petabytes of information. And then, so many events she looks at this and how much is that costing us, even at the cheaper price point of cloud, storage, whatever. You know, you're using up a lot of petabytes. It's going to add up and it's a recurrent cost and you're going to have to have a very strong business case about what are the outcomes that you're achieving from this storage and what is the value versus our cost?

And I think that's like sloppy. I don't really know what I wanted a startup star mean. Just give me everything. Thank you very much. And that to me is wrong. And it's the wrong kind of focus. So I like the term little data, where you actually have an intelligent conversation about what data is needed for a particular problem session. And also, where they finance anyway, I can't use big data for finance problems. Could I use the color of your skin or your gender in terms of getting you a loan?

GEORGE MARCOTTE: No.

15:11

RAY O'BRIEN: Of course not. So I have to use a little bit. I have to predetermine actually which are the key data elements I should use to do these kind of financial decisions about your life. I'd love to use your social media profile, but the answer is, no, you can't because in the West, that's spying. You couldn't be doing that. So you've got to actually – you got to pick little data instead of just saying, oh no, I want everything.

15:37

GEORGE MARCOTTE: It looks to me it's like

that TV show called Hoarders. You have data Hoarders.

RAY O'BRIEN: Love it. Maybe on 20CD on data.

GEORGE MARCOTTE: Maybe we'll come up with a new concept for a new television show. Well, that's great and that makes a lot of sense to me. I think back to kind of the point around the right data, there's a lot of, I guess, confusion or one of the big challenges of managing data is just the quantity of it and the reliability of it for actual financial modeling. What are some of the things that are being done today that to maybe counteract that or overcome that?

16:20

RAY O'BRIEN: You know, one of the areas which I'm really excited about is the synthetic data space.

GEORGE MARCOTTE: Synthetic data?

RAY O'BRIEN: Yes. And this has come a long way in the last couple of years and it's literally only the last couple of years. Honestly, before that it didn't really work, but it's beginning to actually show results. And so, instead of like – imagine you're an organization, you've got a large set of data, but it's secretive, it's your finance system, it's your payment system, it's your customer system.

GEORGE MARCOTTE: Patient record?

16:56

RAY O'BRIEN: Yeah, you can't give it to everybody. You can't just say, oh, sure, let's create a Kaggle competition on all it and let all the universities of the world to use it. So you've got all these huge data stores of really good information that you can't share, you can't use with Fintechs, you can't do your own internal things, whatever it might be, innovation, etc. So synthetic data, what it does, it runs against that data, algorithms, to create a synthetic copy of

that data with none of the underlying information and it injects. So let's say you have a million realms and it will create a synthetic data set if you want of a 100 of anything else. And so, that allows you then to actually start creating much larger data sets, with still the same inherent structural integrity of your original data set. Now this is the key and we could sit here for hours, with the maps behind, does it really do that, Ray? Are you sure? And there's papers from MIT and Cambridge and Oxford and all the best universities on this topic right now, debating about how it works and does it work, but if it works?

18:06

And on this I'm just going to use the word if, if it works, you open up the whole area of allowing sharing of data between organizations, universities and all of a sudden, analytics will explode. They will just explode. And so, that's why I love it. I love the topic and I'm really passionate about it. I'm hoping that it bloody works, George. And that for me is a great new thing that's coming out that will be an enabler for creating dynamic data strategies.

18:43

GEORGE MARCOTTE: Right. That is amazing actually. And I think that kind of leads maybe to the last distinction which is some people don't – maybe they think it's the same, but there is some fundamental differences between what artificial intelligence is versus just analytics. I mean is there a good – how do you think of the two different topics? Are they the same thing or are they different enough and what makes them different?

19:08

RAY O'BRIEN: Let me give you a story, George. I remember when a certain consultancy company came into my previous organization on the Baltics. One of my board members rang me up, very worried that there was robots going around the office and wanted to know what I was

doing about it. I had to explain to that poor person that actually the robotics in question was a bit of screen scrapping and a bit of workflow. And it really hadn't achieved for artificial intelligence yet.

19:39

You know, Schwarzenegger was not in the building. So my view of AI is it's just part of the hype curve. We have not achieved AI. We've done a lot of work in a lot of different areas, with the NRP, whether it be machine learning, whether it be things – it's mostly things that have been out for quite a long time. We have the luxury now of the infrastructure at a lower cost to do a lot more product, as you said, when I'm stitching data together from internal and external players to allow us to do behavioral analytics and then a company work with is doing a huge amount of stuff on network and behavioral analytics, which I also am a big believer that's going to give us a (inaudible) at analytics, etc.

20:22

There's specific analytical things. If you then said to me the word AI, that in my head is like this thing that is conscious and can actually –

GEORGE MARCOTTE: Skynet.

RAY O'BRIEN: Skynet, it's like – that's why when everybody – I always get this kind of thing when somebody says the word AI. And I go, what do you really mean? Are you doing a bit of an LP, do some machine learning, you do facial recognition? It might be really cool stuff. Oh, you're doing a little bit robotics there. What kind?

But, you know, saying it's AI, no, and that's why I'm on that thing on the high curve that that term to me is over hyped. Come on, George, I'll give you a half on that, so the response to that? I mean what is the name of your actual –

GEORGE MARCOTTE: Applied Intelligence.

21:10

RAY O'BRIEN: So I apologize. I've just been slagging off your –

GEORGE MARCOTTE: I mean for us, it's all about insights on their own is interesting, but it's how you apply it to make a better outcome and that's where it's also part of the formulas and that. It's not just modeling, it's how you make change and that's what it's all about.

21:31

RAY O'BRIEN: Absolutely. I agree with you.

GEORGE MARCOTTE: Great. Well, Ray, thank you for stopping by today. It's been great to see you in person, as you said. And I thought this was great. So thank you for taking the time to speak with us today.

RAY O'BRIEN: Absolute pleasure, George. Take care of yourself.

GEORGE MARCOTTE: You too. Bye-bye.