TRAILBLAZERS TALK

Ravi Kumar S., President, Infosys, in conversation with Dr. Frida Polli, CEO and Co-founder, Pymetrics

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Ravi Kumar S. (RK): Hello everyone, my name is Ravi Kumar, President at Infosys. Welcome to the next chapter of Trailblazers.

Today I have a guest with me in our New York Office, Frida Polli, CEO and founder of pymetrics. Frida is a trained neurologist from Harvard and MIT. She is an MBA from Harvard, pre-doctoral training from the Harvard Medical School and a post-doctoral neuro-science training from MIT.

Pymetrics is in the world of match making as they call it, powered by new age technologies like AI and we are partnering with them at Infosys to look at the talent pools which we hire from the market.

Thank you so much Frida for joining us and very excited about our partnership.

Frida Polli (FP): Thank you Ravi. Same.

RK: What intrigues me is, with so many years of training and in the academia, you kind of switched to real world problems and you picked human capital, which to me is probably the single biggest shift in the digital world which if I may add, re-skilling, re-factoring and re-focusing human capital.

Tell us a little bit about what pymetrics does and how is it so unique.

FP: Well, I think that my interest in human capital actually came during my 2 years at the MBA program at Harvard where MBA students, all they do really for 2 years is "recruit" and try to find their next opportunity and as a scientist, it was really the first time I had witnessed the spectacle called "recruiting". And that is what intrigued me because it hadn't really changed much since I was in college and that was, had been a few years.

So, and what intrigued me the most was that what it seemed to me the problem we were trying to solve was understanding something fundamental about people, right, their cognitive, emotional, social capabilities, right? As opposed to what I saw happening which was a lot of resume reading. Trying to take that information and use new technologies like artificial intelligence, machine learning to predict somebody's fit for a role; that also wasn't happening and then making all of this technology enabled, meaning having an actual technology platform to help put the match making, which was so common in all other aspects of life. So, all 3 of these things I saw as being very fundamentally core to a lot of consumer technologies that were out there like Amazon, Netflix, Spotify, you name it and yet in talent, we just had people reading a resume and then deciding whether they want you--

RK: Yes, and it has not changed for decades.

FP: And it hadn't changed for decades, right?

And so to me it was the proverbial light bulb going off when you know they all say that an entrepreneur has to, sort of, see the problem first hand. And again, I had never seen this problem because I was hiding away at my lab in MIT and Harvard studying humans in a research context and, but again the problems we are trying to solve in the lab were identical to the ones we are trying to solve now. Just with a different use case at the end of the day.

RK: And Frida, how does the new digital age fit into this because a lot of times I see you're very contextual to the world we are moving in where creativity is much more critical, problem finding is much more critical, empathy and the human touch needed in jobs is much more critical. How do you test those intangibles using the eye?

FP: Well that's-- I think that's partly what you know, the light bulb that went off, right? It was, how can you ever tell whether somebody has empathy or creativity on a resume? It's impossible, I would say, I would argue…

RK: And it's a hard skill to write…

FP: Yeah exactly! And we try to use all these proxies for it but you know really at the end of the day you're using not a very accurate data. And so we test for these types of things using research tools that have been around for a long time. We didn't create any of them. A whole host of academics across the globe have created these tools; we just re-purpose them for the use of human capital assessment or match making, I would say, and I think what's so core to what we do is that it's really, you know it's the age old adage of 'don't judge a book by its cover'. To me the cover is the resume, that's my cover, that's your cover and you know we try to make it pretty and attractive and all the rest of it; but it's just a book by its cover and what we are trying to get at is much more fundamental aspects about a person that we think are and the data would also support, much more productive of ultimate job success.

And the other thing I think that's critical Ravi is that, it's not a one size fits all. I think when people think about 'assessment' – they think, "Oh you know it's a test, it's an IQ test, I have to do well on this test or otherwise I'm unemployable". That is not our philosophy at all. It's about finding your fit and sorting you into the right role and every single person on the planet has a fit where they will be successful and we help define that by building very custom profiles, algorithms for particular roles at particular companies. Every algorithm is different just like your Netflix algorithm is different than my Netflix algorithm and it's really applying that same recommendation engine thinking design principles to what we are doing rather than thinking, "Oh I have developed an IQ test and if you score high you're a good employee everywhere and if you score not as high, you're not". That's a different philosophy.

RK: And you know just staying on that thread, you mentioned this very important thing about context of organisations and roles and every individual is different for different organisations and different roles. How do you create a learning model on that?

FP: Sure, yeah. It's like every other machine learning powered platform out there. How does, you know, Netflix…?

RK: You apply it on registering of products.

FP: Yaa, you basically have a training set of data that you use to train your algorithms, right? I mean, again, I'm not saying people are movies but Netflix or Amazon – they learn from our behaviors, they say, "Hey, you know, you like these types of movies", they understand the core traits that are you know fundamental to the things that you like and then it helps you discover similar things that have those core traits. And I think what's so critical about that is that it's a dynamic learning algorithm, right? So it doesn't stay static over time and your human capital base will change and we will adapt alongside of that, right?

I think the other thing that is so critical is that, I think that the way that we are trained to look at human capital has a very western slide to it. Its saying, oh you know in a way, you know in a Caucasian person, these are the types of attributes that I think are adaptive. Well nowadays the world is global. If I'm building a human capital system that really is bench marked on Caucasians let's say, how well does that really operate in the rest of the world, right? In the remaining billions of people that are not Caucasians. So, I think that taking something that looks at people's fundamental traits that are like unanchored from their cultural context is so critical and that's another piece I think is important to what we do.

RK: And do you have reference models for specific roles which organisations can adapt to. It's the other way round, you know, not learning from what they have but what they could learn from other organisations of best in class.

FP: I just like that word 'best in class' because I think that's like saying there is a best person out there and to me that doesn't exist, that's kind of a myth. It's like this mythical person that we created because I don't think that is really the case. And I saw this at HBS, like people had a fit to a particular role in a particular company. There is no such thing as best in class. You know it's like we are all good at something. And so, we do have what we call industry or generic models where we have aggregated across different roles and we do use them sparingly for certain cases, but we also know from all of the data that we run that if we build you a model based on your high performing

people in a particular role at a particular company, that model will perform much better over time; and then taking a best-in-class approach because you know there are lots of things that are wrong with this best-in-class model and again it is very outdated in my mind. It's back to this idea that it's an IQ test and some absolute value that we can determine from someone that will always make them successful.

RK: But you have reference models which organisations can kind of refer to and…

FP: Yes, we do and we can use them in certain context sparingly, but we always advice that you customize your profiles.

RK: Right! And the more the data you've, the better the model is learnt.

FP: Ya, I mean at some point it asymptotes but yeah.

RK: If I have to flip this around and say, if you have to go to a potential employee that wants to get recruited in a firm. Would you address needs on the other side, almost like the B2C rather than the B2B?

FP: I think what's really interesting is that we've done that even as an enterprise product. So what I mean by that and I think you're aware of this, but not all consumers are. So, if you apply to a company that's using pymetrics, we will find you a fit. It may not be to the role that you applied to but we have a way that first we'll evaluate you for the role you applied and that will be the first decision point and that's the first part. Then we will evaluate your fit for any other role that the company has and then the third step is if you've been through or put out of that company's process, we will then evaluate you for any role in any company that we have ever built. So, at the end of the day everyone who goes through pymetrics will find a fit and so it is a consumer-facing product in that way even though the buyer is the enterprise. But we have this whole consumer-facing part of what we do because at the end of the day we want to help consumers, people, job-seekers find their best fit as much we want to help companies find the right person. So, really is a match-making tool in that sense and we're unique in that way. There's no other product out there that has this sorting capability, not only within the company but across all of our partner companies. And we have over 100 companies using us at this point, so it's a very effective way to kind of you know, move people around to really optimize their potential.

RK: You know one other thing which intrigues me is how the future of work is going to change. It's going to significantly move from just humans in a workplace to human+gig+machines and in that endeavour what humans would do in the future is going to be very different to what they did now. And if you've to configure a model to hire people who fit to this human+gigs+machines, do you see your AI-learnt model being much more suitable to find the right capabilities for humans there?

FP: So I mean I guess I would answer that in two ways. One is that pymetrics is a system that works with recruiters, it doesn't replace them. When people say you're making the hiring process less human; I say you know what is the human to human interaction in a recruiter reading resume? There is none. I'm just reading a piece of paper, that's not a human-to-human. So, we always retain that human-to-human interaction, it's really making, it's really up leveling and making the recruiter function or the HR function within a company much more strategic.

RK: It just amplifies their capabilities yeah.

FP: Well, it's just making it more strategic rather than operational and sort of you know tactical in a way; which I think is critical and I think that people, we're all being thrust into a world where we need to adapt to the reality that our day-to-day lives require that we become much more adept at using technology; I mean that's true for me, that's true for you, it's true for anybody. And so I do think that helping move everyone that's in our world today to a place where they do feel more comfortable – that is kind of part of our mandate, I think as HR leaders, you know.

RK: Yes. You know, I'll just mention a related thought. The more I think about it, this whole model of applying AI to put successful people in specific roles is not necessary only for new hires; you could apply it to existing employees. Do you see large corporations doing that?

FP: Yeah! Absolutely. We are a talent matching platform that doesn't deal with only recruiting side of the house, we also deal with internal mobility and reskilling. There is a huge interest now in reskilling because you know employers realize that, hey x percent of my workforce is now in a role that potentially may not exist 5, 10, 20 years from now. Yet, I really like them. I don't want to go through massive layoffs and also; we were having this conversation earlier like I can't find these people work …

RK: Ya, that was the point I was making.

FP: Yeah, so why not re-train my current workforce that's so great and doing such a good job; why don't we all go along this journey together? Rather than casting off people and hiring in new ones. Yes, so there is a huge opportunity to do that as well.

RK: And in fact, you know reskilling is such an important topic for every large enterprise.

FP: We're all being reskilled. I mean let's not kid ourselves. I'm being reskilled every day of my job, so are you. I mean it's the trend.

RK: And the ability to assess who we are, what we need to do and how to get to the finishing line on this new capability and being a lifelong learner. It's so credible.

FP: And the other thing is that we sort of eluded to, we haven't gotten to is the potential I think for AI-powered technology is to really breakthrough this sort of you know, places and society where there is growing income and socio-economic inequality. And what I mean by that, we are at a place where the talent market is changing so rapidly, so dramatically that people are; Infosys is a great example of this – using all means at their disposal to find the best talent everywhere and they're really throwing out the rule-book from the last decades and I think that's really allowing, especially when you then start going to AI-powered tools that are not using sort of traditional talent signals but are really looking at something more fundamental; I mean we see this all the time in clients, that they're hiring a much more diverse socio-economic pool of people than they were previously because you know again talent is equally distributed, it's the opportunity that's historically been much more lacking in equal distribution and I think that's changing because of these talent shortages and these new roles that are really nobody's trained for. So, why not take the best person; not sort of the most advantaged person and help them.

RK: I think the switch is going to happen from experience to potential and capabilities and…

FP: Because experience right now I mean, think of the new roles, data science has been around for what 15 years at best, or 10 years; so, experience is kind of silly when, nobody really has the experience right; and that's true for many roles like drone pilots – how many people are going to have 2 decades worth of drone pilots on their resume? So, I think more and more we are moving towards this potential economy.

RK: In fact you and I discussed about adjacencies and you know I remember doing this program with Udacity on autonomous technologies and we were hiring people for adjacent capabilities and learnability and I think the AI model suits so well to look for people who've the learnability index and the learnability quotient rather than actually finding out whether they're ready for the job or not. So, where do you see AI moving further from here in this entire value chain of human capital. What are the next few big things coming up?

FP: Look, personally when I started the platform; my idea was why not make the job-matching experience like great, or any kind of search engine. When I was at HBS, I watched this happen. It felt very much like the travel agent model where you know I'm a buyer. I want a particular thing, I go to a travel agent. The travel agent says yes or no and if he says no, then I'm back to the table and then I hit 20 different travel agents till I can buy my ticket to where I'm going. Now you and I remember that, but you know my daughter is like, travel agent, what's that? Because we have search engines right, I type it in and it immediately matches me to tha . And that's what we should be moving towards. We should be moving towards a system where I have my talent passport, I carry it around with me and it allows me to automatically match, to do the right match and it's an efficient and automatic system that basically makes the talent market much more liquid and can really match any person anywhere to the right company anywhere. And I strongly believe that's kind of the way of the future; there's lots of things standing in its way. I was talking to a leader in the HR sort of space about this and what's still standing in the way and I think there's a whole host of structural issues. But I'm very confident and very optimistic that's where we are headed. That's what people want, that's what companies want, that's what humans want, nobody wants to be unemployed, nobody wants to be in a job that they don't like and you know companies are struggling to find the right talent. Consumers benefit, companies benefit and we just really need to break away the friction that's preventing that from happening.

RK: Thank you so much Frida! Thanks for talking and it's such a path breaking journey.

FP: Thanks for having me! We are so happy to be going on this journey with you. Thank you for having us.

RK: We are very excited about what it does to the human capital value chain. And the advances of technology are just going to make this sharper and sharper as we go ahead.