GETTING THE TALENT EQUATION RIGHT FOR SCALING AI

AUDIO TRANSCRIPT

ALEX STATNIKOV: Data science and analytics as a field, it's really growing, expanding and it's now influence on a lot of adjacent disciplines.

(MUSIC)

ARNAB CHAKRABORTY: Hello, everybody. I'm Arnab Chakraborty, Managing Director for Accenture's Applied Intelligence Practice. I'm here today with Alex Statnikov, Head of Customer Lifecycle, Automation and Data Platform at Square and previously Head of Machine Learning Solutions and Global Line Modeling at American Express, Global Head of Data Science and Machine Learning at SoFi and Professor and Director of Computational Causal Discovery, Laboratory at New York University.

Alex, great to have you here today with us and having the opportunity of talking about the talent equation and how to get it right for scaling AI across the enterprises.

ALEX STATNIKOV: Thank you for introduction, Arnab. I'm real excited to be here with you and looking forward to our conversation.

ARNAB CHAKRABORTY: Awesome, awesome. So, Alex, this is a fascinating topic. We are seeing a huge, huge explosion with the field of analytics and AI and you have been in this field for a number of years across your career. The key theme that I wanted to start with is to get your perspective around as you think about analytics and artificial intelligence and organizations trying to scale that capability, what do you think are the skills that are needed by individuals of today and tomorrow, both hard skills and soft skills to be successful in this field?

ALEX STATNIKOV: Yeah, that's a great question. So there are basic skills that most of people who can call out that are associated with data science, analytics and AI, such as statistics, mathematics, engineering, computer science and business. And in addition to those, as think in storytelling are becoming much more relevant these days.

It's also important when they talk about the skills to differentiate different groups of specialists in the field. That specialist will work on reporting and data engineering more on the analytics side, there are data scientists and there are machine learning engineers. And each of these subgroups have their own unique skills.

And, for example, if you look at machine learning engineers that build deep learning models, they require much deeper specialization. They would build more proficient in programming, software engineering, so that they can take full control of deployment of the models.

Also, I want to mention that as this field expands, there are different facts. There's IT fact and there's the people management fact. And, obviously, somebody is of people management, they will have a high emphasis on leadership for skills and ability being first.

And the final thought that I want to mention here that data science and analytics as a field, it's really growing, expanding and it's now influence on a lot of other adjacent disciplines. And, for example, I can see that people who are data scientists today, they can become very effective product managers or they can be executives of the company. So they gain a lot of adjacent skills and this is very important for development of the field.

ARNAB CHAKRABORTY: I think that's quite interesting perspective. You talked about a diverse set of skills that an individual needs to bring to bear and also, you talked about how those skills can help the individuals navigate their career into different paths within the organization. So the question that comes to my mind with that is where do we get these kind of people? Where do we get this kind of talent? What are the right sources to actually tap the talent pool with the skills and expertise that you mentioned? Where should organizations be looking for?

ALEX STATNIKOV: So, first of all though, obviously, organizations have to prioritize their skills or their roles. It's impossible to find people who have all the skills. In the past, most of emphasis for people with strong data scientist skills was coming out from international talent, but in the last 5, 6 years, American programs have been developed very significantly and we see many graduates coming from U.S. programs.

Also, one important thing is now in order to increase the talent pool, it's important to expand early indications, so that there is more emphasis on mathematics, sciences and engineering. So this will kind of help with more upstream, so that down the road, there is other people who are qualified to be both more technically competent and have a great other skills needed for the job.

ARNAB CHAKRABORTY: Oh, that's quite interesting as you talked about how in the United States, the whole courses and the program have been developing around analytics and AI and all the top universities are starting to offer these programs and curriculums to students. And what I see is today's students coming out of these programs have plethora of opportunities. They have big companies like yourselves, who are looking for talent. They're also

having startups, knocking their doors and try to attract them. What would be your advice, you know, the pros and cons, when you look at the opportunities that are there from startup to big companies for talent in the field of analytics and AI. What will be the pros and cons that has to be evaluated for these choices?

ALEX STATNIKOV: So one line of thought I have is that established companies, they have built out infrastructure that provides opportunity to work on big projects and build models. So it's kind of from join the company and you start to make an impact. However, the draw backs of big companies is that the infrastructure has all the legacy components and this really now frustrates people because of work needed to be done to get something innovate. On the other hand, startups, you can be much more flexible on building the infrastructure because you pretty much do have to define everything from scratch. And the disadvantage is that you may have really nothing.

So you may be able to – you may have to work really hard to get some basic model deployed, but it's yours to gain your skills. And one thing I just want to call out is that the established companies, that enable their talent to operate in a startup like environment and in that sense, have the best of both worlds. And the Square is one of those company and I'm real excited being at Square for those reasons.

ARNAB CHAKRABORTY: That's awesome. That is awesome. You know, I love your statement around bringing the best of both worlds. You can still be a very established company, but creating the startup culture within the big walls of the enterprise is quite an interesting proposition to bring to that talent pool.

So the next big challenge, I'm sure you are facing it as well. There is a war for talent. So you are able to attract talent and bring them into your organization, but at the same time, how do you create longevity of the talent, so that they stay with you, they grow with you and you're able to retain and develop the worker over time? What are some of the challenges when it comes to redemption of the analytics and AI talent and what are some of the approaches, organizations need to take to improve the longevity of their talent pool?

ALEX STATNIKOV: First of all, organization leadership needs to understand that it's very important for data scientists to grow and to have very different experiences for their role and responsibility and begin extra skills.

So understanding this is really important because this helps organizations to set up strategy (inaudible). Another important consideration is that the local data scientists, given that they have now so much choices these days and there are so many opportunities, they really want to focus on technical work and not have to navigate the organization politics. So organizations have to create more certain environments so that data scientists can be very productive.

And finally, and the most important, what matters today is really no culture with the company. So being in a good culture where there's a great example set by the leaders of the company that are great relations and there is great respect for employees and the recognition, it's of paramount importance and this is now what attracts data science and talent.

ARNAB CHAKRABORTY: Yeah, I think some really important nuggets you shared, Alex, it's about leadership, it's about environment, it's about the culture. And one of the important things that I see is when you are creating an analytic organization is important to organize it in the right way. And making sure that the organizational setup is appropriate depending on the organizational climate that you are in. So any thoughts on that, on how we have seen analytics, organizations being structured in different organizations that you have, yourself, worked in and what's the right mix of structuring the organization around analytics in AI in a big company?

ALEX STATNIKOV: I think a first principle, the most important principle is that AI and data science folks need to work collaboratively within the business and not be siloed. And how it's done, it can be unique for each company with different settings and that I arrive to business models, so that really depend on the company. It can be a centralized, a decentralized hybrid model, hybrid support and it really depends on the company and the culture. So one cannot deal with perspective, but understand what works best.

ARNAB CHAKRABORTY: Yeah, yeah, I think that's well-said because every organization is different and we need to adapt it based on the organizational culture and the heavy pitch and what makes sense. I think a big challenge that organizations start facing today when it comes to attracting AI talent is around diversity. How do you bring diverse mindsets with respect to gender, race, ethnicity, into your AI talent pool and it's a real challenge? And I know, Alex, you've been working in this space and investing a lot of your attention and time. It will be great to hear some success stories and also some best practices that you have seen that work in this space?

ALEX STATNIKOV: Yeah, diversity and inclusion is very important. So, first of all, it's important for the leaders also to realize why this program exists and be aligned on the purpose. This programs, they move barriers to allow full participation and leadership under present of technologists, innovative economy and this program, for example, they can equip future technologist, such as Black, Latinx and women with the tools and resource they need to enter and navigate the tech industry. It will last them for a year and advocate for themselves and be a community.

And I've very proud that Square has been a major supporter of open promise, open unified school district and the back the (inaudible) and our partnership over the years, include organizing business with Square offices for Bay Area youth, workshops to how to build, for example, websites for small businesses and how to nail behavioral interview and support for credit to college programs for community that have been historically underrepresented with technology. And making this investment, we create more

diversity of thoughts, perspectives, inclusion and we have no culture that enables everyone to respect each other to grow and to come up with only the best ideas and to contribute back to the community and for the country, just is very important.

ARNAB CHAKRABORTY: Yeah, yeah, I mean as you were speaking, I was just reflecting with my own. I've got twin daughters and as they are in high school, I'm thinking there needs to be a lot of influence in the curriculum that needs to start probably at the high school level, so that when the students are deciding for colleges, it already starts to kind of come in their mindset and that's the way we can start grooming the diverse talent pool and this high school level it's at.

So any thoughts on that, Alex, in terms of how we could influence the curriculums at the high school level and what the high schools should be doing today to start creating that analytics and AI acumen in their curriculum, so that students get ready as they move into the colleges?

ALEX STATNIKOV: Actually, I think we need to do it way before the high school. I think the right time to start this really in the elementary school because in high schools, in my perspective, it's kind of too late because you need to build these foundations, to build essential skills and appreciation for math and sciences. And it's a little bit frustrating that not so many school curricular are investing appropriately in developing this talent and having all corporate boards to view this and coordinate it, so on and so forth. Having three kids myself, so I'm very involved in with the kids on vacation and I sign up them full ride to courses, online courses these days and I make sure they get the best and get exposed to the skills, so that they can pick it up later and have some competitive advantage of their peers and move out in the field.

ARNAB CHAKRABORTY: I love your passion, Alex, and also the stretch that you're saying, that we need to start at the elementary level and not even wait till high schools. So that's really good to hear from you.

So I think we covered a very good range of topics today around the talent equation and how to get it right and you shared a lot of good pearls of wisdom here. Are there any parting thoughts from you in terms of key advice for both the talent, AI talent, that is looking to build a career in organizations, as well as for the leaders in organization as they are planning to attract talent? Any additional keywords of advice from you, Alex, that we should keep in mind?

ALEX STATNIKOV: Sure so, for everyone joining the workforce and the data science field, I really want to wish them to always to follow their heart and be confident in yourselves because opportunities are immense and having this confidence and following your passion is very important. And for leaders, I encourage them really to emphasize on developing your best culture in the world, that attracts people, that retains people. Invest in their growth and enable them to be very productive and you get (inaudible).

ARNAB CHAKRABORTY: Awesome. This is great, Alex. I really, really appreciate you making the time and sharing your perspective with all of us. I would also like to thank our listeners for paying attention and for all the guests who joined to listen to the podcast. I would also encourage you to subscribe and share the podcast with all of your friends and colleagues and thanks again for all of your time.

ALEX STATNIKOV: Thank you so much, Arnab, for the opportunity. I really enjoyed talking with you. Thank you.

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