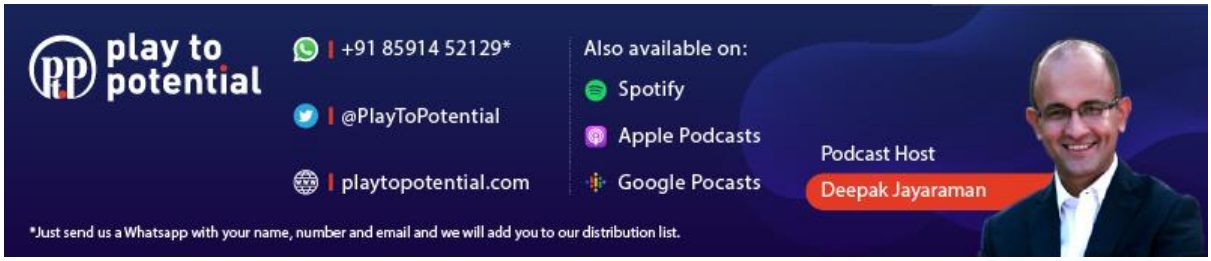

Context to the nugget

Kartik speaks about the extent to which machines and algorithms have pervaded our lives. To give an example, 80% of view on Netflix is based on algorithmic recommendations and 70% of YouTube consumption is based on what it suggests. He talks about what this means for human beings to stay relevant in the future where the machines are getting exponentially smarter by the day.

Transcription

****

Deepak Jayaraman (DJ): Let's go back to the basics Kartik why don't we start with just understanding the definition of Machine intelligence, what do you have in mind and also why you write this book and why now?

Kartik Hosanagar (KH): Artificial intelligence or machine intelligence is the idea of getting computers does the kinds of things that take human intelligence. For example, understand language navigate the physical world, meaning pick up objects, manipulate objects, recognize people, recognize things in the visual world. A reason, learn all those kinds of things so that's AI and a sub-field of AI is Machine learning which gets a lot of attention recently and it's focussed on how do you get machines to learn from data and arguably it's the most important sub-field of AI because if you have a system that can learn faster than us but it's very basic at the beginning it won't take a long time for that system to catch up, on the other hand you have the system that got all our knowledge but it cannot learn. It takes only a day for us to leave it behind so machine learning is arguably the most important soft field of AI and you know, why I wrote this book is because AI and ML are entering into all kinds of technology that we touch today and most of these technologies have underlying algorithms in them so, these algorithms essentially for people who don't know an algorithm is simply a glorified term for a series of steps one follows to get something done, so any software you use it follows the set of steps to do what it's doing, like Amazon makes product recommendations, people who bought this also bought this that is its recommendation algorithm and so any software has algorithms these algorithms are becoming more intelligent, more AIs coming into them and they are also making more and more decisions for us and so I think we should care about it and people don't understand how much of an impact they have on decisions we make. For example, my research shows that over the third of the purchases people make on Amazon originated from algorithmic recommendations over 80% of viewing activity on Netflix and over 70% of the time people spend on YouTube is driven by algorithms. Deepak you were in recruiting, recruiting is using a lot of algorithms to skim resumes and figure out which applicants to invite for job interviews and they are also being used in medicine, doctors are consulting algorithms to make personalised treatment decisions, in court rooms in the US you have algorithms being used to guide judges on sentencing decisions, we are working on driverless cars, so the stakes are just getting higher and higher.

DJ: How do you see the role of humans in the world where the Machines are getting smarter exponentially by the day?

KH: So, I think some of the studies have shown that man plus machine beats man and it beats machine, so it seems like there is some role for man to play but I agree with what obviously our huge chess legend Viswanathan Anand is saying which is that eventually the role of humans is going to diminish in something like that and with more and more activities around us it's going to be the case that for a long period of time, man plus machine will beat both man and machine and it will the case that machine will beat man but the man plus machine will beat machine but then eventually as machines advance the role of the human diminishes. So I think as we move towards what is known as Artificial general intelligence which is this idea that AI can be generally intelligent like us not at very narrow tasks like you know you have a system like Deep blue or more recently Leela Zero or Alpha Zero which play chess, which can beat humans at chess but they can't treat diseases, they cannot understand language and so on but as we move towards artificial general intelligence which are systems that are generally intelligent like us I think our role will diminish and there will be a lot of questions that we will have to answer about what is work? How do we engage with meaningful work and so on? I think this idea of jobs or roles which require compassion which require a human touch which requires personalization, I mean you do something that is very interesting which is personalised exec coaching, so that's I think these are the kinds of things or you look at what a doctor and a nurse does, you can automate a lot of things they do, like diagnose diseases, maybe even figure out the right treatment options but I think for a patient the value of speaking to the doctor or have a nurse right their talk to them, those things are you know hard to sort of quantify and replace and so I think some of those kinds of roles will be once that will become more important.

DJ: Maybe picking on one of the things that you said Artificial Genera Intelligence, how do you see the curve there and do you see a certain point of singularity where the dynamics completely shifts?

KH: Yes, so the point of singularity would be the point where the system is more intelligent than us but then it has more processing power than us and can handle more data than us. So it leave us behind in no time and once we get there you could as well ask what's the point of humans doing anything because let's say you wanted to come up with the cure for cancer but why even try? Because the system can process data faster than you, is super intelligent so it will beat you to it and clearly that is a very interesting and both promising and scary scenario. In terms of your point on when this might happen we can only speculate, there was a survey that was done I believe by author Nick Bostrom, he ask some of the leading AI researchers on when singularity or super intelligence might, when might we hit that? And the survey the vast majority of the leading AI researchers who had surveyed gave a projection in 25 to 75 years range. Now, I personally don't subscribe to 25 years but let's say you go with the high end of the range 75 years or you even say 100 and 150 years that's not that far and so I think we have to start thinking today in terms of how we prepare for those kinds of scenarios.

Reflections from Deepak Jayaraman

DJ: When you think of AI and ML, one would like to think that it is something that impacts the Coders and the Scientists in places like Google and Facebook but after reading the book and after looking at statistics around how much influence the algorithms at Amazon, Netflix and Google have on our lives, I was blown away at how many of us go through our lives without consciously thinking about the repercussions of just playing along rather than being thoughtful and deliberate about our choices. There is definitely an efficiency argument because you get what you want easily because

the service provider has data about you but there is a real trade-off here. You do get to see one part of the universe and miss out on experiencing something else that you might have if not for the algorithm crowding your mind space.

Thank you for listening. Please visit playtopotential.com for more content. You could visit the curated playlists section for specific bite sized nuggets that are captured by themes some of which might be relevant for you. You can also find the podcast offline on platforms like Apple Podcasts, Google Podcasts, Spotify and more.

End of nugget transcription

****

RELATED PLAYLISTS YOU MIGHT LIKE

Staying relevant: How do we stay relevant as we go through our journey is something that keeps a lot of us awake. This is both in the context of refreshing and rejuvenating ourselves over time and also ensuring that our skills and capabilities are fit for purpose in the world we live in and the future of work. You can access the playlist here.

Digital: As we move from an Industrial era with linear supply chains and long shelf-life to a Digital era with interconnected ecosystems and ephemeral shelf-lives of ideas and products, the rules of the game are shifting. This requires leaders to rewire themselves and start behaving very differently. And this change can be hard. Perspectives around how we should deal with the Digital Tsunami. You can access the playlist here.

SIGN UP TO OUR COMMUNICATION

Podcast Newsletter: Join 1000s of leaders who benefit from the Podcast newsletter. Not more than 1-2 emails a month including keeping you posted on the new content that comes up at the podcast. High on signal, low on noise. Sign up for the podcast newsletter here.

Nuggets on Whatsapp: We also have a **Podcast Whatsapp distribution group (+91 85914 52129)** where we share 2-3 nuggets a week from the Podcast archives to provoke reflection. If that is of interest, please click here and send a message stating "INTERESTED". Do also add this number to your Phone Contacts so that we can broadcast our messages to you when we share a nugget.

****

Kartik Hosanagar - Nuggets

- 44.00 Kartik Hosanagar - The Full Conversation
- 44.01 Kartik Hosanagar - Staying relevant as machines get smarter
- 44.02 Kartik Hosanagar - Predictability Resilience paradox
- 44.03 Kartik Hosanagar - Convenience versus Privacy
- 44.04 Kartik Hosanagar - Diversity of thought in the drawing room

- 44.05 Kartik Hosanagar - Unanticipated consequences and "Cobra effect"
- 44.06 Kartik Hosanagar - Exercising consumer choice - balancing efficiency and diversity
- 44.07 Kartik Hosanagar - Machines - Decision Makers or Enablers?
- 44.08 Kartik Hosanagar - Jobs at risk and new avenues
- 44.09 Kartik Hosanagar - Re-skilling ourselves to stay relevant

About Deepak Jayaraman

Deepak seeks to unlock human potential of senior executive's / leadership teams by working with them as an Executive Coach / Sounding Board / Transition Advisor. You can know more about his work here.

Disclaimer and clarification of intent behind the transcripts

This written transcript of the conversation is being made available to make it easier for some people to digest the content in the podcast. Several listeners felt that the written format would be helpful. This may not make sense as an independent document. Very often spoken word does not necessarily read well. Several of the guests have published books and the language in their books might be quite different from the way they speak. We request the readers to appreciate that this transcript is being offered as a service to derive greater value from the podcast content. We request you not to apply journalistic standards to this document.

This document is a transcription obtained through a third party/voice recognition software. There is no claim to accuracy on the content provided in this document, and occasional divergence from the audio file are to be expected. As a transcription, this is not a legal document in itself, and should not be considered binding to advice intelligence, but merely a convenience for reference.

The tags that are used to organize the nuggets in the podcast are evolving and work in progress. You might find that there could be a discrepancy between the nuggets as referenced here and in the actual podcast given this is a static document.