Complexities of artificial intelligence adoption for the Life Sciences workforce

Transcript

00:00 – 04:27

SAHIR ALI: You look at talent and workforce, particularly in life science, it's a multifaceted problem. It comes down to policies, it also comes down to what we call skilled workers. Then it also comes down to upskilling. And then there's a real question of where do we automate automations?

For example, pipetting, it's a robotic solution. So, there's that balancing with life sciences does require higher degrees, PhDs And so, think about it from a policy perspective from, even if you look at United States, turns out 80% or so PhDs in engineering science are, you know, immigrants. And so, what are some of the policies that help you retain that here? The other part is that if you have a skilled sort of workforce, there's a real question of burnout.

And so, I was looking at, I think, a McKinsey report, it says that life sciences ranked third or fourth in providing some of these mental health supports and things like that. And so that's real, that's part of the talent sort of retainment and things like that. And then the automation is a real thing, right? If you're going to have workers who are going to be displaced with automation, which from a productivity standpoint would make a lot of sense, are there programs to upscale them?

Last thing I'll say on this is the education part, you mentioned, a report suggested last year that if you look at the distribution of degree requirements in life science, actually it reduced to even a community college. And so, the idea is that, I think, instead of having a proper four-year degree plan, do we have vocational programs that sort of focus in or upskill, or can get into that and sort of find workplace or workforce in life sciences?

What about once technology has been deployed, sort of in terms of change management, resistance and all? Before being an investor and an academic scientist, I had a parallel career as a sales source architect. And I did work with life sciences companies in digital transformation, and sort of going from on-prem into cloud and things. And QMS systems and change management and CAPA and sort of looking at deviations, these are very important solutions that require either a paper trail or spreadsheets.

And you look at what cloud sort of brought to the table was sort of the 360 view of a product that a life science has from the moment it is being researched, R&D, if there were … "What happened?" "Who approved it?" from … it goes to a manufacturing process … any deviations, any events on the factory floor. Once it goes to a consumer or a patient, all the sort of, what we call adverse effects, all of these are siloed processes and there's inherent risks involved, the compliance. If you're ISO, ISO certified, you have to keep track of all your deviations in the processes. I think that's what cloud brought to table.

So initially, I think we mentioned that road map. Forget AI, do you have a road map for digital transformation? It becomes very important because it can streamline it, or you can have an opposite effect of just burnout, and now we have another tool to use. I mean, you can see that in healthcare a lot. If you ask any nurse what their thoughts on an ESR system are doctors, they feel … the number one reason they feel burnout is, they see the patients, they love what they do, they want to give the diagnosis. Now they have to go back and put their notes in and that's a real burnout. And so … you must have seen in recent news that you have companies like Ambient.ai they're looking to transcribe the ambient sound that listens with the doctor, and it automatically takes the notes and out comes these medical codes. And it's really addressing the burnout issues.

So, I think that there's some -- that's the landscape that I see where there are opportunities, challenges, and for us to kind of start thinking through on what that means as a community, as communities.