

Entrepreneurial AI in the Enterprise: LG Nova's Shilpa Prasad

SAM RANSBOTHAM: How can an entrepreneur in residence kick-start new, AI-based businesses in a large incumbent organization? Find out on today's episode.

SHILPA PRASAD: I'm Shilpa Prasad from LG Nova, and you're listening to Me, Myself, and AI.

SAM RANSBOTHAM: Welcome to *Me, Myself, and AI*, a podcast on artificial intelligence in business. Each episode, we introduce you to someone innovating with AI. I'm Sam Ransbotham, professor of analytics at Boston College. I'm also the AI and business strategy guest editor at *MIT Sloan Management Review*.

SHERVIN KHODABANDEH: And I'm Shervin Khodabandeh, senior partner with BCG and one of the leaders of our AI business. Together, *MIT SMR* and BCG have been researching and publishing on AI since 2017, interviewing hundreds of practitioners and surveying thousands of companies on what it takes to build and to deploy and scale AI capabilities and really transform the way organizations operate.

Hello everyone. Today Sam and I are excited to be joined by Shilpa Prasad, entrepreneur in residence at LG Nova. Hi, Shilpa. Welcome to the show.

SHILPA PRASAD: Thank you, Shervin. Excited to be here.

SHERVIN KHODABANDEH: Tell us about LG Nova and your role there.

SHILPA PRASAD: I get asked this a lot. LG Nova is the innovation center of LG Electronics, based here in Silicon Valley. Our mandate is very simple: We're tasked with finding new business opportunities for LG Electronics that are not core to their bread-and-butter business. LG Electronics is a consumer electronics manufacturer traditionally, looking to make forays into solution-driven businesses. And so [it's] constantly identifying new technologies and areas that can be interesting for them to

build upon and hopefully launch billion-dollar businesses out of it.

That's what LG Nova is. My role at LG Nova is entrepreneur in residence, and what that entails is I have many different hats that I wear, one of them being a plain consultant for the corporation. And by consultant, I don't mean traditional consulting but more in the context of, what are some of the trends to look out for, what new technology areas could be interesting, [and] how can we combine a multitude of technologies, maybe, for a business opportunity? That's one part of it.

The second part of it is very much focused on outside-in innovation. Our roots are set on the fact that we don't want to do what somebody else has already done, and startups are a great example of how quickly they innovate. And we want to bring that innovation into the enterprise that we are and leverage some of that capability to chart out a path together.

So collaboration with startups is key, and that's where the entrepreneur side of me kicks in — where you've got to be able to understand the mindset of the entrepreneur, the speed at which they function, what drives them, what makes them do the stuff that they do — and convey that to the corporation in an effective way. And then, of course, there's the reverse role, where the entrepreneurs don't necessarily — outside of the corporation — understand the workings of the big corporation, and how you bridge that gap, I think, is very crucial to the role. It sounds very simple, but there are a lot of balls in the air in that sense, and you've got to be able to juggle all of that at the same time while keeping your eyes on the goal of building new business.

SHERVIN KHODABANDEH: You're talking about a large, global, multibillion-dollar company that's operating at a given speed, and you also want this group to operate at a much faster, I would assume, entrepreneurial speed. So I could imagine why it's juggling a lot of balls.

I wanted to ask you, is it identification of these technologies or innovation opportunities/disruptors, or is it an addition — incubation and building — of these as well?

SHILPA PRASAD: Yeah. So there is the ideation piece, but there is also the venture-building piece, and part of venture-building is incubation. So you have maybe six months to identify an opportunity, build toward something, and then demonstrate that capability both on the product side [and] on the business side to senior stakeholders and investors wherever necessary, and then drive that to new business. So that definitely is a big part of what I do there.

SAM RANSBOTHAM: Maybe it's just what Shervin and I hear a lot of, but there's a lot of artificial intelligence with startups, and you haven't mentioned artificial intelligence yet. So how does artificial intelligence intersect with your role?

SHILPA PRASAD: AI is not intersecting. It's at the forefront of what I'm doing. If you remember like a year, year-and-a-half ago, Sam, there was a big hype around the metaverse, and technologies come and go. My focus is to identify real-world problems that can be solved using and leveraging some of these technologies. So AI is definitely at the forefront. There's a lot of AI-related work that goes on inside of the enterprise which focuses on servicing the existing business units, and that's not what I'm put in place to do. My role is to look at AI as a technology and identify areas that could be interesting to solve as a problem in this ginormous world and build a business around it.

I can't speak too much of exactly what I'm building, but I can talk to the fact that there is an intersection of augmented reality and artificial intelligence that I personally am charting internally here which will possibly change the way skilled-training transference, upskilling, reskilling, and content around that is going to play out.

I'm sure you already know this — that with AI in the mix now, so much of this can be so intuitive, with a feedback loop that can be generated for both the trainee and the reviewer and essentially allow workforce development or skill training in

particular to move forward at a much faster pace.

SHERVIN KHODABANDEH: It seems like AI is going to be more of a key ingredient of the mix, not just an additive, and so keeping humans in the mix is going to be even more key. I hear thematically in what you're talking about a focus on that. So tell us a bit about AI that's happening. You said you can't speak much, but I still want to tease some information out of you. So talk about AI that's happening within this innovation center, or contrast it with AI that's happening at the enterprise.

SHILPA PRASAD: I'm sure both of you are very familiar with a large enterprise and the channels one has to navigate in order to get anything to market. And what I mean by "get anything to market," it's also about releasing something which impacts a lot more inside the enterprise, right? So when you look at the traditional sort of research that happens around AI within the enterprise, and particularly LG Electronics, my understanding thus far has been that the appetite for risk-taking is limited because it disrupts a lot of their existing work, [whereas] something like this that I'm charting out is leveraging some existing technologies that are out there, and when we launch something like this into the market, none of the existing pieces are impacted — in fact, they're benefited.

So LG, for example, has 85,000-plus workers across the globe working in factory environments. Everybody understands today that there is a gap in the labor that's available in the factories from a front-line worker perspective. There are productivity-related asks constantly within the enterprise to make sure that the entire ... capacity is being met. These are all real problems that the AI research within the enterprise is not addressing.

You asked about the time to market. My mandate is six months to figure out whether a business can go to market or not. I think on the enterprise side, it's a few years, if not more, right? Anywhere between two to five years.

It has always been a topic of conversation, saying, "Corporate is slow; the startup is fast." So I'm essentially building a startup inside corporate.

SHERVIN KHODABANDEH: So, what I'm hearing is sort of unshackled from a lot of the sort of legacy scale — with which comes inertia — and much faster sort of as new ventures that are going out. And, of course, some of that innovation then helps some of the existing enterprise AI that's going on, right?

SHILPA PRASAD: Yeah. Absolutely.

SHERVIN KHODABANDEH: Wonderful. You talked about upskilling, reskilling, and possibly reimagining the role of humans in this whole mix with AI — in the mix you talked about. Tell us about generative AI and where you see that play out in this.

SHILPA PRASAD: I think the possibilities are humongous, just like with any other opportunity in AI. One of the aspects of, for example, intersecting augmented reality technology with AI means that we're not only focusing on voice and text with respect to AI but also computer vision-related data streams that are being captured and processed in order for skill transference to happen as effectively as possible.

So think about a nurse training environment. We're not practicing on real patients but on the dummy. If you have to teach trainee nurses how to position the patient on the bed in order to do a specific procedure, then there is a multitude of value in capturing the data stream from the head trainer nurse in order to see how to do that and, when you're actually practicing it, to get real-time feedback, right?

So we're looking at multiple data streams here. So not just NLP [natural language processing], but we would be looking at computer vision-based technologies and bringing in AI to sort of —almost superpower that process and that trainee and training experience on both sides, right? So that's an example of how we're doing it differently.

SAM RANSBOTHAM: Normally I'm pretty excited about the applications of artificial intelligence we talk about, but I get a little threatened here [for] a second. I mean I'm an educator here, and I hear you talking about all sorts of different ways of reskilling and retraining. Where do I go? You mentioned a model before with nurses, where the

experienced nurse would teach the less-experienced nurse. Maybe a lot of that gets replaced. What's the role for that experienced nurse now in this new model?

SHILPA PRASAD: Yeah. Well, actually, Sam, I think your fear is maybe misplaced here, and let me explain this. We're not trying to replace the trainer. What we're doing is actually empowering the trainer with more opportunity to do the stuff that they should be doing. So in the training-of-the-nurses example, a head nurse has to actually physically stand next to the trainee nurses, possibly multiple times during the day, and teach them how they're doing their specific tasks. Now imagine a scenario where we've eliminated at least two levels of feedback, review, and assessment before the head trainer can actually come into the mix and take a look at what's going on.

So the certification I think is still very, very important, right? Whether it be manufacturing, whether it be health care — the two examples that we're talking about — the certification is still important, and that certification comes from the trainer, who is the expert. So we're not removing the expert. It's actually empowering the expert to also be able to train effectively and not have to monitor 100 screens of trainee nurses that are doing their job. So you see the difference, hopefully.

SHERVIN KHODABANDEH: Yeah. Sam's a tenured professor, so I don't think he's going anywhere. But, Sam, it's a little bit like the full professor, i.e., yourself, sort of not being bogged down with the things that a graduate student can take care of, and you only do the tough ones and the ones that really tease your brain.

SHILPA PRASAD: Yeah.

SAM RANSBOTHAM: That sounds glorious to me.

SHILPA PRASAD: I think it's an assistant, right? You'd have an AI assistant that could actually do a lot of the grunt work that otherwise you have to sit and do. So I think there is value in it. At least we're seeing some inferences of value that we're able to generate in the very early conversations we're having.

SHERVIN KHODABANDEH: Wonderful. Shilpa, tell us a little bit about your background, how you ended up in this role.

SHILPA PRASAD: My career is a zigzag line, Shervin; it's not a straight line to what I'm doing today. Over the years I think there's always been a lot of value and joy that I have found in creating something [from the] ground up. The energy, the momentum, and the rigor it requires to scoop something up from nothing and create something out of it has been at the core of everything I've done.

So very early on in my career, I had the opportunity to partner with someone to start [up] a graphic design studio. And there, I learned the mechanics of what it takes to actually create a business. It taught me a lot of the pieces that went into it.

From there, I've always landed myself in roles that were actually entrepreneurial in nature or servicing the entrepreneurial ecosystem. I'd like to mention a company called YouNoodle Inc. that I worked with here when I first came to Silicon Valley. There, I learned the power of selecting the right startups or innovations to work with in order to move innovation forward, whether in the context of corporations, governments, universities even, and large-scale accelerator programs.

That led me to my own entrepreneurial journey again, during COVID. It was really difficult. I launched a startup called LongPlay and built a team of about 10 people. It was focused around changing the way corporate innovation happens. And one of the things I think there is, when you're outside of the corporate, there is just no way to understand all of the different moving parts that go on. So we couldn't prove product-market fit there, which is where Nova came into the mix. I got the opportunity again to try to do a product-market fit in an industry and an environment that was a little different from what I was used to, but I think the nuts and bolts are the same. So that's just a quick background on me.

SHERVIN KHODABANDEH: It's super-exciting — very multidisciplinary. And it brings me to my next question: There is no one-size-fits-all when it comes to AI, and it's of course a full ecosystem of engineers and software engineers and prompt

engineers and AI engineers and data scientists, etc. But I've been noticing a gradual evolution of the skills over the past, I would say, 10, 12, 15 years or so, from hard-core technical-only to also more multidisciplinary, and that "multidisciplinary" could be in a variety of areas. It could be in social sciences or it could be in human-AI interaction, or it could be in philosophy or whatever. But are you seeing the same thing, and what is your perspective on talent of the future in this space of AI?

SHILPA PRASAD: It's an interesting question. I have to say I'm not seeing the same thing.

SHERVIN KHODABANDEH: OK.

SHILPA PRASAD: I'm not seeing the width as much as I'm seeing the depth. There is still, I think, a tremendous gap in the workforce with respect to being able to be multidisciplinary. There's a lot of, to your point, deep tech work that happens, especially around AI.

I think that's [something that] over the next few years, a lot of the folks like myself that are responsible for how this technology unfolds are going to have to carry with them.

SAM RANSBOTHAM: That comes to measurement too. I mean — Shervin, I know that's a [hot topic for you right now — but when you're talking about impact, you've got to figure out how to measure it. There's going to have to be some measure of "Is this working? Is this not working?" And these seem like some difficult problems, particularly with the newness of the technology, the freshness of the timelines that you're talking about. It seems very difficult to figure out if this is working or not working in your role.

SHILPA PRASAD: Yeah. I mean, I can give it a little bit of a personal take. My style of building projects has always alluded to testing it as much as possible with the customer who has the problem.

And that's where the product focus sort of is very front and center for me, and that's why venture-building is exciting. When we talk about measurement, there are definitely different ways in which the impact of what we're creating or what we're trying to create can be measured.

There is a market validation aspect here, right? There is definitely an investor validation aspect, meaning our investors ... It's not just about my project, right? It's not just about the project that I'm creating or building. It's actually more about where the money is going. And of course a little bit of it is hype, but a little bit of it is also taking the chance on the next thing that is likely to change the way AI is going to be used in day-to-day environments or contexts.

I think the third part here is also just about empowering the users, ultimately, of whatever solution we're creating and whatever we are building, in order for the business opportunity ... Ultimately [it] has to add value to the humans — that is, you and I, who are actually going to use that technology to make our lives better. Today, we're doing the work in the exact same way that we are taught or we're used to or we have learned how to, and we're going to have to change that or adapt that and pivot to a new way of doing things.

SHERVIN KHODABANDEH: And is AI enabling you to have better data and information on that? Is AI enabling you to know something that maybe 20 years ago would've taken you a lot longer to know?

SHILPA PRASAD: Absolutely, but I think "Is AI enabling me? Only it will do that," I think, is perhaps a lot of weight on AI and less relevant to what has been done in the past 10, 15 years in a specific industry. I think AI also has a flip side to it, which is, sometimes it's putting too much in front of you, where then you have to actually go through the top layers to really figure out where this data can be used and how this data can be applied. So there's the pro and the con of AI as well.

SAM RANSBOTHAM: You mentioned cons. What kinds of cons are you seeing from these startups you're working with? What are people struggling with here?

SHILPA PRASAD: I think the startups in particular are still looking for ways in which whatever they have developed can be applied. The application of AI in effective ways is still to be determined. And so startups are creating all these LLMs [large language models] that can be relevant to the project, but they don't know how it's going to actually translate.

So I'd say there's still a little bit of a journey there for the startup to be able to understand it. And in the context of the role that I have today, for example, I'm also enabling the startup to understand how they can use the technology that they've created and translate it over to a meaningful problem, but ... that's why I said consulting before. It's consulting for the startup as well: to give them some real-[world] scenarios where you can apply something that we've built together and then see how it translates into value. So I think the startups are still learning for sure, Sam.

SAM RANSBOTHAM: So those things actually tie back to maybe some of Shervin's comments about breadth and breadth of knowledge and multidisciplinary, because you didn't specifically mention that they're struggling with technology. I heard lots of things there that were not particularly technology-oriented.

Let's transition here. One of the things that we do at the end of the episode is we ask you five questions. We're going to ask them fast. We just want your first reaction from them. What do you see as the biggest opportunity for AI right now?

SHILPA PRASAD: Health care.

SAM RANSBOTHAM: OK. What's the biggest misconception that people have about artificial intelligence?

SHILPA PRASAD: That it's going to replace them. That it's going to replace us as humans. That's not going to happen, I think. We're a ways away from that.

SAM RANSBOTHAM: Ways away. Good. What's the first career that you wanted?

SHILPA PRASAD: To be an entrepreneur. I think it was always in my DNA.

SAM RANSBOTHAM: Good. Did you have a lemonade stand when you were growing up?

When is there too much artificial intelligence? Where are we trying to make a square peg fit in a round hole?



SHILPA PRASAD: I don't think I have a concrete answer for you, Sam, there. So if you're going to switch the question out ...

SHERVIN KHODABANDEH: Ask it this way:
Can it be too much?

SAM RANSBOTHAM: Can you put too much artificial intelligence into a product?

SHILPA PRASAD: Yeah, absolutely. I think an area that comes to mind is cobots — collaborative robots. It could work, it may not work, and then it's very heavily AI-driven. So automation is key there, but how much of that could be relevant, I think, is questionable for me personally.

SAM RANSBOTHAM: If you were fantasizing, what's one thing you wish artificial intelligence could do right now that it can't currently do?

SHILPA PRASAD: Make me sound as good as I possibly can.

SHERVIN KHODABANDEH: Shilpa, thank you so much. This has been illuminating and wonderful. Thanks for being on the show.

SAM RANSBOTHAM: Thanks for joining us.

SHILPA PRASAD: Thank you.

SHERVIN KHODABANDEH: Thanks for listening today. On our next episode, we'll hear how Harvard Business School professor Ayelet Israeli suggests augmenting corporate market research with generative AI. Please join us.

ALLISON RYDER: Thanks for listening to *Me, Myself, and AI*. We believe, like you, that the conversation about AI implementation doesn't start and stop with this podcast. That's why we've created a group on LinkedIn specifically for listeners like you. It's called AI for Leaders, and if you join us, you can chat with show creators and hosts, ask your own questions, share your insights, and gain access to valuable resources about AI implementation from *MIT SMR* and *BCG*. You can access it by visiting mitsmr.com/AIforLeaders. We'll put that link in the show notes, and we hope to see you there.