

Satyajith-M-Chief-Technology-Officer-AI-day-Session-11

So, you heard a lot of our colleagues talk about the products that we take to market, solutions that we have with clients, and how we accelerate our development with our clients as well as internally, right? Most of this starts with innovation. So, I have the fortunate opportunity of running that particular team in Hexaware. So, I'll talk to you about what we do in that team. Primarily, I want to focus on what's going to happen, because you've already heard what's already happened. So, I'll focus on what's going to come out. I'll give you a gist of what we are doing.

There are many things that we do, but I'll talk about some of them, which is more interesting and which might be exciting for you as well. So, the lab is the engine behind all the agility that you've seen so far in terms of accelerated product deployment, monthly product releases, et cetera. And this happens with a systematic pipeline that we have built.

This is built over years. It's not recently done. So, this pipeline is very solid. AI has helped concrete the pipeline more for us. So, it starts with incubation. Then we do prototyping and finally move things into production. So, I've got some examples here. In the interest of time, I'll run through one or two of these examples so you get to see what we're doing. So, let's start with incubation itself. So how do we do incubation? So, this is not something just clients tell us that they want to see or there is some problem that they face. That's one aspect of where requirements come from. So, I have a specialized team of PhDs who actually do research. Please look at the white papers that we write as well. So, these are intense papers that we write, contribute, and also we collaborate with a lot of third parties to do this. So, we also look at what research is happening with frontier models and at the universities that do cutting-edge work. So, when we find some concepts there which are interesting in nature, which we feel has a lot of value, we pick them up for the incubation stage. So, it's one channel. Second channel is our business units themselves. When they see signals happening that they predict could be futuristic in nature, they bring requirements to us and that's the second channel. The third channel is, again, client-based ones that we get as well. So, three channels of pipelines that we get for the incubation phase.

Now, there are many things in here. So, you will get to see one of them in the labs when we take you there, which is the robotic red steaming. It's a massive one because everybody is into robotics these days. It's a trillion-dollar industry that's coming up. Security in that industry is the weakest that we have seen. So, we'll give you how we are able to specialize in that area and where we feel we will have a cutting edge when compared to everybody else.

Now, what I'm going to talk about is looking glass. This is something that we are doing using Wi-Fi. So, everybody has a Wi-Fi, be it an enterprise or a home. So, the idea behind this is can I detect objects within a premises just using Wi-Fi, right? There are other products like Wi-Fi sensing, et cetera, which you have to replace the device, but it's just using existing tech stack. So that's what we are doing. So, take an example of a care home in the North American region. So they have patients in there. If a patient falls down, there is no way somebody will get to know unless the patient goes and rings a bell. If they have fallen down, it's very unlikely they're going to go ring a bell, right? So, the only way that can be identified is when a nurse

actually does their rounds. So that happens once in a few hours or probably once in a couple of hours as well. So, this particular technology allows us to detect where the patient is, if they're on the bed, if they're on the floor, if they hit the bathroom, if they're on the floor of the bathroom, and immediately alert the nursing station so the nurses can go and take care of them. So, this is also a critical aspect. Think of the defence industry. So, if you want to know what your adversary is doing on the other side, if you could just use a Wi-Fi signal to do this, so that's the power of what this has got. So, it's got extreme potential, so we're investing a lot, and we have some prototypes ready that'll come out in the next few months.

Let me talk about the second thing, which is once we have something in here which is more robust, which is programmable, not just in paper, that moves into prototyping stage. So, I've taken two examples here. I'll talk about one in the prototyping stage, essentially. Now, this is, in my opinion, one of the hottest topics you'll all get to hear in about six to 12 months from now. This is exactly what the world is moving towards, because there are so many agents being created, and everybody wants to treat an agent as an employee. When you treat an agent as an employee, you should know how the agent behaves as well, right? That's a critical aspect. Is it behaving correctly? Does it have any malicious intention? Is it actually doing something which could jeopardize the organization, reputation of the organization, et cetera? Now, a good example for this is about a couple of weeks back, you would have seen the Black Hat announcement where OpenAI came and presented how one of their agents, which they had given an Excel-solving problem, just was supposed to solve an Excel, broke into a competitor, which was Hugging Face, and hacked their entire infrastructure. So, imagine Excel-solving problem landing up with hacking a competitor. So that's how agent behaviour is. They couldn't identify it, they didn't detect it in time, it happened all post-mortem. So, this technology allows us to identify these patterns earlier, and when we find such a pattern, we have a kill switch that actually kills the agent, right? So, nothing happens. So that's what we're developing in that space.

Second is Biomirror. When you go into the lab, you will actually see Biomirror in action. So, it's got some 30-plus parameters it can pick up from you by just your facial recognition. So, you don't need to have something on your hand, your wrist, or somebody trying something on you, none of that is needed. 30 seconds to 60 seconds in front of a camera, just looking at your face, will be able to give you about 30 parameters, and that is almost 98% accurate when compared to these devices that you wear and walk today. That's a critical one. So, if you go to a clinic, if you're able to accelerate the time that you can hit the doctor, and the doctor has enough information about you, that's very helpful for the industry as well.

Now let me talk about the final one. I want to spend some time here with just something that is in production. You've heard a lot of things, so I thought I'll take one of the examples and talk a little bit detailed about what we have here. So, this is called Agentverse. Essentially, it's a studio of three solutions. We give it to organizations or employees of organizations, business units, et cetera, to develop their own agents. Once they do, then there is something called a testing studio, which actually runs through the entire testing phase of that agent, and then there's an op studio that actually does the operations. So let me talk a little bit detailed about what happens. So when we have a lot of these agents getting developed, the challenge that we have is different teams develop different types of agents, the standards get lost, right? Standards getting lost in translation. So, this platform allows all the security-compliant standards of the organizations to be applied by default across the entire stages of

development cycle. Now once that standard is there, the testing again is the same, so it tests for more vulnerabilities, weaknesses. Everybody spoke about METOS, so you know what it does. So, this actually does a scan that is equivalent to what METOS could do so that the code that is going in for these agents are rock-solid and secure, right? Then finally, in the operational aspect, what it essentially does is track the behaviour, like I said, one aspect of it. Today it's more telemetry behaviour. In the future, we're going to introduce the behaviour of how the agent is thinking itself. So, on the telemetry side, we track the tokenomics, we track how the agent is performing, the tools it's calling, the kind of guardrails it's there, the harnesses that we have deployed, does it have any weaknesses in those, is it testing the borders, is it trying to break away from the border? All that stuff is what we track in this. So, these are already in production for our clients, so they could scale, and this will not have any challenges in terms of maintaining and managing the security infrastructure in general.

So, this is what I wanted to quickly cover today, and everybody welcomed you to Hexaware, but I have the opportunity to welcome you to our lab. So, I'll quickly walk you through what we want to do in the lab and how we are organized. So, we have some leaders who will guide you, because the intention is that we want all of you to see everything that we have to offer. So, the leaders will guide you. So, if you look at your badges, you have numbers in there that has been assigned to you. So, you just have to go to one of our leaders based on the number. So can I ask all the leaders to come to the front so everybody knows who you are one more time, and then it's easier for us to navigate everybody into the labs. So, the intention is we'll spend approximately eight to 10 minutes per booth that you see here, and we will go on a round-robin basis so all of you get to see everything that we have to offer. So Vikash is going to manage group one, and Neeraj is going to manage group two. We have Sid who will manage the group three. Nidhi is going to manage group four for us. We see Chandran is going to manage group five, and finally we have Ajay who's going to manage group six for us.

So, we'll take you there now. We have 60 minutes, and we'll come back and then continue our sessions.