EPISODE 7

VIDEO TRANSCRIPT

Shiladitya:

Hello everyone. Welcome to tech careers in the new, the new podcast series presented by Accenture. I'm your host Shiladitya Mukhopadhyay. In this podcast series, we'll get you the latest and greatest in the world of technology that's shaping the future of business as we know it. We are talking intelligent platforms, cloud, AI, blockchain, extended reality, and a whole lot more. Every fortnight on Wednesdays, we'll have for you a hot topic with experts speakers from Accenture talking about top trends in the space, how these are changing the world and creating growth across industries. And more importantly, we'll tell you how you can learn more, build your skills and expertise to grow and stay relevant in your career.So we're here today to talk about intelligent automation. This might sound like something which is easily explained, but the ability we have today with technology around us to automate things, to sort of make our lives easier, to make everything we do more efficient, to automate, not just things we do in our life every day, like products and services we use, but also for business. There's a lot of automation to go around. So what really is intelligent automation today and how does it stand? Is it just the fact that I can punch a few buttons on my phone and a cab arrives? Or is it as simple as me saying, instead of having to write a letter, I can send an email? There's so much more. There's to what automation means today and what it used to mean maybe a decade ago or maybe even many decades ago when it all started. So everything we are doing as a technology-driven civilization today is towards automation. But how does this all come together? What's the cutting edge of automation today? And of course, what is all the intelligence that we're putting into it, right? And what does this mean for us? What does it mean for people who are skilled in this domain or people who are building careers in this domain? Let's talk to some experts and find out just about that. So I'm here with Koushik, Vijayraghavan, Managing Director Automation, and AI and Aditi Kulkarni, Managing Director Automation, Agile and Dev ops at Accenture to talk about just this. Shiladitya:Welcome to the show Aditi and Kaushik. Thank you so much for being here. I would love to have both of you maybe give us a quick introduction about yourselves and your background because before we dive into this topic of intelligent automation and what it entails. It would be great to know, uh, you know, how you both have arrived at what you do in this space.

Aditi:

Hi everyone. Glad to be on the show. I'm at the Aditi Kulkarni. I have been in the IT industry for the last 21 years and 17 years with Accenture. I played various roles within Accenture. Uh, all of those roles have been working along with my clients. I love to work along with clients in a collaborative way. I've helped them in their transformation journey to digital, transformation journey from their traditional methods like waterfall to new methods like agile and safe, Dev ops transformation. In my current role, I'm leading automation, Agile and DevOps practice, within the Accenture technology center in India and also a leading the MyWizard intelligent platform development, engineering, and deployments for our clients.

Koushik:

Hi everyone. I'm Koushik. I do three things at Accenture. I'm the global lead for our MyWizard platform which is an intelligent automation platform. I also focus on building automation specialist skills our own automation architects and engineers, which we will talk about during the day, and I work with some of our large clients in implementing the automation transformation for them. Overall over 18 years of experience, 16 of which have been with Accenture. I played a wide range of roles starting from being a developer, business analyst, and architect for the most part of my career, working with clients in products, health, etc. And now bringing it all together to drive automation with working with our clients.

Shiladitya:

Lovely. Thank you so much. In fact, uh, that actually brings me to the, you know, the first part of how we go down this conversation of intelligent automation as to what really is the background of the core fields that we're talking about today. Both of you have had, of course, you know, uh, various, uh, roles in technology which have led to what you're doing today. But could you give us, uh, Aditi, maybe a history of the tech in general? Like what does automation mean? Everything from, you know, automating the simplest of tasks in my head sounds like automation, right? So what does this industry really represent and where has it come from? If you could go way back and tell us.

Aditi:

Automation is not new. It started somewhere in the 18th century in the manufacturing industry, uh, trying to automate every repetitive task on the production floor, but it's not limited to manufacturing. All industries are driving automation and IT is no different if we focus our attention on it, even the trends within IT have changed over the past two decades. When I started my career, there were no cell phones. In my school and college days view used to be dependent on landline phones, but today we cannot live without a smartphone. That's a

technology change. But with the technology change the way we help our clients drive automation, intelligent automation is also changing. So if I go a decade back when I started my career, our clients, the challenges that they used to face, they're more of this integrated technologies or platforms, a lack of processes, lack of discipline and rigor and ideating to those. So we had to help our clients industrialized and the focus was more on reducing the cost by doing outsourcing now via moved from that phase to today. Today the clients are on the digital transformation journey. Not Everybody is at the end of the journey. They're somewhere in between. While they are on this journey, the automation trends are very different. They ask us, whether they can do 100% automation on their operations, they ask us whether they can go from reactive to proactive, but today they ask us more to go to predictive, completely eliminate any disruption from happening in future. The ask is 100% automation specialization in this career, and those are the trends that we are helping our clients with. So the, the entire, uh, way of looking towards automation has changed and evolved and it's also changing the way we will do our operations and support for our clients in future. Shiladitya:
All right. Do you want to add anything to that question Koushik?
Koushik:
Just to add to what Aditi said, if you look at automation today, traditionally when we think automation, we think of cost, we think of, um, effort reduction, more productivity and so on. Now with the benefits that our clients look for from automation have brought insignificantly. Now our clients don't just look at that and some of the first things that you hear is, can I use automation to make my user experience better, right? Can I use automation to drive speed? Can I get that business-changing transformation out in the market in a year versus two years? That's a big ask. How can I make a, you know, my id or my systems or my business more agile, more flexible? How do I get better products out in the market? So, uh, the ask is very different. The shift is also, uh, you know, uh, moving from, you know, reactively responding to more proactive and predictable like, um, what Aditi just spoke about?
Secondly a decade back, automation was very script focused automation of repeated task, etc. Now the kind of technologies that are available at our disposal is much wider. We have a wide range of technologies from RPA, bards, chatbots, virtual agent machine learning, deep learning, very advanced analytics predictors, etc. All of which we now apply into the automation mix and it is moved from, you know, just tool-based automation to having AI at the core. The emergence of AI, uh, or you know, and the deeper technologies in AI at the center of automation is a big game-changer. That's one of the reasons why they look for a hundred question, uh, automation at scale in a sustainable way and so on. And it's becoming extremely business-driven. It's no longer about how you automate it or you know, some siloed processes. It's about how you use automation to achieve your business outcomes. Shiladitya:
Right. In fact, both of you mentioned, right, the shift today. Uh, which brings me to my next question, right? Where is this tech today? Where is this not just the tech or rather this domain today is what you mentioned focused about the outcome automation? I mean, organizations are aligning, uh, whatever practices of automation they implement to business outcomes or some KPIs that they understand as their driver. So, uh, let me ask you what other, you know, actual applications in the industry today, uh, of all of these things?
Koushik:
Automation has generally, it has evolved from being one other thing that firms do to being very central to their in business and it's a very broad area. Going back to the phone call example that Aditi made, I can actually say that making a phone call to you in Mumbai is automation because I don't have to travel all the way. And I speak to you, I have made that entire communication more effective. But, uh, you know, coming back to the reality of automation today, you see it applied in four broad areas. First, there is automation around what we call it, products and services. This is the part of automation that is most visible to us. So think of, for example, how we used to shop for Diwali 10 years back we would go all the way to a store, go store by store, look for clothes, you know, and check out the sizes and so on. Now you can all do it on your mobile phone. Or think of how you hail a cab today I book a taxi in advance. Go wait for a request requisite just using an Uber or an Ola or a Lyft depending on where you are. So these are direct end customer-facing automation where you are actually designing systems to automate, to make your end customer experience better. Right? So that's one. There's one category of it. The second part of it is what we call automation for businesses. So each of these businesses has their underlying processes. They have their say order management, procurement call handling, and many more HR finance functions and so on. So each of these business processes has a lot of scope for automation in terms of bringing in automation to make the processes more efficient, cheaper, more effective, accurate, etc. So that's around automation for businesses.

Then there is automation for IT. This is how do you make the underlying IT systems more reliable, easier to operate, how you provide an overall, a better user experience. So for example, I don't want to have a buggy software, having a better user experience. Uh, you know, my mobile app makes a big difference in terms of the business and so on. I would have, you know, use making systems more, uh, cheaper to maintain, to develop, get development out faster, execute projects faster, etc. That's, uh, you know, automation around IT. And then finally, the last one is what I would call it as automation that around transformative services. Now, like Aditi mentioned, every business is changing. So think, you know, moving from traditional retail business to a complete, web-based online mobile-based or you can even think, you know, and uh, an echo or Alexa based a transaction that means that the business has to change, the underlying business processes have to change. The underlying technologies have to change. You, you can no longer operate that out of a mainframe for example. It has to be completely into digital using blockchain AI so that total transformation, uh, is something an organization goes through and automation is right at the heart of it. How do they get that transformation out faster, doing it in time in a very predictable way, getting it out with the best possible quality? So that's the other area of automation. And you know, there are many more. So these are broad categories. I would.

Shiladitya:

In fact, that also brings me to maybe ask you Aditi, given the background that both of you have and of course the extensive experience in Accenture, uh, in this domain. Could you tell us a little bit more about what Accenture does in this space? And maybe elaborate with some real-world examples of, uh, you know, case studies as well.

Aditi:

So Accenture has been consistently ranked as number one by the industry analyst and we have been recognized for our holistic strategy on automation, the investments that we do and the innovations that we have in this space. My wizard is a flagship intelligent automation platform which has helped our clients dry their entire automation journey and help them take a big leap on speed, agility, efficiency, experience and cost optimization. Now be applied three key principles in intelligent automation helping our clients. The first is to help them move from the reactive to proactive and from proactive to get predictive. For examples, the clients or Organizations want to predict when a disruption will happen and based on that lead time that they have got prevent this disruption from completely occurring. So that's the move towards predictive. The second thing is analytics and AI is at the core or heart or software engineering practices. Not only the new applications are being designed using AI, but the entire software engineering methodology is changing and AI is getting infused at every step in this. There is a human plus machine interaction using technologies like chatbots, virtual agents that Kaushik talked about earlier and that's driving more efficiency. So you're not replacing humans, but we are augmenting their tasks with these virtual agents who can do these much more faster and efficient. Third, the ready to use and self-service AI capabilities are needed to have an acceleration of automation and drive the value is much faster. Also, what is important is driving automation from a business angle, looking at what are the business priorities, what are the business key performance indicators? And from that then get down to the IT layers of application and infrastructure. Now let me give you a few examples of how we have been helping our clients, moving them through this automation transformation journey.

So one of the leading banks that we worked with they were on their digital transformation journey, uh, organizational program. But while they were doing this, their loan processing time had increased to 12 days, 12 business days, which is quite high even from industry standards for various reasons. Now when we partnered with them, we did a complete assessment of what was going wrong, both from a business perspective as well as from an IT perspective. In their applications and the infrastructure space, we applied complete touchless automated monitoring and this along with the self-healing concept of resolving their tickets and incident, reduce the turnaround time for their incidents on the IT side. What was also important was to look from a business angle why the loan processing processes were taking much longer time. So we work collaboratively with the clients to optimize that process and make it much leaner. And then we applied robotic process automation on top of it.

Now this entire intelligent automation was orchestrated by my visit and this has helped them reduce their loan processing time from 12 days to 3 days. So this is how the automation is not just at the application infrastructure layer, but it's driven from a business priority perspective, driving more outcomes and value to the clients. The second example I will give is a leading telecommunications company. Now, a couple of years back, they were getting disrupted by market. There was a very high competition. Their customer base was about 10 million and the need for them to remain to sustain in the market as well as differentiate from their competitors. Uh, they wanted to become more agile. Business agility was a key ask. To drive business agility and delivery agility becomes a part of it. Now how do we do that? We partnered with

them. We helped them move from their traditional methods like a waterfall. Today they are on safe agile. Safe and scaled agile. We did a complete DevOps transformation for them. We also did a part of organizational transformation, so they were initially working in silos with different IT departments and business units. Now they are organized more like feature teams or site reliability engineering teams where full-stack engineers do the complete development as well as the support of their systems. Now, this transformation today has helped them increase their subscriber base nine times and the speed to market for launching new products into the market has increased eight times. So this is the change that the platform my wizard and our work along with our clients is helping them achieve their business outcomes. You would like to add for example?

Koushik:

Sure. I've been talking about retail. So let me take you through an interesting example of where we use intelligent automation in the retail space to make a big difference. So this is for a large retail client that they had an ongoing problem. Their customer expedience was getting affected across their stores, due to failures in scanners that they use. So just imagine in a retail store, you're standing in a long queue, right? You get an option of, you know, you can scan, you know, the products yourself. When the moment the scanner fails, you are being brought straight to the queue. Yeah. And then if a scanner fails, you are, you know, stacking a long queue. It causes a lot of frustration there. So for them, it was very important to keep this engagement high. So that's where we, uh, they brought this in and what we did is we, we went in, we didn't know what all assessment of, uh, you know, what the problem was better where we could, uh, you know, um, prevented where we can use automation, etc. And here we resorted to AI as well as the Internet of things. What we realized is if we can predict a failure before it occurs, is monitored all the devices, use the technology that's available to use signals from the scandalous monitor them constantly and over time start predicting when a scanner is going to fail before the failure occurs. So what used to happen earlier was a scanner fails, there is a ticket, the tech team then has to come into the store and the whole process would take two to three days. And then you are a, you know, the, it causes a problem. Here we were predicting the issues before they occur, be where we would locate the store pointed to the tech team were, so they go and remediate the devices before the problem occurs. And more so just think of a large retail store, it'll actually pinpoint the exact scanner that fails on a map. So the disc coming there, a remediated. So most occasions the, uh, devices that are, uh, getting fixed or replaced before the problem occurs. And the, you know, the, when we looked at the when they surveyed the customers had satisfaction increased tenfold and all of this was using AI from the main was at platform customized and adapted to this particular problem area. And a very good one of the best examples of going from reactive fixes to proactive fixers, value monitor them and then predicting the issues and then improving the user experience significantly. Well, another very good example, but this is more in a development context on how you use, uh, a move from reactive to predictive is for a large markets company. So this, they had a unique problem there IT, you know, was so vast and was so active that they had about 30,000 change requests that they handled in a month. So that's like a hundred change requests a day. And they were, they actually wanted to speed up the development. They wanted to release every other day. And the problem they had was every time you inject the change into a production environment, you, you know, it can destabilize it. You can have tickets, your users can get impacted. So in order to do that, they need to ensure that when they inject these hundred or changes in a day, that production is not affected. And that's the only way they can move towards, you know, weekly or daily releases and so on. And the speed at which they could analyze and take decisions on the change requests was a big barrier for them and they didn't have the confidence that they could actually inject, you know, particular pack of changes into production. So here was an area where we actually brought in predictions in the development process and in how we do DevOps itself. We were able to implement, we use my wizard, we use some of the analytics and predictions there, where do we monitor the entire development life cycle going all the way into the behavior of the system in production, in the production environment and the ticket's coming out of it, etc. And what we were able to do is to call out that as you develop, starting from the time, a change request is defined, predict how successful it will be in production along with a production impact. So you defined the change request as you start building it, there is a prediction. It becomes more accurate as you start testing it. It still predicts how successful that release will be all the way down into your final Go No-go call before you deploy it into production. So you are constantly given real-time predictions and it also recommends to you telling you to drop these 5 changes, these are the 5 changes that are most likely to break things up things cause a production downtime or spike in tickets etc are these are the least ready changes. So now the client was able to just look at these predictions, look at the analysis backing it. We had to get the data cleaned up a lot to get it in place, but then they were able to run these decisions right from the start of the life cycle to that final Go - No Go calls on the basis of the predictions and analytics. And they knew that you know, the, they always knew that a, a particular release will be safe and if not, what to drop, etc. And that helped, you know, move them towards ultimate day and eventually they literally cycles and you know, which helped them get the speed they wanted into their id.

Shiladitya:
Thanks for those amazing actual case studies. I mean it's interesting to see that there is so much happening in the space and as all of the things which you spoke about are actually a combination of so much tech, you probably need, you know, your knowledge base for you know, implementing a project like the ones, you mentioned involve so many disciplines in, in each case. So the job of someone in this space is essential to sort of be very cross-functional or you know, have uh, across multiple skill sets. Wouldn't you say like what is the future of technology or skill set like this? What is the future of our domain as such? What's holding it back? Uh, in terms of, you know, what next?
Aditi: So there are a couple of things are happening in this industry. One, technology is exploring very frustrated. The new technologies like Fiji, blockchain, AI, cloud, IoT, virtual reality, they are going to change the and new business opportunities are coming up. Now organizations are going to apply these technologies, not individually but a combination of them. And that gives rise to many new business opportunities and business innovations. While the technology is exploding and the businesses are evolving, the way applications and systems get designed and future is also changing. So the future applications are going to have three characteristics. One, they will be boundaryless. By boundaryless I mean the gap between the infrastructure applications, businesses, systems, people is blooding and they are all coming together. Second, the future systems are going to be adaptable, meaning they will be able to look at the entire data themselves, self-learn that I have inferences and recommendations from their data and self adapt. The third is they will be radically human. So it's a combination of love, human plus machine interaction, driving the highest level of efficiency in the systems.
Now, these future systems also require a different way of automation to manage them, not just develop them, but also operate them in the future. So the ecosystem of automation of the future needs to be such that it can scale at the organization level holistically and very easily. So we need to have an automation architecture and platform which can be self-provision, it should be The second part of it is we keep talking about AI. auto-scalable, it should be auto recoverable, it should self learn and sell, feel itself. These are some of the trends of the future where we have started designing our platforms. Now Accenture platform, my wizard intelligent platform today we are leveraging it for more than a thousand engagements. We have about 300 assets, realtime integration assets coming together, both technology and industry and there are more than 5,000 automation specialists that are helping our clients on the ground to their transformation journey. We are taking this platform further by applying intelligent automation analytics and artificial intelligence at the core of the platform to support the future systems that I talked about.

Koushik:
Typically what we see from clients when they approach automation and to get, you know, why, you know, large scale benefits across the firm. The first thing is um, automation is actually very easy when done in pockets. It's usually a quick thing to do. It's easy to build a Bot and it's easy to get quick results. But when you look at large scale results that affect business outcomes, it needs a firm-wide strategy. Very often, you know, there is a tendency to get quick RPA quick, you know, script scripted results, etc, to prove them out. We need early thinking and strategizing to see how you can apply it, you know, firm-wide . So that's one and a key challenges, you know, how you work across the silos in a firm to, you know, uh, ensure that the automation cuts across. The second part of it is we keep talking about AI.

A key to make AI work is data. It needs very careful investment in getting the right data in the right quality of data, the right richness of data available, because AI is all about, and machine learning is all about learning from data, right to, you know, replace what we've traditionally defined as business rules, like data-driven logic and so very often the, uh, you know, as we start the automation journey, we, you know, we need to identify what gaps exist and work with our clients to improve their data strategy to get the right data in place for automation. Thirdly to make it work that people value apply automation to need to accept it. So if you're applying a business process that has to be acceptance of the automation solution. So the change enablement, the right, providing the right coaching to the people and how you apply automation is, is a key there as well. There's a fourth piece, which is, you know, the, you need to have the right technology and the right tooling ecosystem on which you automate, which is another area we help our clients with. And here's where, you know, using a combination of Mywizard with some of the practices we have, our own automation provides that holistic approach to help our clients achieve these results.

Shiladitya:
Great. In fact, uh, if you could also extend this to, uh, you know, as an organization, Accenture, the MyWizard platform, all the things that put this in place. What other kinds of, uh, actual careers in the space, which, uh, you know, enabled all of this to happen.

Koushik:
So, uh, in today's world, um, automation is no longer

an additional skill. Today it is sufficiently vast. There's so much, you know, technologies and skills in play that it requires specialization, we see automation as a specialist skill. And let me take you through some examples of where you need the specialists. So our first step to actually start automation is you need to know what to automate where you have the business case. So it requires people who understand the underlying business processes, IT processes using analytics to find out what to automate, how to automate it in a way that gets you the results. So here, there is a strong need for process architects, uh, analytics experts skills like six sigma coaches, etc, who can bring that in. Once you do that, you need the right solutions on how to automate. How do I automate your processes, the workflows or your user experience the right way, Applying a good knowledge of the client's system, available technologies to automate strong knowledge of AI, bots, etc, and tie this solution together. So that's where, you know, just like we have architects in technology, we call them automation architects. So these are specialists who craft and implement these solutions. And once you do that, do you actually need the engineers, the guys who will do the coolest stuff, building the bots, building the, uh, you know, doing the machine learning parts of it, doing the integrations, you need the installation, you need to see this come to life and this requires, again, a wide range of engineering skills from RPA, machine learning, analytics data and so on. And finally that are, um, that are the, uh, automation coaches who actually make sure that the consumers of the automation accepted. So the coach, you know, the businesses, the IT users at clients, around projects etc are to adopt the automation that we bring in. So that it, you, you get the results that I needed. And finally, you know, these roles evolve into what we call as the automation champions or automation directors who actually help our clients define, you know, their overall automation transformation strategy, how would that firms approach it and so on. So plenty of rules out there. And a this is an area where we heavily invest in and we also look for, you know, deep skills in this area from the field. Shiladitya:
Yeah. So what, what are some other, I would say tips, you know, for folks in looking to start their career in this space. I mean there's obviously so much vast opportunity. So what kind of dips, what do you want to leave to other listeners here? Aditi:
It's a really interesting space. I think the first thing people have to remember is it's automation first culture. Don't look at implementing or performing an activity which is just given to you as a responsibility, but think out of the box and try to do something different, optimize it and let it be the highest degree of efficiency. It's possible. So use design thinking approaches to do more of automation first culture thinking. The second tip I will say is you have to continuously learn. Uh, automation does require a lot of skills to come together. Like Koushik talked about. You need RP skills, you need artificial intelligence skills, you need DevSecOps skills, you will need agile skills, the new methods skills and the technologies as well. Now, while that is happening, it's difficult. It's not so easy to adopt all the skills at the same time.
You'll have to learn one at a time, but that continuous learning is important. So how you want to learn is up to you. You can prioritize yourself, you can do online courses, digital training, a lot of different ways of learning which are available. Pick and choose and learn at your pace but let the pace be quite fast. I leave you with those two tips. The third is more, everybody knows. Google is always there. There are many other ways of also finding out more information than what's happening. Latest. Uh, be aware of the new trends and technologies and that will help you get into this space. And we do offer a lot of programs for our people to specialize in this career. It's a dedicated career path that we have where people can grow and learn and also help our clients move to the new.

Koushik:
I will add, be hands-on, explore. There's a wide range of skills out there, you may not try it at work but keep exploring what's out there. Right? While it's important to learn, it's equally important to unlearn in the automation space. You'll have to constantly move ahead and then added to that. I think the most important tip that's helped me is that be bold and challenge the status core. Automation is all about challenging what are the accepted ways of working and coming up with ways of doing them differently. So ask the bold questions, challenge what exists and then you know, that helps you generate the ideas you need to, you know, automate in a way that makes a difference. Great.

Shiladitya:
Thank you so much. Uh, I mean this was really enlightening and I hope this podcast itself, uh, to our listeners has sort of started that journey of, uh, understanding, uh, along the left, the topic of intelligent automation. Thank you Aditi, thank you Koushik thank you so much. This was great.

Thank you so much Koushik and Aditi, this was a very interesting conversation. I think the real-world examples and implementations of Automation given by you were one of the most important things that we discussed. We also did cover a lot today, starting with some really fascinating case studies, Accenture's role in this space, and of course what's next for Intelligent Automation in the future and of course the career opportunities,

especially Automation has become such an integral part of so many industries today! There are a lot of things that will change as humans adopt Intelligent Automation more and more. I hope everyone had a great time listening, I'm hoping that a lot of people are inspired to take automation up as a space for their professional careers.

To everyone else listening in, if you're excited about what we discussed here today, and if you're interested in exploring careers with Accenture, check out the open positions at careers.accenture.com. On the next episode, we talk Data, until then, I'm your host Shiladitya on Tech Careers in the new, the podcast series presented by Accenture.

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