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The Deloitte On Cloud Podcast

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Title: It's a great time—for anyone—to launch a cloud computing career

Description: Cloud computing is a hot sector in IT right now, and many companies can't hire enough workers to fill cloud roles. In this Knowledge

Short, David Linthicum gives advice to anyone seeking to move into cloud computing as a career. David's take is that no matter where you're starting from—a college student or recent graduate, a non-IT worker looking to change careers or an IT professional looking to

 $shift\ gears-you\ can\ find\ your\ path\ to\ cloud\ and\ a\ successful,\ often\ lucrative,\ career.$

Duration: 00:21:33

David Linthicum:

Welcome to this Deloitte On Cloud Podcast Knowledge Short, exploring specific topics related to cloud computing. This is a short tutorial talking about the real-world concepts in the emerging world of cloud computing. I'm your host David Linthicum, cloud computing subject matter expert, author, speaker, and managing director with Deloitte Consulting, and this is how to move into cloud computing as a career.

Well, first, we all know cloud computing is a big deal, and it certainly has become a bigger deal since the pandemic began, because many enterprises realized that it was probably advantageous to outsource hosting of their applications and their infrastructure with a professional cloud provider, versus owning and operating their own datacenters, many of which couldn't be entered with some of the quarantine restrictions in the beginning of the pandemic. And they found that rather scary. They also saw that enterprises, generally speaking, were moving into the cloud, so they might as well accelerate the movement.

So, everybody knows that cloud computing is a big deal and, of course, cloud talent is needed to make cloud computing happen. Therefore, there's a global demand for folks who have cloud computing skills.

So, a recent report from Gartner covered a few things. Cloud computing revenue was pitched to be at \$474 billion in 2022. That's up from \$408 billion in 2021, last year. Market research firm Gartner estimated that cloud revenue would surpass non-cloud revenue, and that the IT industry will see a sudden demand for professionals skilled at cloud computing.

So, here's what else the report said. Again, global sales are going up to \$474 billion, and in 2022 demand is surging. So, other things that the report stated is more than 85% of the organizations will embrace a "cloud-first" principle by 2025. Companies will not be able to fully execute on their digital strategy without the use of cloud-native architectures and cloud computing experts. By 2025, 95% of new digital workloads will be deployed on cloud-native platforms against 30% in 2021.

So, cloud's exploding. We need lots of talent around to make cloud work. As we're finding out, it's a very complex, very technically driven endeavor, and we don't have enough people to drive the needs and drive the demands to make cloud computing work for all the enterprises that need the talent. So, a bit of a shortage there, but an opportunity if you're looking to get in a career that's both fun and exciting, well-compensated, and something that's going to have very strong growth, at least for the next 10 to 20 years.

So, let's talk about how to move into cloud computing as a career. Well, I'm going to look at a few scenarios. Number one, I'm going to look at college to cloud, people who are going through the traditional educational cycles to get into cloud computing. In other words, you're going to high school and college and what that means. We're going to talk about people who are changing careers in the cloud, to cloud. We're going to—for example, if you're another professional now—you could be into real estate, you could be a government employee, or any profession where you're looking to change what you're doing to something that may be compensated a bit better and something that may be more aligned to your interests.

And if that's cloud computing, we'll talk about how that works. And then finally IT veterans who move to the cloud—in other words, I'm somebody who's been in IT for 20, 30 years and I'm doing things on traditional platforms, typically on-premise. It could be a mainframe developer, things like that, and I'm trying to modernize my skillset so I'm able to take on cloud computing roles, either within my company or within other companies. And we'll talk about how that path can be gone down as well.

So, college to cloud—well, this is a great time to learn cloud computing in college because there are lots of college courses that cover cloud-based skills whether it's a specific cloud provider. Or it's general architecture skills, cloud-based databases, cloud-based security, cloud-based governance, all these sorts of sub-disciplines and disciplines around cloud computing. It used to be maybe ten years ago there wasn't a lot of cloud courses that were in the colleges and universities. Some were offered but not many.

Today, either through continued education, or through the core degree coursework, you can take cloud credits and learn about cloud computing as part of your college degree. So, take advantage of that, and certainly if you're an information-service professional or you're an IT-service professional in management systems and things like that, those things are typically going to be related to what your degree is about. But even if you're on a different degree path, you can still take electives where you're able to learn the basics of cloud computing. And maybe you're on the fence on whether you want to go into a cloud computing career or not. That's probably not a bad way to do it.

So, there are cloud-related degrees that are out there, certainly with the community colleges, many of them that are funded by the cloud providers themselves. And the great thing about college is you get a degree, so you get a Bachelor of Science or a Bachelor of Arts, and you're able to align that with also obtaining various skills that are going to allow you to get that first job. And that's going to be very important.

The other thing that colleges offer is college placement. And, so, they typically have placement centers within colleges and universities, and certainly they did when I was in college, where you can work with them to find different opportunities that are out in the enterprises that you're able to leverage your skills that you learn in college, inclusive of cloud computing. You may be on the fence on whether you want to do cloud computing kind of skill-level jobs or not, or you may be focused in on a cloud computing job. And they'll allow you to take a look at the opportunities out there and the why and figure out what you want to do. And it's always a tough thing to do, to figure out what you want to do because many people don't make those decisions until they're actually out of college. And, so, this provides you with the ability to make those decisions.

So, once you pick a job, it's really kind of managing your career from there. Working with organizations that are looking out for you is really the best path to you. So, in other words, it may be a better idea to make less money if you're able to work with an organization that's well-known for providing people with very supportive career paths. Compensation should be fair and up to market, but it's not necessarily the only thing that you look at when picking your first job, and also kind of moving up through your career path. The compensation will come if you're able to manage your career effectively. And I think people often make a mistake when they go off and take a post-college job, typically their first job out of college, and look for the larger compensation packages, the sign-on bonuses, things like that, and end up making a mistake, because they end up working with a company that's probably not as good as they can be at helping you manage your career.

So, next and probably the most exciting, and probably the most that I see out there, certainly with people reaching out to me for assistance in moving into cloud as a career, is changing careers to cloud. And this is somebody that's not working in cloud today. They may not even have a technical job. So, they may be a real estate agent, or they may be a teacher. They may be a police officer; they may be in the armed services and looking to retire very soon. All other kinds of different careers that are not necessarily cloud-related, but they understand, they have an interest in cloud computing as well as technology

in general. They like the fact that it's well-compensated. They like the fact there's a lot of job security. And, so, many people have switched directions and changed their careers to cloud.

So, the good news is that we've figured out how to do lots of things that'll allow you to do that on your own. On-demand training, certainly LinkedIn Learning and A Cloud Guru and any number of training platforms out there that you can leverage to not only learn about cloud computing specifically, but also about IT basics as well. In many instances if you haven't had IT courses and you don't have a technical degree, then learning the basics is going to be where you start. And, so, that's understanding the difference between storage and compute and how databases work and all sorts of things, from understanding concepts that you really need to understand as you move into cloud computing, because cloud computing basically is leveraging these concepts but doing so as a service on demand.

So, pick a path of understanding in not jumping directly into cloud-based skills if you don't know the basics of IT. So, take those classes first. Take those courses first, and then get into the cloud-specific skills learning how a particular cloud provider works and really kind of expanding out from there. And I'd also urge you to not only just focus on the cloud-specific skills but also the general skills that are also needed: cloud architecture, cloud database management, cloud security. You've got to remember that we're kind of heading to a multicloud world where we're going to deal with lots of cloud providers at the same time. And your ability to have a general understanding of what each cloud provider does and how they're able to work and play well together is going to be more in demand as we start moving into these very complex multicloud deployments.

So, basically, things are on demand. You're able to leverage the training you need to start wherever you need. And then go up through a path—sometimes they'll recommend a path for you—where you can understand the basics and get into the more complex and more advanced topics as you move forward. You've got to remember it's not a substitute for on-the-job training, but the coursework that I see today that's on demand, they'll give you labs. They'll allow you to do experiments, leverage hands-on training where you're able to touch a particular cloud provider, which is really easy to do, and do assignments and even do small projects and really get to a point where you're going to be more useful for people who are going to leverage you within projects, whether you're working for a consulting organization or working for an enterprise that's looking to deploy cloud-based systems.

Other options you have are colleges and universities. You can go back to school. You may have a degree. In fact, many people who go back to community college or continuing education already have degrees and take cloud-related courses. If you have a university near you that's certainly going to be an option. They also have on-demand training as well.

Keep in mind this is self-paced learning and that your learning typically isn't going to stop. So, you're going to go through some sort of a basic coursework to get to a point where you have enough understanding and enough skillsets and enough knowledge to get that first job. But this is going to be a continuous education, a continuous learning approach, and so take your on-demand training and learn to kind of build it into your career. So, in other words, you're going to loop back and understand different things, loop back and understand different things. And as technology progresses, your ability to keep up and maintain your skill levels which are aligned with the technologies people are leveraging is going to be very important moving forward.

So, some of the more popular on-demand training out there and certainly the ones that are offered by the cloud providers specifically would be AWS's Certified Cloud Practitioner, Microsoft's Certified Azure Fundamentals, Microsoft's Certified Azure Solution Architect Expert, and Google Associate Cloud Engineer and Google Professional Cloud Architect. And there's many different paths moving forward.

Now the great thing about these certifications is they provide a way to get a job. So, if you're able to maintain a level of understanding where you're able to pass this coursework and get to the certification level, in many instances employers are looking for that as the entry—as what you need to enter into the organization as someone who they're going to allow to work for the organization and have a job, because you went through the certification very much like I passed my certification exam, or I passed the bar, or I passed teacher certification, or board certification as a doctor. This is just enough information, just enough skill level to provide you with the ability to do a particular job. People understand that, and they're going to allow you to get into a career path that way.

That's probably the easiest way to do it. Now you're still going to need to understand the basics, understand how IT works and understand how databases work and security works and things like that. But when you get into these particular skillset certifications around these particular vendors like the five that I just mentioned, there's already a pent-up demand for people who have those certifications. There's typically placement that these providers provide you as well, so people will hire you directly out of passing that certification. If you haven't worked in cloud computing before, or IT before, it's a great way to start because if you pass that certification, they're going to want to give you a chance for that first job, that first gig. And, so, it's a good place to move.

Finally, the IT veteran moving to cloud, and what are the options that are in front of those people? Well, you remember that they have basic IT skills. They've been in the position for a long period of time, so they don't have to go through the basic coursework. They don't have to understand the difference before storage and compute, and memory models, and security, and all the technical stuff that you learn that's part of your basic understanding of what IT's all about. Now you've got to remember that when you move into cloud, we're dealing with the same concepts. We're just using them with a different consumption pattern, and that's what cloud computing is at the end of the day.

So, again, we have a couple options that are open to the IT veteran. Again, on-demand training—we already talked about that. That includes the vendor certifications that we just talked about in the previously—defining people who are changing careers. So, since this isn't really a career change, you're just kind of expanding—you're expanding your skillsets to get into something you're going to be happier with hopefully, then we're leveraging the same things. We're basically leveraging on-demand training. We're leveraging vendor certifications. We're looking for internal training. We're going back to college in many instances, any way that you can get the additional skillsets so people understand that you've taken the initiative to learn how we're going to take our skillsets in this case to cloud computing. And that can be, by the way, just reading a few books. That can be, by the way, just going through an on-demand training class. That can be going back and taking a single computer course. And these sorts of things are available to you; they've been available to you for a long period of time.

So, anybody who wants to move in that direction from an existing IT position, those are pretty well open because, number one, you're a known quantity. You have a history of working within IT. They know you understand about the technology in general and now they're basically pushing you into technology

specifically, in other words, how we're understanding how cloud computing providers work and how things are different from provider to provider and getting the expertise in the narrow or the technical skills you need to do a particular job.

Next, you need to join the right team, and there's a couple of things there. Number one, I can either make a lateral move within my same company, and that means looking around and see if there are cloud projects underway, and then talking to the leaders of those cloud projects and see if they need new teammates, letting them know that you spent your time understanding different cloud concepts and you believe you're ready to take on and contribute to the project, and that's certainly a possibility.

In many instances, you may be in an enterprise that's not doing a lot of cloud and so you need to look at other companies and apply for other jobs and use your experience in IT in understanding what they're doing and look for the certain skillsets that they're looking for and make sure you've trained yourself to understand those particular skillsets, and in many instances, they'll give you a chance. It's probably easier to move from an IT veteran position to the cloud than it is with the other two scenarios that we just discussed. Again, you're moving from IT to IT. You're just moving to an IT group that's doing things in cloud computing. It's going to be very important.

Again, make sure you're joining the right team. People have a tendency to put too much emphasis on compensation and sign-on bonuses and things like that and end up working for a team or working for a company or working for a firm that's not necessarily looking out for them. And, so, they're on death march after death march in terms of projects. They're not necessarily paying for you to go back and spending time and doing some training. You've got to remember that continuous learning is really going to be a part of this.

And you should look and ask and talk about particular companies as to how they treat their employees, what their philosophy is in terms of growing your career, and how they're supporting you specifically financially. Are they paying bonuses for people who pass certifications? Are they paying for those certifications? Are they paying for training? Are they giving you time each week to spend training? It's all very important, and people often make the wrong decisions, end up working for the wrong company, and therefore they're delayed. They work for a company for a couple of years, have to reset, go back to work for another company that's typically going to support them better, and that's not necessarily a fun thing to do. So, try—it's not always possible but try to make the right decisions as to working with companies that are going to be the best fit for you and what your career choices are.

And finally, working with mentors—someone in the cloud computing field, either working for your company or maybe even working for other companies, who agrees to help you look at what you're doing and advise you in terms of the right training you need and things you need to do, and even recommends particular companies and project teams to work for, because they know. And, so, if you find somebody out there who's a veteran in cloud computing and they agree to be your mentor, that's always great to leverage their skillsets to understanding where best to take your new skillsets to make the most of them.

And people are more willing to mentor people than you think, even though it's a volunteer job, things like that. People feel good about helping people get into their career and they're happy to advise them on things to do and things not to do and how you move into your career within cloud computing and, by the way, any career. You should look for a mentor that's able to show you the paces and what you need to do and how to keep out of trouble and know how to leverage assets in the best way and where's the best place to work and the most fun you'll be able to have at work.

So, wrapping up, this is something that I touch upon from time to time in my blogs and certainly on the podcasts. I'm not an HR professional; I'm a cloud subject matter expert. But I understand why people are making this change and looking at cloud computing as a new career path and from the different career paths that we just discussed, coming from college, changing your career, or an IT veteran that's moving into cloud. I will tell you that this is a great career to move into, not only because it pays well. People are compensated fairly and it's typically higher than most IT jobs at this particular time, and that's a function of the demand that cloud computing has. But it's also a fun career. We're at the edge of technology and how technology is being leveraged, and so working with cloud computing, it's really kind of working with how we're going to be doing IT with the next generation, more modern systems that are out there.

So, it's fun. You're at the edge of technology. You're moving to technology that people are only starting to leverage. And in many instances, you're changing an enterprise to move that enterprise into something that's going to be more sustainable, higher growth, more agility moving forward. It could be even something that enables a business to become a disruptor unto itself and avoid being disrupted and really kind of changes the view on how they're able to leverage technology to bring the best value to the business.

So, I urge you to look at it. If you want to move into cloud computing, absolutely great career path. Consider some of the advice we gave you on this podcast and good luck to you.

Operator:

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