**RedZone Podcast Episode #94: CIOs of the Future: How to Help Your CEO Grow the Business – with Chetan Raval**

Bill: Well, Chetan, I want to welcome you to the show today.

Chetan: Thank you, Bill. Appreciate you taking time to talk to me this morning.

Bill: Absolutely. Well, it's a very interesting story that you want to share with my audience. We're going to talk innovation, we're going to talk about making a business more transformative and helping establish efficient processes. This is going to be an interesting show for people, one of the things [00:00:30] I wanted to start off with is kind of the back story from back in India where you grew up. Can you remember some of the early times when you actually leverages technology to bring about an innovation or help back in your home country.

Chetan: Absolutely. So, that journey started back when I was in middle school somewhere around sixth grade or seventh grade. And we had a science fair [00:01:00] competition to come up with products and all the middle schools and high schools were competing for different prizes there. I had always been very enthusiastic about alternative energy sources, so from childhood that was one of the passions I had and so thinking about that I had designed and made a solar cooker to present it in the [00:01:30] science fair. That definitely was something I was really proud of and I presented that at the science fair, thankfully it won the first prize in the city of [inaudible 00:01:45], where I am from and that actually began my journey into the innovation sort to speak or automation.

The solar cooker was [00:02:00] not something very prevalent in India at the time. Solar energy was what I thought would me made to harvest the energy for cheap or rather free, and I figured you know what let me do something different, everybody else does so many different things, this was my way of learning something new that I was not really adapt to and I wanted to do something different. [00:02:30] That's how I started with that.

Bill: So, you were at an early age wanting to do something different and you were motivated to learn. Where did you get that learning from, was it just native DNA or did you learn that from your family, did you family encourage you to be a life long learner.

Chetan: Yes, absolutely it was. I would say I got it from my parents, my dad who actually was a lawyer by education, [00:03:00] being the lawyer he was retained by a construction firm and he worked with them so much that he became a better engineer than normal engineers. So, that was something I was like okay, dad you never had an engineering degree however you are a better engineer. He was in civil construction and he started his own civil construction company at one point because he got so interested in it. He got the books, [00:03:30] learned it and that's what inspired me to think about technology and think of different things. As a matter of fact, one more interesting comes to mind when I used to go to his construction site, back then everything in India was manual, especially when it came to construction, most things were manual. To the point where if you needed to get sand or cement and needed to get it mixed, there would be human being who would [00:04:00] be working on things, and I would look at them and I thought some of these guys are just sitting around, what if I were to be able to build a robot that can actually bring all the material that is needed, mix it up get it ready, so that the mason go and get ready to get his or her work.

This was my early childhood days, and that's [00:04:30] where my journey for technology began.

Bill: So, you were always thinking about efficiency and using technology to help make manual or just to help make processes more efficient.

Chetan: Absolutely.

Bill: Which is interesting-

Chetan: Make it easier for someone.

Bill: Yeah, and that's interesting right now because you're using manual labor as an example, there was a time [00:05:00] where the carts were pulled by horses and our traveling was done by horses and then all of a sudden the car came online in the early 1900s and I can guarantee you that the mechanics of the horse drawn carriages and the people who cared for the horses and carriages all had to retool themselves and learn the new technology. And the ditch diggers used to be done by manual, by shovels and now [00:05:30] they're done by automated backhoes and front end loaders and such and all of a sudden the manual labor becomes less important but not irrelevant.

It's interesting now with technologies like machine learning an AI that we're sort of in a different but similar inflection point but you started in AI a long time ago, like talk to my audience a little bit about when you [00:06:00] were first exposed to machine learning and AI and what was it like then.

Chetan: That's an interesting journey as well, and this was back in late eighties or by 1990, that was part of my engineering bachelors degree program, I was doing my engineering and at the time we had to do a bachelors project and of course people went in and did different [00:06:30] things in electronics, that's my original background. Me along with a couple of my buddies, we had heard a lot about artificial intelligence, we had heard a lot by solving different problems using artificial intelligence, especially health problems and things like that. Back then, I was more of a technology nut than health care and things like that, so [00:07:00] at that time my focus always used to be how do I solve this business problem and at that time, to give you some perspective, there was no internet especially not in India, I'm talking about late eighties. I know even here in the US, the internet was not there at that time. So, anyway, we researched whatever we could and bought some [00:07:30] books on prologs, that was the AI technology at the time.

Bill: Did you say prologs? P-R-O-L-O-G?

Chetan: Yeah. Mm-hmm (affirmative). That was the programming language that people used and using prolog, I was able to build the databases for traveling salesman problems, that's an age old problem developed back in 1930s. [00:08:00] What it goes is if a salesman is running around in the field and he or she, a salesperson I should say, he or she is out there in the field and gets the notification that so and so company in so and so town needs you, and at the time, since there were no other better communication tools, people used to travel a lot. So, [00:08:30] we figured let's solve this problem and we used a couple different algorithms to solve the traveling salesman problem using AI.

The way we would do it is we would build the database and as the person kept getting more and more requests, it would keep building its own database and then figure out the best way to get this salesperson from Point A to Point B to Point C and so forth and so on.

Bill: So, [00:09:00] based on customer request they would get on the phone, you would fill out the data in the data base and then the salesman could be made to be more efficient as they're traveling from town to town, and city to city. Is that what you're saying?

Chetan: Absolutely. And optimize their travel time as well as their travel distance so the salesperson could be as effective as possible.

Bill: Yes, people don't realize that AI [00:09:30] has been around for quite a while, we just didn't have the underlying computing power to pull off-  
Chetan: (laughs) That is very true. And with the modern computing power, the sky's the limit, you can do amazing things, it's unbelievable.

Bill: Now, it's just not only that you didn't have the computing power but now in the traveling salesman example, you could do weather patterns into account, you can [00:10:00] do online ordering data plus inbound requests on the [inaudible 00:10:04] system from inbound telemarketing. It's just more data available. Doesn't AI need a lot of data?

Chetan: Absolutely. Because at the end of the day, the more data points it has, the better decisions it can make. One of the examples that I can think of right off the bat is your delivery truck for UPS or [00:10:30] FEDEX or whatever it would be, and the delivery trucks, yes I understand they start at the beginning of the day but you could make them more efficient, especially on the same day delivery, now you got a classic situation where you got these packages to deliver and in the meanwhile while the driver is out in the field delivering the packages and you got something new and urgent, instead [00:11:00] of deploying a brand new driver, you pick it up where they are at and order them out and get them to deliver the package more quickly and more efficiently.

Bill: So, you got out of your bachelors and I think from your bio you ended up in United States at Indiana university, right?

Chetan: At Indiana State University.

Bill: Fantastic, oh, that's where Larry Bird went to school.

Chetan: Yes, it's the [00:11:30] Larry Bird town and Larry Bird school, absolutely.

Bill: I don't know if you were there, I'm from Boston, so I grew up during the Larry Bird era, the [inaudible 00:11:43] era, when the Red Sox were atrocious, when the Patriots were atrocious, but you know we had a bright hope with the battles and wars between Larry Bird and the west coast. I digress there, but in the end [00:12:00] we all knew that story.

Chetan: And we used to pass by Larry Bird, he had a resort in Indiana so we used to pass by his resort everyday going to school.

Bill: Oh, really. That's fantastic. So, when was your most recent experience of automation [00:12:30] and how you were sort of building this knowledge base since you were a child, it went through your bachelor's project and then into the work force, do you have an example where you were able to take a large group of task being performed and simplify and automate. Could you share with us a little bit about that as an example?

Chetan: Sure. Absolutely. Let me give you the latest example, [00:13:00] when I joined Nerium, within the first month with me being there, I saw that they were getting ready to roll out brand new projects-

Bill: Can I pause you there, what is Nerium? Just as a general business and the scope of the business, can you give my audience an understanding about what the business is and the scope of it.

Chetan: Sure, absolutely. [00:13:30] Nerium is a company, which is a multi-level marketing company or direct sales company, if you will. And what direct sales means is if I like a product, I introduce you to a product, you like product and you introduce it to ten of your friends and of course when I introduce you to the product, I may get some commissions out of the sale that I made to you and you in turn would do the same and so forth and so on. [00:14:00] That's why it's called multi-level marketing, and its a very high touch business if you will and they are in thirteen different countries doing the business. And their products at the time were mainly skin care products and so anything related to skin care, their main products are age defying products and of course it makes you look younger and [00:14:30] they also help you build more businesses because now when you're selling the product you're earning yourself.

Bill: My team knew exactly what Nerium did, they're all ladies, and they're like we know Nerium. And I'm like okay, I've never heard of Nerium.

Chetan: Of course, our biggest customers are women, actually, if you think about it. Though a lot of men use the product also but [00:15:00] not a lot of them acknowledge it. That's a different story. So, that's the main business and what they do is they go out and sell their products to the customers and while selling the product, it's of course a wealth building tool as well, its a site of income generation for people who are in that business. So it makes you look good and brings you money as well, it's a dual purpose. [00:15:30] It's a crucible I would say for business opportunities. So at Nerium we were getting to roll out a whole new set of products in a particular country and at the time I was brand new to the company and I saw that they had a team of about 40 people working on changing the products out.

They worked on it a week or ten days [00:16:00] and that's when I though this is just ridiculous, you cannot be operating a multi-million dollar business, a multi-hundred million dollars of business in this fashion. It's unequaled. We got to do something about it. And we figured out what the nuts and bolts were in rolling those products out. We figured out what's the best way to optimize the processes and came down to a solution, [00:16:30] it was step by step solution, we automated a few pieces first then automated some of the other pieces and gradually we came down to a point at one point they needed only two people in marketing working for less than half a day to roll out the same products and essentially the nutshell there is how do we templatize this thing. Making a template out [00:17:00] of this thing and giving it to the business where they can do the things themselves without having to wait on IT, without having to deploy IT resources. Why don't we just empower them and that's the project in order to automate that whole process. I could say today they are in a much better shape in terms of being able to roll out the products.

Bill: [00:17:30] So, was there a combination of the process or was there also a bit of the technology ... I'm assuming because you're in so many countries they have to go to a front end website and so they're basically changing both the front end and back end of the website for rolling out a new product and that process of going through has basically took forty or so people and [00:18:00] did you have to use different technologies to do that or is it just process engineering?

Chetan: It was process engineering and some of the things were being done were technologically antiquated. That's when I came in and we redesigned the way it was being deployed technologically. Where they had the content management system inside of [00:18:30] the whole cart on the website and so one of the things I helped them do was re-engineer that piece of technology and separate out of two pieces into micro-services so that your cart becomes just pure micro-microservice itself and you can call it from anywhere anytime and componentize the whole set-up that they had and thereby your [00:19:00] content was just pure content, you do the micro-service, get the content from the service and feed it to the cart and let people choose whatever they want in the cart and so forth. There was an underlying re-engineering of the platform that we had to do in order to make this possible, this of course helps redefining the processes what was being done at the time originally.

Bill: Interesting. I could [00:19:30] see where that would make a huge different. Nerium, I wasn't sure exactly how big it is when you started but I do understand these businesses can go through periods of really hyper-growth and I imagine that puts an amazing amount on strain on the IT to support this work, is that true?

Chetan: That is absolutely true. So, Nerium hit [00:20:00] a billion dollars in cumulative revenue within first three years of their existence I believe, three, maybe four. So, you could imagine the type of support that was required from IT, because at the end of the day, this whole business is pure sales and most of it is online. IT is the backbone [00:20:30] for the whole business and you need to support it and things you have not even imagined where IT would come into play and help the business grow and run, so overall they have been doing at a a time 600 million dollars in a year in revenue.

Bill: You said 600 million?

Chetan: [00:21:00] Mm-hmm (affirmative).

Bill: So, the site is operational now, did you use any particular technologies that you thought would be for the micro-services piece and the content piece, was it all separate technologies or did you settle in on a single content management platform that could deliver it all? What was the technology approach that you used?

Chetan: [00:21:30] So, the technology we used was we've been using site course, the content management system, and dot net at the back bone for all of the technology there. So, Microsoft dot net technology with sequel servers, they're always on high availability set up on the sequel server databases and the whole platform is supported through Microsoft dot net technology. [00:22:00] Site core, previously like I mentioned, was yielded into the core dot net code that we had, so we took time to separate the pieces out. Now it's all micro-service based approach, versus previously it was completely, everything was hard coded and coded within base code, the code was replicated as many countries as there were, all the code was replicated [00:22:30] that many times. This took a lot of time in terms of the maintenance of the code as well. Now, the same code is managed twelve different times, which means if there is a bug in one place, you got to fix it in twelve different places just to make sure the bug is one.

Bill: So, Site Core?

Chetan: Yes.

Bill: [00:23:00] And then did you mentioned Documenum as well or just site core?

Chetan: No, dot net.

Bill: So, you used dot net and you were able to get some portability with code updates based on- So, if you did find a problem you could replicate it across your different sites, supporting your different countries. Is that correct?

Chetan: Yes.

Bill: Interesting.

Chetan: And [00:23:30] that's what used to happen and with the change to micro-services, now you don't have to do it at multiple places, you do it at one place and that propagates itself across the board and it requires a lot less resources in terms of making the changes and testing it over and over again.

Bill: Did you find-so was there a strong marketing group or were you tapped [00:24:00] to help mine the analytics on the site after you had it operational?

Chetan: So, yes, we did have a strong marketing group there but their main focus was sales and marketing and so we in IT came in as an additional resource to help provide them the numbers and figures saying that look these are different approaches you could take in order to solve some of the problems [00:24:30] and in order to help grow your business and maintain your business. And if I can give an example there?

Bill: Yes, please do. I think that's important because one of the big things with innovation is that I want the [inaudible 00:24:44] to understand that they need to play offense and just supporting the site and making the changes in the micro-service isn't enough and you got to the next level and I think what you're about to talk about is how you took the traditional [00:25:00] role, which would have been innovative of itself, how you took it to the next level to provide offense.

Chetan: Absolutely. That was something my experience over a period of time in this particular business came into play and what I did there was, I said okay, let's look at the hundreds of thousands of customers we have and the primary businesses for these customers to order their products over [00:25:30] and over again on a monthly basis.

And we could see the pattern that after the customer orders x number of times, they tend to fall off. They initially start off to change their product mix and you could see their product order total is going down and that's kind of indicator that okay this person is going in a different direction from where we would want them to be at and so we built the models and [00:26:00] gave the business and our marketing team a predictive analysis saying that here's a set of customers, let's look at those customers and give them a special incentive so that they would stay with us, looking at these different patterns we can say for sure with over 93-94% certainty that these guys are going to fall off, so let's focus on them. And even if we can increase their revenue [00:26:30] or keep that additional revenue for three more months at a hundred dollars an order, let's say, when you take 10,000 of those, now we are talking big numbers and let's focus on them and giving those type of insights into their bio-behavior we were able to turn a lot of customers around help them stay with the business.

Bill: So, how did you find the needle in the haystack [00:27:00] opportunities? So, clearly there was a strong marketing department and sales department, otherwise sales wouldn't be sky-rocketing, but what technology did you employ, what thinking did you deploy to find those opportunities? Did you go back to your machine learning background? How did you decide where you were going to focus?

Chetan: Some of that goes back to that about [00:27:30] the machine learning background, in fact I had taken some courses on machine learning and learned how to use the software code R and things like that?

Bill: Are you talking about-Sorry to interrupt you, I just want to make sure people understand you, so the software called R, the R programming language, is that what you're referring to?

Chetan: Yes, absolutely. And, so part of it goes to that, part of it also goes to the business background in terms of, when [00:28:00] I was Mannatech, I had seen several X growth if you will in the business where it will go into hyper-growth, then you get a slow down and then you get into hyper-growth. At that point, when you're hitting the slow down, when you're hitting the hyper-growth mode nobody thinks of what can I do to retain additional customers that I already have, when you are in the slow down curve that's when you start thinking of other innovative ways of making sure that you keep [00:28:30] the business up and running and going. And so those past experiences definitely helped me tremendously come up with different ideas, and of course each business is different. They're similar in a way but they're different as well, so you study a business and you say what's going on with their business and how their buyer behavior is changing from time to time, what motivates their buyers.  
One of the motivation factors [00:29:00] for the buyers is the compensation and the incentives that you give them, so you put some modeling around that and say okay if we were to incentivize the buyers this way, this would be group that would respond the most to this type of incentives. But there would be other group which would not be as incentivized with that particular model of incentives, but they maybe incentivized using a different mode of incentives. So, [00:29:30] you got to know your customers really, really well in order to come up with different options to provide them. And then you run the modeling on it to validate your theory and go from there.

Bill: It's interesting, I know your industry is different from others but it's not that different in the sense that every business, we're all riding the Trump train right now and it's very difficult for the [00:30:00] business to fail in this type of environment. But there will be a correction and there's real value in a CIO that can look at the slow down curve and really understand business, the customer and to be able to do that modeling.

Now you went and learned this programming language R, would that you would advise CIO's to have some expertise on staff or they themselves [00:30:30] understand what R can give you and sort of the programmatic environment that would be need to set up to be able to build that skill set?

Chetan: I would say that definitely have somebody on staff who is good at machine learning and also being able to do predictive analysis. In my case, it was out of sheer curiosity that I went and took a course and learned about it, but you need to have somebody on staff because they would definitely [00:31:00] guide you. All of this analysis that I'm talking about, I did not do it personally first hand myself however I knew what to look for at least, I knew this was something that can be done and I knew it because I had taken a course and reading up on different places, talking to different people in the industry, you hear about things and you collaborate things. Hey, this is what I've done for my innovation, and so forth, so [00:31:30] you take those ideas and start applying it and make sure you have appropriate staff to be able to support all these things and help you with helping the business.

At the end of the say, you are the driver of the business as the CIO, that's how I personally believe in.

Bill: Well, I think that underlying belief is what drives you to different way of helping the business. We did an innovation lunch and I brought [00:32:00] in at the very end, a power BI expert from Microsoft that I had found, that my team had found in our travels and so kind of a hard core geek but real deep understanding of the platform and the reason I did that is because everybody was telling me they didn't understand it. It's funny, half the guys left the room. And I'm sitting there why are you leaving the room and it's because he was getting technical. And the problem is that they couldn't divorce the fact ... but [00:32:30] the guys staying there wanted to understand, and not because they're going to programmatically do it themselves but they wanted to understand what the capabilities were but also how they can hire the right team and put this powerful tool into place. It doesn't matter if it's power BI or R or these others, I think there has to be an understanding of capability and sort of the skills set so either you can go out and grow it internally or find the people.

Chetan: Absolutely. And I'm a big believer in hiring the right people and even if it [00:33:00] means getting the right consultants. In fact, at Nerium we ended up with a mixture of different technologies, we used R, for presentation's sake we used power BI there and that's helping a lot in terms of the executives getting the visibility into what the business is doing on a day to day basis. We were also researching other technologies in terms of giving a [00:33:30] window our entrepreneurs so that once we deploy that, our entrepreneurs should be able to see it in detail in how their business is doing and they can also do some sort of what if scenarios. I'm not going to reveal the name of the product just yet because it's still in the research phase and stuff so can't really talk a whole lot about it, but something like that we are also looking into so that [00:34:00] it gives an edge to our customers and they can go out in the field and do better business for themselves.

Bill: That's interesting. So, I want to ask you about how you presented the data intelligence to the end user, so not your end customer slash entrepreneur but your internal decision makers, did you have a dashboard that you extended like through Power BI, like what did your technology [00:34:30] stack look like? Did you present a graph? How did you visualize this for them?

Chetan: We did, of course, built the ETLs and the presentation layer was Power BI and we had a mixture of different things, there were graphs, the pi charts, the wheels if you will, I forget the exact term right now, it's escaping [00:35:00] my head but we need to show the different breakdowns of different parameters and of course you allowed them to modify the outputs as per their choice so they can say that I just want to run the data for this particular country. What's the product mix that is selling the most? Which type of customers are going for this [00:35:30] particular product next? What ethnicity of people are buying this kind of products? Because each product appeals different ethnicity people differently. So, for example, Korea is very much into health related products. So, any consumables that you want to sell in Korea, that's a very high market for you, like [00:36:00] health supplements. In terms of skin care, you got Latin America very high on it. So things like that. It allows them to play.

This was all Power BI presentations where they could mix and match the results and play with the data and of course get it in the tabular format if they'd like or pull up the graphs, you just have [00:36:30] to click on the graph and it would be in the tabular information exactly what you're looking at.

Bill: Interesting. So, you had it both externally facing so that people that were buyers, consumers and the entrepreneurs could see their business constituents that they reported to them and then you internally had folks at corporate that were able to use that as well.  
Chetan: Yes, absolutely, and you have to do that both.

Bill: Yes, [00:37:00] I imagine you would. Did you feel that ... Well, let me ask you this general statement, are chat boxes a hoax right now or do they actually work?

Chetan: (laughs) Very good question. Yes, they do actually work. Now, it depends how much intelligence you want to build into it, how much investment you want to make into it. But they do work. I have done it, I have ... As a proof of concept, [00:37:30] it all started as a proof of concept, I had read about it and I ran into a guy, not a Nerium employee but outside in one of the conferences, I ran into the guy and he was talking about it and he said they were working on the technology and this was a couple of years ago I'm talking about. And that peaked my interest. I was like, you know what, if I can have a machine do the mood analysis of the customer [00:38:00] on the other end, how cool would that be?

So, I sat with him and said, okay can you do a proof of concept for me? I would like to introduce this to my business. And of course the guy was really willing to do that and together we put a plan and brought in the people from our customer service department, worked with them, developed possible [inaudible 00:38:30] [00:38:30] of opportunities, what would be our largest call volume, which areas they were getting the heaviest focus on and so forth and so on. Identify those, developed the algorithms for answering those questions and we deployed that. That was a huge success, that allowed our customer service team to free up about more than 25% [00:39:00] of their task force to use it towards other, more complex situations where a human had to be involved and there were no other options because the human needed to do the research on the question that they were talking about and come back with a solution or answers for the customers.

So, it allowed us and based on the mood meter, as we called it, based on [00:39:30] the mood meter the check box would transfer the call over to the agent so that the agent can take better care of the customer but it is not a hoax. It is a matter of time when it is more refined and better developed. Pretty soon, I would say we would be talking to a lot of customers. Not that we're not.

Bill: Right. Right now they're already... So, basically your chat bot, this [00:40:00] is not voice-, it is not listening to an actual voice call and measuring mood, it's actually text based.

Chetan: It's all text based.

Bill: Okay, so it's text based mood analysis of the situation and then it can transfer right away to a human being for up-level support and more advanced problem solving and such.

Chetan: Absolutely.

Bill: Interesting. And then on the back end, [00:40:30] did you have to develop that capability or did you use either Cortana through Microsoft or did you use IBM Watson?

Chetan: We used IBM Watson. This company that I partnered with. It's interesting that there are people in the market place who would be willing to do these types of proof of concepts with you. I partnered with these people and they initially gave me a code and [00:41:00] I said, you know what, I know you want to get into our company, here's the deal. Why don't you get this proof of concept for me free of charge and if this goes well, you got my commitment that we would work with you for future endeavors and those guys were willing to invest their times and of course we were investing our time in terms of giving them the knowledge of what exactly we would need, [00:41:30] how we were going to do this and so on and so forth.  
So it was a linear partnership for us, the way I see it. There are a lot of companies out there who would be willing to make investments for you so that in future they could work with us.

Bill: Yeah, I have a customer of mine who launched a complete ... Well, they were launch an AI product slash [00:42:00] machine learning and it was a whole stack of technologies they needed to master and it was just no way that they were going to do this in sub five years so they had to use a consultant to scale them into it and do it with a POC that led to a paid engagement. Another way to do it is go to meet up dot com and just searching for these skill sets because there are some real, incredibly bright folks that are meeting and to share ideas and they're just in their own little communities and just sit [00:42:30] in the back of the room and meet these folks and it's amazing, they'll come in and help you kickstart projects and such.

Chetan: Absolutely, yes, there are slack channels out there where you can get these kind of information and participate there and we pay for the business.

Bill: Slack channel, that's a good point, I hadn't actually thought about, that's a great idea, I'm going to put that on the blog as well.

[00:43:00] So, this is great. Is there anything else that we wrap up, I think you had some interesting stories that you shared, is there anything else that you think would be useful for my audience for my audience to hear about your approach to your innovation and some of the- as we wrap up or conversation today.

Chetan: One of the things I would want to definitely reiterate is as the technology leader [00:43:30] in the current day and age, we are not just the technology leaders, we are the business builders if you will. We help thrive the business, we help the business grow so we should start thinking about and getting out of our shells, honestly. I know it's an uncomfortable sound but we got to get out of it and we got to go out there and help our CEOs grow the business because [00:44:00] at the end of the day, that's going to be what is ... That's going to be something that would help us grow as individuals as well.

Bill: I think that's going to be the title of this whole episode. It's going to be help your CEO grow the business.

Chetan: Okay, that's interesting. Yeah, that's pretty cool.

Bill: Because I think, I honestly think the CIO needs to believe, they don't necessarily have [00:44:30] to have the goal but they have to believe they could be the CEO if they wanted to-  
Chetan: Absolutely.

Bill: And I think that we're going to see more and more technology leaders taking that top spot as we go along and it's going to start with them believing that maybe the top spot is COO or maybe it's CEO or maybe it's not. But ultimately, once the belief is there then it's no longer a goal just to have the seat at the table, I think it's when you're at the table [00:45:00] what do you say. And if you're focused on the CEO winning big time, I think that's a great way to focus on being the best high performance CIO you can.

Chetan: Absolutely. One of the other things I've noticed and I've heard this from in fact from the CEO and co-CEO at Nerium and she is a great communicator Deb Heisz, that's the co- [00:45:30] CEO and I totally agree with her. She said, you know what, you technology guys are not necessarily the best CEOs, the best CEOs are the best communicators. So, us technology folks we need to start looking into how do we communicate our ideas better? I know I'm not there, I still want to keep learning more around communication as well because that's extremely important. So, [00:46:00] the last part to some CIOs, hey let's learn how to communicate better because the best communicators are always the most successful CEOs. Those are the people who grow their teams and lead their teams into success.

Bill: I love that. That's a great leadership statement. How to communicate ideas better or question. Well, Chetan, this is a really fascinating, fun [00:46:30] conversation, it's going to be really useful and helpful to my audience and I appreciate you for your time today.

Chetan: Thank you, Bill. Thank you for taking time to talk to me, this has just been a sheer pleasure.

Bill: And if anybody wants to reach out to you and touch base with you, is LinkedIn the best place to do that? Through your LinkedIn?

Chetan: Yes, LinkedIn would be the best way and it's LinkedIn.com/ChetanRaval is my LinkedIn.

Bill: I'll make sure that goes on [00:47:00] the blog post for this episode. So, until next time Chetan, enjoy the hot weather down in Texas and we'll talk to you soon.

Chetan: Absolutely, I look forward to that, thank you so much Bill for taking time.

Bill: Bye-bye.