POWERS: Welcome to This Week on developerWorks. I'm your host, Calvin Powers. Everyone who's had to deliver enterprise-grade software to their organization knows how difficult that transition from developers to operations people can be, and so the term DevOps has been coined to cover all those activities and tools and technology that people use to help smooth out that transition.

My guest this week on developerWorks is Sanjeev Sharma. He's an executive IT specialist at IBM, and he's just released a book called DevOps for Dummies, which you can download for free at ibm.biz/devopsfordummies. That's ibm.biz/devopsfordummies. Sanjeev, welcome to This Week on developerWorks. Tell us about your role at IBM.

SHARMA: Thank you, Calvin. Thank you for the opportunity to come and share about my book at developerWorks. So, to tell you a little bit about myself, I'm the worldwide technical sales lead for DevOps at IBM. I've actually been with IBM for over a decade and been working as a solution architect, working with multiple tools and technologies with the Rational brand in IBM offers.

And earlier this year, in April, IBM made an acquisition of a leader in the DevOp space, a company called UrbanCode. And now I'm a part of the sales integration team for UrbanCode leading the integration and leading the technical sales team worldwide for our DevOp solutions.

POWERS: Sanjeev, tell us why you decided to write DevOps for Dummies, and who'd you write the book for?

SHARMA: Actually, you know, when the opportunity came for me to write a book which ended in the words, "For Dummies," I was really hesitant, right, because I'm going if I give the book to anybody, I have to first explain to them, you know, this book is really not for you; I'm not trying to insult you or anything.

But the "For Dummies" name is a brand which widely has developed over the years, and there are all kind of books, including one called, you know, on Quantum Mechanics for Dummies.

So, I realized when I saw that, that, you know, the "For Dummies" is really a brand which is there to help explain new or complex ideas in simple English terms, which is what this book is all about. DevOps, being a new term, it's only a couple of years old, and it's evolving very rapidly, has become a buzzword which many people have different interpretations of.

And this was an opportunity for me to share our interpretation -- mine and IBM's, more importantly -- of what we believe DevOps is and what our positions of DevOps is with the readers of the book.

And this book is intended for anybody who's heard the term DevOps and has heard a lot of buzz and a lot of hype around it and they want to cut through all that hype and get to the meat and understand really what DevOps is; and more importantly, what value can it bring to them and their business.

POWERS: One of the concepts I keep hearing discussed in the context of DevOps is this notion of continuous delivery, which seems to be a broader concept. Can you explain to us what's meant by continuous delivery and how it relates to DevOps?

SHARMA: You know, continuous delivery is, again, a term which actually predates DevOps, and it has still has a lot of connotations to different companies and different organizations based on what they're delivering in terms of the software or the system or the service they're delivering.

And we could be talking to a banking customer which is delivering a large complex banking system. We could be talking to an embedded systems company, you know, which is delivering software which runs on a chip in a car, for example. Or we could be talking about a company which has adopted a service-oriented architecture where what they deliver as services which are made by different third-party outsourced vendors.

So, continuous delivery is a capability which allows us to automatically deliver this software from one environment to the next in your software delivery lifecycle. So, if I'm a developer, once I'm done with writing the code, I need to deliver my work to...which once I've compiled it to an environment where I can run some basic tests and UNIX tests on it and integrate it with the work of other developers on my team.
Once I'm done with that, I need to deliver this software to the QA environment so that the testers can now work on testing the software and validating that it functions, it performs, and it integrates with other components or software components which it needs to work with to provide the complete functionality.

And then it might be delivered to a staging environment or a system integration test environment or a user exception test environment till eventually it is delivered to production where customers can all start using it. This capability to on-demand continuously and, more importantly, automatically deliver this software from one environment to the next is what is known as continuous delivery.

And the reason we need this is, a) to make this more automated and fast, but also because a lot of overhead, a lot of time is wasted by developers and other practitioners in the software delivery team, manually delivering this software-run environment to the next every week, every time they have a new version of the software with the need to deliver.

And to us that is all overhead, and that can be replaced by an automated tool, which can automate it and make it seamless and they can now spend their productive time doing what they're really paid for, which is productive work of coding or testing or doing their work and not wasting their time doing manual deployments. We can automate it for them, and that capability is what we refer to as continuous delivery.

POWERS: What advice would you give to someone what wants to make DevOps and continuous delivery real in their company?

SHARMA: Very good question, right? I mean, I was having a conversation with a customer of mine recently, and he was asking me, you know, where should I start, you know, what do I do next? I want to get to point B. And you know, how long will it take me and what will it cost me? I said, you know, it all depends, unfortunately, is the answer.

So, I live here in the Washington, D.C. area. If you ask me how long does it take to get from Washington, D.C. to Chicago, I might say two and a half hours -- which is the flying time -- but I'm not accounting for how far away I am from the airport.

So, where you start will depend upon where you are today, what your level of maturity is to all the practices which go into this broad concept of DevOps. I mean, if you do not have good source control management or build management, continuous delivery is not going to be easy to adopt. Because the precursor to continuous delivery would be source code management or good build management.

So, what we recommend to our customers is to let us come in, we as people who have built a lot of expertise over the years, in this space, and we actually have a maturity model, a DevOps maturity model, where we can come in and examine your practices and help you gauge where you are today, point A, and where you would like to be, point B.

Because not everybody needs to have push button on demand continuous deployment all the way out to a website. Not every company needs that, not every company can have that. I mean, if you're a health care company or a financial company which is regulated, you don't need it. You can't have it because of all the restrictions and constraints and compliance requirements you have.

So, then we can help you develop a roadmap once we know where you are and where you would like to go, help you develop a roadmap on how to get from point A to point B. Right?

So, first we navigate to the traffic to get you to the airport, and then we can show you a direct path to get from D.C. to Chicago. And we at IBM, have service offerings which where we can come in and help you get an analysis of where you are on that maturity model.

POWERS: Thanks, Sanjeev. It sounds like DevOps for Dummies is going to be a great resource for people who need to get started making DevOps real in their company. That's all the time we have for this episode. Don't forget you can download your free copy of DevOps for Dummies at ibm.biz/devopsfordummies. We'll see you next week on developerWorks.

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