Ken White

From the College of William & Mary in Williamsburg, Virginia. This is Leadership & Business, the weekly podcast that brings you the latest and best thinking from today's business leaders from all across the world. We share the strategies, tactics, and information that can make you a more effective leader, communicator, and professional. I'm your host, Ken White. Thanks for listening. Well, one of the fastest-growing, if not the fastest-growing, areas of business is data analytics. Companies and organizations make decisions based on data, so they are desperately seeking talented people to fill data-related roles. Data analytics has multiple facets, elements, and approaches, and for the novice, it can be confusing. But our guest today clearly explains data analytics and why it is so important to businesses. Bin Mu is chief data scientist at MetLife. We sat down with him in Northern Virginia, where he explained data analytics, the need for data scientists, and how insights gathered from data are used to help businesses make the right decisions. Here's our conversation with the chief data scientist at MetLife, Bin Mu.

Ken White

Bin, thank you very much for taking time out of your busy day to talk with us today.

Bin Mu

Thank you.

Ken White

This is such an exciting area. It seems everywhere I go, all of the professionals I talk to, everybody's talking about data analytics and very, very exciting field. For those who don't quite understand it, how would you define the field of data analytics?

Bin Mu

Yeah, actually, what you describe is a very exciting phenomenon and trend today across different industries. And it's exactly the question many people are also asking is what exactly is analytics, data analytics, and why it is so important. Why is everybody asking that question? So how I want to categorize analytics, especially data analytics, is deriving

insights from data to help and to drive and to power business to make the right decision. So that's what I call that is data analytics.

Ken White

What did we do before?

Bin Mu

Great. Other than putting a finger and test where wind blows? Well, before, oftentimes, decisions are made based on how people know about the subject matter and based on the institutional knowledge. But today, business are looking for a fact and science-based decision-making process, and that is where the data analytics really brings everything to that notion.

Ken White

So, for example, with MetLife, what might you be looking at? What type of data would you be examining to drive the business?

Bin Mu

Yes, that's specific to the type of for the insurance. If you look at the insurance value chain, it starts from channel, distribution channel, and customer acquisition and risk assessment, including underwriting actuary and operation. And final is customer service, customer experience. So each one of these step across the value chain would have data coming in. So when we do analytics when we come draw insights to drive business decisions, we look at data across the spectrum and also looking at data from outside, not just internal, but external, including enhancing the data, giving it more attributes. And also, today, people talk about big data. Those are unstructured data. We're also looking at unstructured data, for example, weather and geo data and home foreclosure data, if you will, taking those data altogether. So looking at, looking at what insights all these together can drive out specific to the business objectives, and that is how we drive insights in MetLife.

Ken White

Does the data analyst, is he or she in charge of determining those insights or simply gathering the data and handing it off?

Bin Mu

Excellent, excellent question. So, today's data scientists so I run the data science organization within MetLife, and I'm also the chief data scientist in MetLife. Today's data scientist, the definition has broadened. We used to be called the data guy sitting in the basement. Nobody cares. Right next to file cabinet.

Ken White

Right, right.

Bin Mu

And then, gradually, our title elevated to analyst, data analyst statistician. And today, data scientists. The title evolves. It's not just an evolution of the title itself but also the responsibilities associated with that. Today's data scientists their responsibilities involve basically four major components. One is being able to identify the source of the data. Where can I get the data to address the business objectives? Second is how do I get access to the data that related to what type of technology I need to use to get the data into the format that I can use to actually to be able to drive insights? And the third component is analytics. How can I build a model, what models can I build, what solutions, what algorithm I can build based on data to get that insights? And the fourth is how do I deliver the insights to the business to influence and impact and drive the business decision? So, four components together is today's data scientists.

Ken White

Wow, that's a great deal of knowledge and talent someone has to have. So this is a job that requires some real experience, and you've got background in IT and retail, consulting, and insurance. What we hear at William & Mary is that businesses are desperately seeking people to fill positions as data scientists. What are you seeing on your side?

Bin Mu

To tell the fact in the past ten months. So I joined MetLife from Cigna in October 2014, only 9-10 months into my job in MetLife, I have doubled the size of the Data Science Organization.

Ken White

Wow.

Bin Mu

That's how fast we grow. And I'm expecting to have another ten to 15 positions open, including data scientists and also the leadership positions, such as directors and AV positions, in the next ten months as well.

Ken White

Amazing. What kind of people are you looking for?

Bin Mu

That's a great question. Definitely, if we can find someone that has all the four components, we'll grab them. We'll grab them at all costs. But the reality is there are not too many people today in the market that would compose all the four components. So what we do we'll pair them up. Different people have different skills. They have strengths. Then we pair them up to form as a data science organization. So the type of talents we're looking for is all the four components. However, is combined together we've looked for different combinations. And most important, most important is I'm looking for someone that has the passion of data. Really, with that passion, we can mold them, we can train them, and people can really evolve into this position. So really, it's a passion with data.

Ken White

Right before we started recording, you and I were talking about the number of one-year master's programs in business analytics and data analytics. William & Mary, soon to launch one and other schools. What have you heard about those programs and the graduates that they're producing?

Bin Mu

Well, Dr. Ken, thank you for bringing this up. And honestly, to be honest, I'm so excited that William & Mary now starting this program. What I have seen in the past six years, actually, I saw how this program initiated across the country, even across the globe, is there are schools that they were able to capture really the foremost trend of this. Kudos to them. And what I also have seen that there are more schools are starting to open this program, start this program. And from a business perspective, we excited because really through this training, through this formal academic training, really the students going through this program and what I have seen is they started to equip with the knowledge and skills of how to look at the issues and problems and how to apply data in a different way. That actually, with a focus of addressing the business needs and making a change, that's, I think, the most valuable output and outcome from the program as opposed to from on-the-job training. There are people always focusing on the output rather than focusing on what exactly I'm trying to solve. So that's I see this huge value coming out of this program, and I am so excited.

Ken White

It is, it's very exciting. As you and I talked before, so many schools looking into it, and William & Mary, as soon as we announced the fact that we were going down this road, we heard from so many people. Let us know when you start, let us know when the first class is finished, and so forth. So the passion needs to lie with the data. That's number one, and then is the industry number two, like you have been in retail and in IT and in insurance. Where does the industry part fit in?

Bin Mu

Industry is important but not as critical. Why I say that is it's all about data. Data is the numbers. It doesn't matter which industry you are. Data is data, and especially when it comes to big data is structured and unstructured data is agnostic of industry. So I say that with a caveat, which is at a more senior level, then industry knowledge and industry experience will be more important. But to begin with, at an entry-level and also mid-level industry is not as important or not as critical as a passion and understanding of the data and also the methodology of how to apply analytics to solve a business issue that's more important.

Ken White

Where do you see the field going in the next three to five years or so?

Bin Mu

I like to tell stories, and I like to tell the stories from the past experience. Here's the story I want to tell, and maybe that can address where does this, the trend where the data this field is going. Remember back at 1985, that's mere 30 years ago, CIO Chief Information Officer was not a position actually in most of the companies. It didn't exist. Today it's on the executive, sitting on the executive board.

Ken White

Right.

Bin Mu

What about Chief Data Officer? We started to see the trend of more and more companies starting to have chief data officer or chief analytics officer. Now they are sitting in different organizations. They can be sitting in IT, in strategy, marketing. Do they truly belong to there? It's hard to say, but what I've seen that and within the industry as well as when I spoke with other executives and top executives, is they see the data-driven decision science is going to be a critical and integral part of executive decision-making and sooner or later that will be elevated to another level, to the board level, basically. So what I see this trend is someone said this is just a buzzword, just a trend, it will fade out in two, three years. I said probably no.

Ken White

Right.

Bin Mu

Now it's a buzzword. But in two, three or three, five years, it will solidify its position, and you will see a really drastic change of how the analytics this field is going to be positioned within a corporate America or within any company.

Ken White

Interesting. Well, let's say 1990, for example, websites were new, and we just started to have chief technology officers who would oversee. Here it is, 2015, and pretty much everybody in the organization knows a little bit about the website and social media, and marketing. Almost everybody kind of gets it. Do you see analytics going that way that maybe in a generation from now, everyone has a hand in that? Or is it too specialized and too focused?

Bin Mu

Interesting, no, no, Dr. Ken, you just describing something that I have seen almost happening at every company.

Ken White

Wow.

Bin Mu

Now is every company and any function, any business line. Now if you ask about what's your 2016 priority, I can guarantee you for sure that 80% to 90%, if not 100%, analytics is going to be one of the top three or top five priorities. So everybody is talking about analytics. Everybody is thinking I can use analytics to help me solve a problem. But what exactly analytics is? And do they actually know what actual analytics is? Probably not everybody can understand to 100% degree. So it is going to change. It is going to evolve. And once, once business start to realize to see more value coming out of data analytics, data science, then they will get to know more about this field. They will get to know more about how it does, and they will ask more, and they will get to know more. It turns into a healthy cycle and becomes an evolution.

Ken White

That's our conversation with Bin Mu, chief data scientist at MetLife, and that's our podcast for this week. Leadership & Business is brought to you by the Center for Corporate Education at the College of William & Mary's Raymond A. Mason School of Business. The Center for Corporate Education can help you and your organization by designing and delivering a customized leadership development program that specifically fits your needs. If you're interested in learning more about the opportunities at the Center for Corporate Education, check out our website at wmleadership.com. That's wmleadership.com. Thanks

to our guest this week, Bin Mu, and thanks to you for joining us. I'm Ken White. Until next time, have a safe, happy, and productive week.