**RedZone Podcast Episode #96: How the Detroit Pistons Appreciate Fans Using Data Analytics with Chris Pittenturf**

Chris: I was raised to hate those teams, and so we can have some fun with that for sure.

Bill: Well that's the thing, I mean well before we get too far I'll introduce you to the show and I want to ... So Chris I want to welcome you to the show today.

Chris: That's Bill it's a pleasure to be here. Thanks for having me.

Bill: Well I know we have some really fun conversations to have about a variety of topics, and so one of the, I think it would be [00:00:30] good for everybody to understand is like where you sort of in some respects have like a dream job working for the team that you followed from a little kid. Maybe you can give a little bit of the lens of where you grew up and just where you now work and spend most of your time.

Chris: Yeah so like you said I grew up in the Detroit area as a fan of really all the sports teams, and [00:01:00] the Pistons were always a pretty, held a pretty dear spot in my heart because of the proximity to where I grew up. They were about 10 minutes down the road. My dad and I had made a lot of great memories when I was a child going to these games, and you know I played sports and my dream really was to be the point guard for the Detroit Pistons. So I grew up watching Isaiah Thomas and Joe Dumars and Bill Laimbeer, the bad boys, and if you were to ask me when I was a kid "What do you want to be when you grow [00:01:30] up" it was the point guard for the Detroit Pistons. So that career goal or aspiration I think fizzled pretty quickly as I went through high school, and I had to course correct a little bit and find an alternative here. I wasn't going to pay the bills playing basketball. So I found a home a bit in the business and the technology space and a passion in that regard, so being able to marry two of my passions basketball and [00:02:00] business and IT was really fortuitous for me.

Bill: That's fascinating because as we were talking about before we got on the show, I grew up in the Boston area, and it was funny, during the '80s Boston had teams that were like either bottom of the barrel or right at the top, and the Celtics, I was going to those games you know because I went to high school right in the city as well, and I just remember [00:02:30] it was a battle playing against the Pistons. Isaiah Thomas, Bill Laimbeer, I mean I actually went back just remind myself, and John Salley and Mark Aguirre, I mean it was crazy, but there were some big rivalries with Bird Ainge and Parrish against you guys.

Chris: Oh the biggest. In Detroit we hated the Celtics. There wasn't a Celtic, even if there was a good guy on the Celtics you couldn't like him because [00:03:00] they were a Celtic, and they essentially kicked our teeth in every single spring and we could not get past them in the playoffs, and when we finally did I mean that was almost like we were in the championship for the fans because we finally you know vanquished this foe that was it felt like you know impossible to do. The Celtics and Lakers dominated the '80s, and the Pistons were that upstart trying to break through, and yeah those were fun times, and that's really where my love for basketball began in [00:03:30] watching a lot of those games.

Bill: Yeah and those were like formative times, because you and I not too different in age. I remember going out after the game, I mean it was just Detroit in the winter is freezing cold, Boston in the winter is freezing cold, and just going out and shooting baskets, your fingers are numb. My kids just don't know what it's like being in the kind of mid-Atlantic to be playing outdoors basketball trying to get some shots in during the day, gosh. So you doubled down in basketball, [00:04:00] you went I think I read a quote that you went away to school to play basketball and full time and to get a degree part time, and that's exactly my philosophy too, I thought that was funny.

Chris: Yeah like I tell you like my mind yeah people would ask what are you going to major in, what are you going to go to school for, and it was always hard for me to think about that because the only thing I really wanted to think about was basketball, and I just loved playing so much and I love the sport, [00:04:30] and so it was really hard to have a perspective of what else are you going to do with your life when this ends, because not being terribly forward thinking at 17 years old or 18 years old it was a challenge.

Bill: So you end up marrying your passion with two passions, some work and sports, and that's really interesting. Well let's talk a little bit about, so how did you get into [00:05:00] as you were getting into you've been with the Pistons but it's really a bigger conglomeration of entities, correct? Or is not just the Pistons or are you working more for a series of different entities under a master company?

Chris: That's a great question. Right now it's a little more complicated than probably it would've been just a couple years ago. When I started to work for the Detroit Pistons it was part of a broader entertainment umbrella, and in a sense it still is, [00:05:30] but that entity was PAL Sports & Entertainment, and that encompasses of course the Detroit Pistons, but also the Palace of Auburn Hills and every single event that would come through those doors, in addition to a couple outdoor amphitheaters, Meadowbrook and DTE Energy Music Theater, formally Pine Knob which was a pretty big outdoor amphitheater and known nationally. So that was what it was like when I started. A couple years ago our team agreed to move downtown [00:06:00] into a new building and be a tenant at the LCA, Little Caesar's Arena with the Detroit Red Wings.

Now it wasn't our building, now we're becoming a tenant, you know moving from a place like the Palace that we owned and into that kind of relationship and at the same time we entered in a agreement with Olympia Entertainment to share in the entertainment business, and we formed a joint venture called 313 Presents, and that combines a couple different venues, entertainment [00:06:30] venues on Olympia's side and a couple of different entertainment venues on the Palace Sports and Entertainment side. So we become this you know morph into kind of a different business model entirely over the last few years, but I'm fortunate enough to be able to support not only the Pistons but continue to support the entertainment business from a data and analytics perspective in this joint venture.

Bill: Yeah that's fascinating. So one of the bigger themes that's been running through [00:07:00] my CIO innovation sessions and council in the mid-Atlantic here has been data and analytics, and I'm curious when you got into this industry versus today, what has been some of the, as you look back on your decade plus in this space, what has been the biggest change that you've experienced from then to now that has been so powerful?

Chris: [00:07:30] Yeah so I think I think probably the most, just speaking of data and companies use data and how businesses desire to be data driven, and not only the decision making but in how they approach their customers, so if you were to look back ten years ago, let's just use that as the spectrum of time here, at that point in time people were just starting to really understand how they can use data and how they can provide custom experiences for [00:08:00] their customers and be relevant and timely, really the boom of CRM if you will, and you know you look back then and for many companies that was a competitive advantage. If they knew how to use the data, they knew how to capture it, and they knew how to centralize it and really make it operational that was a competitive advantage. You fast forward to now and if you are not doing that as a business, as a company, it's not a matter of competitive advantage anymore it's a matter of necessity.

So [00:08:30] if you're not using that information to provide those custom experiences and relevant touch points, you know you're not only at a competitive disadvantage but you're going to struggle to even stay in business because it's a certainty that if you're not doing that your competitors are, and consumers are becoming sophisticated and knowledgeable enough now where they expect this, they expect these custom touch points, they expect these relationships to be much more relevant than maybe that [00:09:00] overarching [inaudible 00:09:01] same way you find as recently as 10 years ago.

Bill: You know it's, I think what's interesting from contextually aware of your buyers and your consumers, the context of the human being, has that changed from here's a bulk human being with a heartbeat I've got to get him into the arena, to today we've got to actually have a lot more context [00:09:30] around that individual?

Chris: 100%. 100%. And it bears out just in your offerings, and so looking at sports in particular and premium offerings and what we offer the consumer, you go back, I'll use the Palace as an example when it opened 30 years ago it was pretty much an arena bowl with a bunch of seats around a court, and as sports has progressed [00:10:00] and as those relationships with customers have progressed and how people are using tickets have changed, now you have you know just a myriad of premium offerings, a myriad of offerings that are tailored to the consumer. So you're talking about B2B and a B2C differentiation, and understanding you know how that customer relates to your business through that lens is imperative. So somebody on the B2C side, they're coming maybe with their family of friends, and they're looking to have a good time and be there basketball fan [inaudible 00:10:32], [00:10:30] most definitely they're a basketball fan or at least they enjoy being entertained and getting out with the family.  
But on that B2B side it can be very different. You could still have those same dynamics that you have on the B2C side, but now when you're talking about a B2B consumer it's much more about networking, it's much more about entertaining, and that fan-ness if you will that kind of takes a back seat in many cases. And their needs and their desires and their purposes for going out that [00:11:00] particular evening is very different than you know a family man or the super fan.

Bill: You know I was, and my kids are in high school, or are almost in high school right now for some, and they've been offering this experience where, and this might be romper room for you guys, I'm sure it is, but it really was interesting how they've been able to parlay essentially a camera, if I can't make the soccer game that might be 60 miles away they have a robot camera [00:11:30] in the stands that essentially you can remote into and watch it as the game's going on. And nobody asked me if I wanted that example, nobody asked me if it was, yeah about it, it's appeared as a capability. And I noticed in reading some material about you guys, people are in line are hustling to get to the game and they're running late, they can pop up the game, can they pop up the game on their phone and on their tablet or whatever it may be as they're making their way to their seat?

Chris: [00:12:00] Absolutely. You could, depending on your relationship with the NBA too right, so there's certain broadcast restrictions, but provided that you have access through a cable provider for example to our broadcast you can definitely pull that up on a device and even watch it while you're walking around the concourse if you desired. So that mobility, that's been a game changer I think for everybody, and your example I think is a great one. We do something very similar with our camps and clinics where we [00:12:30] stream these games and these sessions so parents that are maybe working they can still watch them. And it's a great example of something that you didn't know you need until you used it, or as some would say you didn't know you wanted it until it was gone, or you had to have it until it was gone, and now you have that capability and it becomes really what you expect.

So now its raised the bar as a consumer, and this technology has raised the bar for you, and the next time or the next team that your [00:13:00] child plays with, and if it's going to be a distance or even if it's not it's just going to conflict with your schedule, you're going to expect that kind of experience, you're going to expect to be able to have that service available to you, and if it's not there you're going to probably find yourself looking for options for your kids where it is there so you can be still fully engaged with your kids and their activities even while you're at work. So that's a great example of why it's so important. I think you know we are consumer focused and we are tuned in to the needs [00:13:30] of our fans and our brand advocates so that we can provide the services that they desire.

Bill: You know it's interesting, I don't know if this is fully attributed to Henry Ford, which ironically would be right in your backyard, but I, and maybe it's just the lore of history, but didn't he say "Well if I ask consumers what they wanted I would've given them faster horses" versus actually inventing the car, and I'm [00:14:00] curious from an innovation perspective, where do you balance out well "I need to survey my end users to see what they want" versus actually inventing capabilities that they didn't know that they wanted. Like how do you balance that out with your team, or is that even thought about or is it just pure gut instinct?

Chris: No that's, man fantastic question. So we, it's always important to engage the customer needs, [00:14:30] and you want to have the pulse of the customer, you want to understand what they're thinking and where maybe we're coming up short or where maybe we're doing well, but that Henry Ford example is a great one because you know the concept of a car was so foreign or not even something that someone could imagine at that point in time so of course it's like yeah if I need to get somewhere quicker it needs to be a faster horse or whatever. And for us it's like you know we have the benefit with this organization [00:15:00] that market research is one of the disciplines that is kind of married with our business intelligence and data collection efforts, and so we can take and we can look at okay this is what the customer's explicitly telling us, this is what they're telling us you know in response to our surveys and the questions that we're asking, but you know the problem and where that becomes an issue is you can lead somebody to an answer that you desire, and so your surveys often are biased by what you desire the outcome to be. And that's the challenge for every [00:15:30] market researcher is that they construct these things in such a way that they can minimize that. But there's only so far you can go.  
So now we take and we marry the stuff that we see that consumers are telling us through their behaviors. And behaviors are things that we can track. Like are they opening our emails, are they clicking, what kind of emails are resonating with them. When they do go to our websites, what pages are they going to, what products are they telling us they're interested in by their behaviors, not necessarily [00:16:00] their responses. Because here's the thing, this is my example where I would draw, if we were to ask a customer "Hey, do you want to be a full season ticket holder," I tell you what when I was 17 absolutely I'm raising my hand, even now. But I'm always going to say even at 17 with zero means I want to be a full season ticket holder, but I couldn't afford to be a full season ticket holder, and so if I'm going to the website and I'm a 17 year old I'm looking and individual games. So I'm telling the company that I'm interest in individual games. I'm [00:16:30] not going to the season ticket page because I went there once and I already know that I can't afford it so I'm not going back there.

So it behooves us to be paying attention to what our customers are telling us both you know directly through survey responses, and indirectly through their behaviors and their activities.

Bill: Yeah and it's also kind of an interesting trend for the context is coming on line for the millennials who really are craving context and individuality anyway, and [00:17:00] I've also seen that quite a bit with ... So it's interesting that's coming on board, and also security is coming that way as well. You used to be able to be able to kind of bulk secure but now we actually have to secure with context, which is hard. It's like it's getting more and more challenging to really get granular. What about blockchain? Is blockchain going to ... I was reading recently about a theater in England that had, instead [00:17:30] of charging ticket prices to come in to the theater to experience a comedian, they actually rolled out a pay-per-laugh model where they had these little tiny screens in front, baby screens behind the backseats of it like a movie theater where someone could pay per laugh, and they essentially segmented it up using blockchain so that then you were billed based on how much you laughed. And they actually found out that they were making more money with tickets [00:18:00] based on that model than the were ... So it was an interesting experiment. I certainly hasn't rolled out everywhere. But have you been experimenting with any technologies and the impact of those?

Chris: So not in that regard, and that's fascinating by the way, and it's I think for the sports world it's very complicated to kind of go down a model similar to that. There's things that we've dabbled in or talked about, and some teams have actually done, but it's one of those things like hey [00:18:30] pay for a win. If you buy your ticket, and let's say you buy a five game plan and we guarantee wins out of four or five of those games, and if we don't then you get your money back. So that's kind of some things that we toyed with but the problem in sports with that kind of model is that sometimes, and you know it's not always about winning, right? You know if you've got a young team that's growing and they're trying to get experience for younger players, you know the end game isn't always 100% to win. You're always trying to win, but like you're not going to sacrifice all costs [00:19:00] to win. So for an organization to take that approach in sports it'd be difficult, and then additionally like I mentioned earlier, often you're coming to the games to be for the whole entirety of the experience not just the win and the loss. So that relationship with the fans has become much more complicated than it was in the past. So if you're a business executive and you're entertaining customers you know it'd be really hard for us to quantify that.

Now, I would say this, [00:19:30] there could be an opportunity here on the business side with something like this where you sign deals or you know with the expectation that as a external business you're going to land incremental business or a certain amount of incremental business and if our assets don't help you reach that goal there could be some sharing the cost. So I think there's probably a model along those ends that could be possible, but the pay-per-laugh would be very difficult I think for us to accomplish.

Bill: [00:20:00] Yeah it was interesting the testing that's going on in different avenues related to kind of an industry segment that was a traditional ticket price approach. I am, a lot of our listeners are not, they're kind of on the maturity curve between zero and like you are like 100% of dominating data analytics and it really driving a lot of business. [00:20:30] If you look back on your success and your arc, your trajectory along the way, were there some particular areas that if you had to do it again, you would've with all of this knowledge that you couldn't possibly have getting started but you now have, and you had to arc out that ten years over again, would you do anything differently? Would you learn anything different? What were some of the kind of tips you can give some of the [00:21:00] leaders that are listening of what you would do if you had to do it over?

Chris: Yeah I think one of the things that comes to my mind right away, and this is rewinding right to the beginning, and I'll use our CRM strategy as an example, one of the biggest mistakes that really caused us to spin our wheels as we were trying to get into this world of customization and understanding our customers at another level, and it was to do when we tried developing [00:21:30] our own CRM system that was a big misstep on our part, and I think part of that had to do with maybe a little bit of the arrogance on our end and my background as a programmer and a developer thinking that you know what we can do this better than some of the companies that have developed the proficiency. So like a Salesforce.com for example, which we ultimately ended up partnering with, but prior to that we were like you know what we can do what they do and we can do it better because we know our business. [00:22:00] A  
And that was just, it set us back. And it really just caused us to lose a lot of valuable time, and I think to do something over that would probably be, if we could go back and say yep let's just start Salesforce right now and begin that automation and integration of information you know a couple years earlier instead of spinning our wheels would've been important. And then secondly I think we took a lot of time before we put [00:22:30] resources against centralizing our information and really making it operation from a data warehousing perspective and using it to power some of our operational transactional systems. And that was partially because we didn't know what we didn't know at that point, and you know going back to your car example it's like okay we were asking ourselves you know how do we get there faster, we would say let's get there faster on a horse. But it was, [00:23:00] for us it was like getting to that point where the engine of our data ecosystem needed to be built sooner so that we could realize the full benefit of these marketing automation systems and our CRM systems.  
So I think for us, and I think it was more just a matter of learning and that learning curve because we were so early to the game at that time, at least in our industry we were early [00:23:30] to the game, and so we kind of fell on our faces a lot and had to pivot quickly and go in another direction.

Bill: So the data warehouse was in retrospect that was something that if you had to do it again you would double down efforts and just move quicker ... When you're saying data warehouse it's both selecting the data schema, just really diving into the mechanics of the architecture and how it's going to plug [00:24:00] into Salesforce and your other systems, is that what you're saying?

Chris: Doing that earlier would've been the important thing. The way infrastructure is now it's really minimizing the need for a data warehouse, because you can do so much, you don't necessarily have to centralize it first and then start pushing it to your operational systems. Our data warehouse you know early on we didn't have a clear vision or strategy for everything we wanted to do with it, and that's what caused us to probably slip [00:24:30] up a bit. But once that crystallizing bit became clear, that okay we can be a lot quicker, a lot more customized if we can connect these dots back when the infrastructure was still a hurdle for us. So our network wasn't fast enough, or our systems, our data collection systems weren't going to be able, we weren't going to be able to access that data quick enough and then transform it and put it into a usable format for our operational systems quick enough. So we needed to centralize it. So doing that sooner probably would've helped us accomplish some of our strategic [00:25:00] gals quicker. We got there, it just took longer than it should have. So that was really I think probably at the heart of what I'm trying to get at.

Bill: Are there certain skills from a team building perspective that you look at what you need core versus what you can subcontract or outsource? Because I've had some people say that you know if, they've said you know to go fast early, to have a consultant come in that really knows and are experts at building, [00:25:30] and then they're bolting on expertise as they go, and since you have the lens of this from a long period of time, like would you, are there certain percentage of skills that you just got to have in house versus those that you can actually use from external sources?

Chris: Yeah I think so, and I think it's a mixed bag too, and I think it varies by discipline and by what your goals are and what you're trying to accomplish. So [00:26:00] the needs for consultants and experts, that's definitely there to help define your strategy and understanding where they need to fit. But as it relates to our internal resources and how we've structured our teams, we're really a small business, we don't have a lot of employees. So what that means is we can't be terribly specialized, but we have to wear a lot of hats and we have to understand a lot of the discipline, you know when we're talking about data warehousing we need to understand the structure and the design and [00:26:30] the integration and how we're going to move the information, but that person can't just be a data architect or a database administrator for example. They also need to have knowledge in how we're going to use this information to drive our business, and from a BI perspective how we're going to roll that information up and present it, how we're going to model it, what we're going to do you know for analysis and how we're going to use it to drive some of our business issues and models that we use every day and every year.

So you know [00:27:00] we don't have the luxury I guess with staffing to rely on specialization, but what we can do is if we have these people in positions that understand multiple steps of the process or really the big picture, then we supplement our teams or with those outside vendors that can help us accomplish those goals that we would have a hard time accomplishing because of the resource constraints.

Bill: If [00:27:30] you don't feel comfortable sharing that's fine, I don't mind that, but I was wondering if you could, is there a core suite of like platform tools that you find are really interesting that add a lot of capabilities that you could share. Obviously Salesforce is one of them, is there any others that you'd be willing to share?

Chris: Absolutely. So Salesforce has been a great product for us. [00:28:00] They being open source in the back, there's so much access, so many ways we can customize it. I mentioned we tried building our own and then we realized that one, there's a better platform already there and guess what it's completely customizable so you can do everything you need to do anyways. All the things you were trying to do on your own you can do with this platform and not have to take on the cost of development. So Salesforce is big, and being able to integrate, and I say big I guess what was big about it was the ability that we could integrate [00:28:30] our information, do it rapidly, and build a robust ecosystem for our sales and marketing teams to use. Because adoption on CRM systems is very difficult for any, across all industries for any company, and that was no different for us, but when we were able to enrich and really provide this robust environment with so much information that maybe our sales teams didn't even realize about the [00:29:00] customers they deal with on a regular basis, it was pretty easy. So that's one.  
From a BI perspective for us we use MicroStrategy, and we evaluated all sorts of tools and there's great tools out there, and this is probably a space that's changing quicker than most that we deal with, but MicroStrategy when we made the decision to use them for our primary platform they just set themselves apart in really how [00:29:30] they can distribute I guess, remote distribution and application development. So a lot of the tools that we were looking at didn't really even have a strategy five, six, seven years ago for application development and mobile development, and this concept of being able to consume information while you're on your phone, for example. We had a directive, or a goal I probably should say, [00:30:00] to provide a lot of information on iOS devices, so Apple phones, Apple iPads, and that was kind of where we were trying to go as an organization to be realtime in our information sharing, but also be able to do it on these devices. So obviously there's challenges with sizes and things like that, but MicroStrategy enabled us to build our reports, get our information and put it in a presentable fashion on these devices, and do it a realtime manner, [00:30:30] which was really difficult to do with anybody else. So that was for us a pretty important partner to have as well.  
Bill: Yeah they're actually in our backyard. And now I'm assuming you've gone onto other platforms like Droid and such for your mobile strategy, is that true?

Chris: So we have the capability, and I'm talking about internal applications, so we have the opportunity I guess to do that, the capability [00:31:00] to do that, but right now we're completely an iOS shop internally. So all of our internal consumption is on iOS machine. So we haven't had to develop for the Droid. Now, our public facing application absolutely. That's handled, we don't use MicroStrategy for that, but that application is across all platforms, mobile platforms is available.

Bill: So when during a game experience do you actually have a fleet of folks internally [00:31:30] that from where you are from a realtime perspective if you had like a burst of folks coming in on one side of the stadium do you have the ability to respond because of the way you're gathering data? I guess that's just one silly example, but do you have the ability to respond during the game as far as adjusting the experience based on the data that you're gathering, or is it more okay this happened yesterday, last night, we got to look at it next day [00:32:00] to come up with a plan for the next game?

Chris: Yeah. We do using your example of people arriving, it normalizes pretty quickly within an area, peoples' arrival patterns as far as times and locations just based on the geography of the space, like where people park and where they're coming from. So you see it normalize pretty quickly so we can set expectations. Now what the variable that does kind of throw a wrench into things is say there's an accident or a weather event, some sort of storm, that [00:32:30] drastically changes arrival patterns, and we do have the ability as we're watching these things, and we've married some of those elements with our BI reporting, realtime event reporting, so we know that okay there's a storm. I mean sometimes it's pretty obvious, you look outside it's snowing. But we know that there's weather forecast and we know that there's an accident because we're able to look at some of our applications and see that there was event on the expressway that's causing a backup, and now we're [00:33:00] seeing that the arrival patterns are maybe not what we would expect and we can adjust where we're positioning our ticket takers, for example, our scanners.

So there is an element where we can do some of that. and there's elements where we can look at even where people are sitting, how full sections are. That application for other venues, maybe like a football stadium would allow you to adjust where your hawkers go. Even looking at where people are buying the most, say beer or pop, you can kind of see [00:33:30] that in realtime based on SMD information that comes through.

Bill: That's fascinating. Looking back did you find it took a while for the business to have trust in the data that you were giving them? Because I do find a lot of those questions popping up is that I think there's so much power in the data, but do you find that, right now might be quite different, but did you find five years ago, ten years ago that [00:34:00] the trust level was different?

Chris: Yes and no. So kind of funny example, so when it supports someone's bias when you're providing information to somebody and yeah it fits what they know, they get behind it real quickly. Yeah that's what I know, it supports my position. When in contradicted maybe what we thought we knew, that's when it becomes a challenge, and then you start dealing with data integrity questions and [00:34:30] is this consistent across all different elements or are we being too narrow with our focus that's providing this discrepancy. So yes and no, but like what we did have the benefit of I think a few years ago when we really started focusing on these data efforts and being a data drive organization was that we had leadership at the very top that really believed in us and believed in our processes and believed in what we’re doing. So that support from the top down helped [00:35:00] us not only gain acceptance but also helped us partner with different business verticals to perfect what we were doing to make sure that we were providing the context and the right information for the need.

Bill: Do you ever have to apply like a Pareto's principle of what's important with the data, like an analysis of what's the 20% of this mountain of information that actually makes the difference, that actually moves the needle? Do you ever have [00:35:30] that type of a conversion within either departments or with the CEO or with your peers?  
Chris: So like the context essentially?

Bill: Like there's so much data that can be decided about, how do you actually make the decision that this is the 20% of all of this important data that actually is going to help us accomplish our objective? And I was curious if you ever, is that a conversation that you help drive? [00:36:00] What was your role in helping coach the business on your perspective on which data is the most meaningful?

Chris: You have the two fronts, and I think where it meets a company goal and objective, where we know we have this goal and objective and we have information that can inform whether our success or failure there would be one area. And then the other area would be where we're kind of presenting what we're finding and what we're [00:36:30] seeing from a particular data set that was unexpected, and that's where you're going through the process of gaining acceptance and kind of opening that communication and that dialogue. Because you're right, there's so much information you can be buried in it very quickly, and where early on we focused on trying to get our arms around all the information we could and structure it and consume it, you find out very quickly that you can't [00:37:00] possibly be able to drill in and know the specifics of every particular question you possibly could ask because the options are endless.  
So what we use to derive really those decisions is what information we want to spend our resources to analyze, it was where it fit a business objective, where we had questions that needed to be answered, and then something that maybe tipped us off through that process that maybe we should look in another area that would give us some clues [00:37:30] and information that we could take and bring back to the business and say hey, you know this is something that we're discovering, this is something that we're learning through some trend, and something that we're seeing that we think would be helpful for us to potentially discuss how we can pivot and make some changes to our processes to capitalize on opportunity or prevent a potential pitfall.

Bill: Do you find ... Does the machine learning at all, pushing machine learning algorithms into certain [00:38:00] parts of your data, has that yielded any fruit or any gold that has been helpful as a part of assisting human beings in their process, or is that right now kind of built into all your reporting tools?

Chris: It's a [00:38:30] little [00:39:00] bit of a mixed bag. We're not to the level, and just being honest here, we're not mature enough at this point that we've fully assimilated machine learning into our processes where we can really use that to understand, not you know I guess displace it maybe is the word, human resources and time [01:02:30] and be a little more rapid and proactive. There's things we're doing on our ... And that's on the business side, and things that we're doing on the basketball side of our business that maybe is a little more conducive, or we've leveraged machine learning a bit to produce algorithms or data sets that we should be using to drive our decisions, but we're just not there on the business side as much. [01:03:00] and quite frankly on the basketball side we're just beginning.

Bill: Yeah. Well it's good to know. I don't find many folks ... I believe that these algorithms that they're going to help us, it's kind of like the steam shovel versus a shovel itself, like the steam shovel allows us to dig faster and deeper and bigger, but we still use the shovel, and I was, I think kind of those algorithms are going to be here, but I think we're sort of all maturing in that whole process [01:03:30] right now to figure out best use case of them.

Chris: It's fascinating too. There's platforms, you know BI platforms that are being developed that are really designed to kind of be like, that's machine learning, to be like Google, where you literally would go out, you type your question in and then you're looking for the answer to some financial question from three years ago and you want to trend it over the last few years, and with just a couple keywords you plug it into like a Google search and it's going to kick [01:04:00] out the report you need just based on previous searches and how its learned your data and how your organization interacts with that data and requests that you typically make, and you know those platforms are being developed. So I mean it's changing the landscape of these tools and how we even structure and use our data. It's changing at such a rapid pace that you know it's really exciting.

Bill: [01:09:00] [01:08:30] Yeah. [01:16:00] [01:15:30] I think five years from now we'll be doing just way different things with data but we'll need the help of tools that can find the needle in the haystack [01:16:30] for sure. Well Chris I've had a lot of fun talking to you about the, about data analytics, and I just have one question for you about the role of the CIO in the future, and the role of the person that's really in charge of analytics and this critical asset within their businesses. Where do you see the role of IT leaders moving forward? How do you see their role [01:17:00] changing over the next ten years as it comes to interacting with the business and the CEO and the leaders in the organization?

Chris: I really see that CIO role as really just being one, crucial to the organization's success, but two as I look and I apply it to sports in particular I think those leadership positions that understand kind of that hybrid position that understands the business goals and [01:17:30] the directives and can marry that with the understanding of technology and data and how to use these systems and use this information to meet those goals, I just without a person like that in your organization I think it's really, really hard, and it's going to be increasingly hard to be successful as a business. You can have all the smart people in the world, but you have to have that understanding at the highest levels that this important and these systems are imperative to our success without [01:18:00] necessarily just being a copycat organization. If you truly want to be innovative you have to have that sort of resources that can bridge the gap there at the highest levels.

Bill: Yeah I definitely agree with that, Chris. Is there any resources that you think folks listening could really use that you've leveraged a lot through the years, or any books or any reading material that you've found that really resonated with you either with [01:18:30] leadership or data analytics, or just groups, organizations that you've found kind of gave you an Archimedes lever to kind of accelerating your success?

Chris: I think probably some of the best resources I've been able to use to contribute to our success here as an organization, one just my peers in spots. This is probably where sports is a little unique, it is really unique, where we have this, the [01:19:00] NBA as an example, we have you know 29 other teams that are doing the same things, that have the same business model, are trying to sell tickets, and most of them aren't necessarily championship ready, and so they're facing a lot of the same challenges. So having that peer group that is so willing and ready to help and discuss best practices and their learnings has been integral to our success. So when we look at it in the business perspective, [01:19:30] our competitors on the floor are very different than our competitors in business. So where the Celtics and the Bulls maybe are competitors on the court, when we step back and look at business our competitors really are other in-market entertainment alternatives. So it's more likely our Major League Baseball team and our hockey team that are competitors to the business. So on the business level we share a lot of best practices with each other among the NBA teams.

And then secondly I think [01:20:00] for me what's been very helpful in my development has been, you know as a general resource, has been other people in market, like our different peer groups. There's a couple different groups in the Detroit area of data and analytics professionals and IT professionals that meet on either a monthly or quarterly basis for networking events and discussions about different business problems. That has really helped me because I've tended in the past to get too focused on sports, [01:20:30] and I know that business and maybe that industry really well, but there was a lack of understanding of what other industries are doing and doing really well. So once I got more involved in these groups I was able to leverage what they were learning now and apply a lot of that to what we're doing, and that helped me be a more well-rounded I think professional in understanding you know best practices at the enterprise level right down to like your small business level.

Bill: So kind of getting outside of your industry to take a peek at what others are doing kind of gave you the ability [01:21:00] to kind of pull and extract information from other communities and groups and approaches to solving problems that you found useful?

Chris: Exactly.

Bill: Yeah that's really cool. It's funny because there's a whole, I just interviewed a guy last week who is a multi-billionaire across many industries, and he says he's really found that a huge advantage to not being an expert in the industry he was entering, and he thinks that coming at it from a [01:21:30] beginner's mind was really helpful because then he could dive in. So sometimes I think we all get so focused on our industry that sometimes looking outside the industry is really helpful and useful because we look at it from a completely different set of eyes and then can bring things back to our world, and I think there's a real usefulness there for our brains from an innovation perspective.

Chris: I couldn't agree more. That's brilliant, because if you were to ever be an expert in an industry that you are getting into, and you [01:22:00] already this experience, all you're going to do is replicate what you've already done. And that may be great, but it does stymie that innovation because you're not going to be as prone to try new things.

Bill: And to disrupt the model.

Chris: Yeah exactly.

Bill: We have like a, talk about biases, we have a bias against disrupting our own model.

Chris: Exactly.

Bill: Well I appreciate your time today, Chris, and this is going to be really helpful for my audience, and hopefully [01:22:30] the Pistons have a great year coming up. It was a lot of fun hearing you and I shared at least some of the time period commonalities of these two areas of the country kind of going at it.

Chris: Yeah, yeah, and you know the Celtics have a great team again, and they look like they're going to be good for a long time, and they have a phenomenal coach in Brad Stevens, and I wish you as a fan well, and that [01:23:00] you enjoy them, and that you lose to the Pistons four times a year.

\*\*Bill: Well I really appreciate it, Chris. Thank you very much for getting on the conversation with my community, and we'll talk to you again hopefully soon in the future.

Chris: Bill thank you so much and thank you for the privilege of being on your show.

Bill: Bye bye.

Chris: Bye.