**Project Completed by:**

**Selections from the**

**EDUCAUSE Security Professionals Conference 2018**

**August 21, 2018|12:00 - 4:30 PM EASTERN**

**Selections from the**

**EDUCAUSE Security Professionals Conference 2018**

**August 21, 2018|12:00 - 4:30 PM EASTERN**

>> And we're back. Our next session is a creative approach to data and Sarah from the University of Colorado systems. Welcome Sarah.

>> Thank you, Valerie. So I also wanted to say thank you to her inviting me to speak on this important topic today. I'm excited to share with you guys some insights that we have about data governments. You will notice that my presentation is pretty not cal themed heavy and hopefully you'll have fun with that. Data governance, some of us have it and some don't but no matter where an institution is in terms of maturity there are steps you can take to improve your strategy around data. I will be breaking this down into three main area, the process and policy people and technology components of that and we will talk about the -- well, I will talk about the struggles that we've had, the successes we've had and lessons we've learned along the way and hopefully you'll be inspired to take these ideas back to your compass and keep going on data governance. There's always work to be done. That is what we've found. Some of you may be familiar with the VD PR and I say that jokingly because I think we all are at this point. Some of the things that we've found to be helped with data governance, compliance issues and gender identity and also third parties that we share data with, the staff services, sharing data to the cloud and then data leaks. These are things probably everyone can identify with to some extent and data governance has helped us. I won't say we've overcome all of these yet but at least be able to have a nice conversation and develop structure around how we're handling these things.

>> I'd like you all to answer if you have data governance on your campus, whether you are involved with it or not, whether it's formal or informal to give everyone a heads up on what their peers have in place. I've got a little bonus question here. If there are things that pop into your mind as we're talking today, things that will benefit data security or things that will benefit your overall institution. Looks like a lot of you have data governance and that's awesome. Alright. Well, I think we can keep moving along but it's great to see that so many of you have some kind of data governance in place. What I've got here is a definition that I came up with for data governance. If you Google data governance you'll find about twenty different definitions but what we're really going to focus on today is that this is a strategy you can use by empowering select individuals with decision making authority that you'll be able to handle requests that come in around your data more quickly and efficiently and really being able to build structure around that process as well. So, I mean it sounds cheesy but if I want you to take anything away from this conversation today it's that data governance is a way of life. It's not a destination. In 2013, we were this haphazard little village over here on the bottom left-hand side. We wanted to be in this castle of data governance over here but we weren't sure how to make that happen, but we knew we needed to get started. We didn't have structure in place, data owners that were able to make decisions on these processes. But what we realized was that we really needed to be opportunistic. As things came up, as new systems and services were brought to us and decisions needed to be made about access requests, we were able to just kind of talk to people more and just make these things happen even though we didn't have a structured process around that. We just needed to keep the conversation moving. Some of you might be thinking, why is security involved? It's possible on your campus that information security has limited involvement. There are tons of other groups that are involved with this like data analytics, IT, privacy, and it just so happens on our campus information security we took this on. We had the time, we had the resources and saw how inefficient the process was and it just constantly was a problem, so we took the time to establish relationships with these other groups and then we were able to kind of guide the group. We have been in it since the beginning for the last five years. We have that historical perspective. Frequently things come up where people say I know we've talked about this before and we're always able to pull up meeting notes or access request forms that have been signed off on by all the right people and just having somebody that's been there from the beginning is important. We're the captain. We own the process. It works for us. It may not work for you. Talking it through and getting in the room with the right people and never letting it go. Anytime something comes up where you think it's a good opportunity to have these conversations jump out there and have them. Security, we've been able to provide the perspective of we talk through the risks with everybody. A lot of the times we're in the room with registrants and being able to talk to the IT people and then those folks and kind of translate what's going on and what the concerns are and really being able to boil down the options for them is so important. So, what we've done here is boil this down to the foundations of data governance. I'm going to talk about people, processes and technology and I think it's important to say again that we're not talking about some end goal of data governance. Oh, it's going to be perfect at X, Y, Z. We really just want to have -- keep it moving, keep the conversation going and it may be that some things happen faster than other things and this is all me translating in hindsight what's happened over the years. At no point in the beginning or during this process did we say let's talk about the people, processes, technology aspect of this. This is hopefully my best effort in bringing it to you in a way that makes sense and that you will be able to translate for your own use. We know this is a lot of information here. This is also in the materials that is available on the agenda for this topic. This is a maturity chart that I put together and it is based on something that Stanford has on their website. I'm sure Michael is over there going that looks a little familiar but what we've done is broken down into those three areas that I've talked about and then kind of shown you what it might look like for you. If you are a level one to a level five, level one being our village and level five being our castle. At Colorado University it was between a four and a five. I'd love to say we were a five all the way down but we're getting there. Take a few moments to look over this and think about where you are right now but more importantly, think about where you'd like to go. It is notable that we are a system and it's possible that we've had a lot more data governance struggles than the average campus because of that. We do have four different campuses and I do work at the system office. What that means is here we have K O RI P systems with a ton of data and each of the campuses have their own data and then sometimes situations come up where one campus needs access to other campuses data or system data so we have confusing situations that arise sometimes where there are no designated people to sign off on those types of requests and it's a huge challenge. In the beginning of this, we knew that we had just this hodgepodge of issues going on like that. There wasn't really anybody driving it. People were frustrated by it so we took charge, and we said we were going to own this process of information security. What I'm going to do is walk you through and hopefully give you some ideas about planning your program or making it better. Starting with process and policy: We started out, we had our data classification tiers, public, confidential and highly confidential and we use that. There's risks associated with these types of question and this helps if they know what kind of data they are talking about. Risk assessment is a good way to document decisions that are made in these groups. In 2013 we adopted our initial data government policy and that outlines the or gives us the support that we need to say that this is a priority for everyone and we have to all get along. With that, we formed the student data management group, employee data management group and final data management group and I'll talk about those a little bit more in a moment. But I feel like the more exciting part too since sixty to 70% of you already have data governance on your campus these are the things we're looking to focus on near term and in the future. We're working on more procurement relationship so getting the data governance process early in the service and even renewal process. We've been working with them to make sure that all IT services anytime we're sharing data with third parties, these things are being properly reviewed by owners. Everyone has been receptive to that. It's been a huge struggle as you can imagine and I think it's going to make a huge impact. Another thing is data classification, so student and employee and financial data but now we're looking at donor data, research data and trying to figure out how to get our hands around that as well. Our CIO's, this is a way for all four campuses and systems network to work more cohesively and learn from the projects that the other campuses are doing and furthering this whole effort and I think us being able to integrate into that process, it already has the support from the other side of IT so making sure that our relationships with the business owners are getting to the right people on the IT side so we're able to facilitate those conversations. Now we're actually seeing that the campuses are taking the lead on data governance. They are finding that our overarching policy has been successful but it's too broad. On the bolder campus they are drilling down further into all the areas so instead of saying this is our student data owner, they have someone from student affairs there, someone from financial aid and these groups are talking to each other more and starting to document things better and make decisions quicker and these have been some really helpful things that we've seen happening. The people side is something that I just find so interesting too because before this data governance process these people didn't really talk and it initially, we had to find the right people, make sure they were on board with this and then kind of coach them into filling those roles that we had picked for them. Luckily, there were groups that already existed when we started this process. The registrars and relevant IT folks were getting together and talking about issues with the student information system and we were able to kind of jump on their coattails and get involved with that. The chief HR officers were meeting and we were able to jump into those meetings and the CFOs were also meeting. Luckily, we had kind of an easy time when we started out because those people already knew each other and it was building their trust and letting them know what our expectations were. I will not say that it was easy. It was a little bit like herding calf. I had to point that out too but now we're getting to a more mature place. We have this new reporting that we're doing given on an annual basis listing out things like these are who all of these members of these groups are. Our data trustees, our data stewards, and we detail here are the major systems that have the student data or employee data and you know, this is the types of data. These are the counts of data. We don't have an asset inventory but this is a good way to tell people this is what we have so when we have access requests and we're trying to make decisions, we can say this is the scope of what we're talking about. Other things we're working on is better processing systems and that was an issue that we had with our people. We've had a lot of turnover so I'm not going to say that part has been particularly easy. During the last five years we've had ten CH R O's turnover basically so in those four roles on each campus we've had ten different people and one thing we've found over time is they come in and say this whole group is going on around me and I don't know what my actual job is here and what the expectations are so we've been making those things more systematic and of course always driving awareness of these groups. Sometimes people come to me and say, I'm putting up this new service but I heard that I need to fill out a form. They don't know about the process but they know at least how to get started and that's encouraging to see. We have an intake form that our IT folks drive people toward and that form usually ends its way somehow to me and I make sure it gets in front of the right people and that we do get the right review and approval for that. Of course, as I mentioned, the campuses are working on their own data governance groups and we've been lending our expertise and helping them out as they go on their way. So, technology is another component. I will say that information security hasn't been as involved in this piece. Neither really has our data management groups but these are really being driven and owned by IT and these are things that they were already working on as we started this process so it's almost like we're the sounding board for them, I guess. They'll say we're working on this and we just have these back and forth conversations where we kind of help coach them about how these tools will be useful to us and what they can provide that we would like. This is not quite accurate but we've been making investments in this area and making progress. Especially the data lakes. Everybody wants them. No one understands them, I think. The data retention is something big we've been talking about. Making sure that our technical solutions can support that. Our groups currently having conversations with the technologists to make sure that we can automatic that. It's very important as well. Which brings us to the end. I will say that our journey is nowhere close to over but we've matured our process in the last five years. We continue to mature and it always kind of stays interesting. That's why I named this presentation our creative approach because we haven't really followed any sort of set standard. We just see an opportunity and we jump for it and just keep pulling people in. I would ask you, what you can do tomorrow that's going to help you further your own journey?

>> Thanks so much, Sarah. We have one or two minutes here for questions so if anyone has some. I think we did have one. I think it was lost in another conversation. What do you think the distinction would be between document classification versus system classification.

>> That's a good question. We haven't really made that distinction here. I mean I guess usually our systems are classified based on really the types of data that are stored on them so it would almost be the same thing. I'm not sure. If you'd like me to get in touch with you offline we can carry on that conversation.

>> I would say it always boils down with us to the type of data. So HIPAA data is going to be highly confidential. Anything in between we're just going to consider on a case by case basis.

>> Great. That makes sense, Sarah. Maybe if you want to put your e-mail address there or you could private message them if you want to continue the conversation offline. Thank you again for sharing your approach to data governance with us. We're going to take a moment or two to set the stage for our next presenter if you'll stay quiet for a moment and we'll be right back.

>> Thanks.