



# BUILDING THE DATA DRIVEN CULTURE PODCAST

## AUDIO TRANSCRIPT

JOY BONAGURO: That I always joked that my job is about change management and sort of data is like a side gig.

ARNAB CHAKRABORTY: Hi everybody. This is Arnab Chakraborty here, Managing Director for Accenture Applied Intelligence Practice. I'm here with today, Joy Bonaguro, who is currently the Chief Data Officer for the State of California. Previously, Joy served as the Chief Data Officer for the city and the county of San Francisco.

Thanks for joining me today, Joy, it's great to have you here.

JOY BONAGURO: Thank you for having me, excited to be here.

ARNAB CHAKRABORTY: Absolutely. Absolutely. I think today, Joy, we are having a very exciting topic that I think is close to your heart and my heart and we are talking about how to build data driven culture in an organization. I think this is super topical and we thought we'd have a chat together and get your perspectives. And I thought that maybe we can start with a little bit of your own journey as the Chief Data Officer and how you're seeing the role of Chief Data Officer evolve within organizations and how it's going to evolve in the future? Maybe we start there, Joy.

JOY BONAGURO: Yeah, sure. I think I've been analogizing a little bit recently to the role of the CIO, which was like the hot thing in the 90s. And we're sort of still in a similar – we're in the 90s of the CIO era, I think, for the CDO. It's become more and more prevalent, but I think in a lot of organizations, it initially started as a catalyst role around advancing analytics or it came out of a compliance mandate typically in the financial sector and things like that.

For me, my role was definitely more of a catalyst role when I first started as the role of the CDO in San Francisco and I more or less had two broad mandates. One, overhaul open data, which is sort of a thing specific to government, but that's the proactive publication of machine-readable data. And then, the second was this huge mandate of make departments better at using data and decision making. And it's like, oh, okay, well, how should we do that?



And having to really think about what does it mean to be better at using data and decision making and how to sort of build the shop from scratch on that? And one of the things that we didn't do is we didn't start with analytics and data science. We actually started with more basic fundamental challenges and part of that was just diagnosing what the organization needed. And in my case, it was sitting currently in San Francisco, 30,000 employees, 50 some departments, depending on who was counting and huge range of data maturity and use of analytics across that.

And so, as a new role working across that complexity, one of the best ways I found to start that role was, one, diagnosing my organizational position. And so, I think new roles and as we've seen in the literature, the role of the CDO, it's still sprinkled throughout the organization. No one's like really settled in on a key spot for it. And so, you sort of need to, one, diagnose your organizational position. And then, two, identify organizational needs around data and then, try to bridge those structural gaps.

And so, that was really my focus on how I approached designing the role both at the city and county, as well as the state.

ARNAB CHAKRABORTY: So, Joy, that's really great. I'm talking about the role of the catalyst and also from there, how you drive the change within the organization? As you think about that, in an organization like the State of California and even organization otherwise, if you put these on the same level playing field. Everybody has a different level of understanding and they are in different points of maturity. How do you bring people along in this journey of creating a data driven culture?

JOY BONAGURO: Yeah, I think I mentioned the complexity of San Francisco and then, the State of California is even more complex. So in this case, depending on how you're counting, you have either a quarter or a half million employees and you have around 200 lines of business and you don't have sort of – so it's like a conglomerate and you don't really have ready access entries into all of those groups. And so, in thinking about and designing the role of the CDO across what is essentially a nation state. On one hand, you're kind of like, well, that's sort of a hopeless task. And it's like what could this role possibly accomplish, especially in startup mode.

And so, where I have found sort of backing into your question is that, instead of focusing on – you know, I think in San Francisco, my goal was to sort of like create minimum competencies in part and ability and functions and services across. In this case, I see my role as figuring out how to institutionally and structurally dismantle common shared data challenges that are inherently cross entity in nature.

So in San Francisco, there were 50 some departments, but there were some big departments. We had a department classification where we actually put our departments into different groups based on size and complexity in terms of what was going to be our engagement strategy with those departments. And we thought very intentionally about how to engage certain key departments who were either had incredible amounts of data that could be leveraged well or were providing services that had disproportionate impact on people's lives.



At the state, my current focus is sort of designing the role of the CDO and I'll say one thing that's in common to both approaches is I'm trying to solve problems that people care about as part of a broader change management strategy. I'm not coming in with here's my agenda and I'm the smart person in the room and just listen to me and we'll be great at T&O, right. No, that's like really annoying and you don't make friends that way.

Instead, I spend a lot of time going around and trying to listen and validate what I'm hearing. And so, that approach has been consistent for me. And I will tell you the important differences at the state, beyond the fact that there's very different types of business, as I mentioned. There's also very different types of need. But what I'm trying to focus on, where is the very deep structural shared challenges because across entity. So the state's structure, there's agencies and under agencies are large groupings of departments and working across those agencies and focusing on those sort of inter-structural gaps around data, like focus interest, as opposed to going deep into certain departments.

I was much more interested in going deep in certain departments in my San Francisco role because some of those departments were so big and important. Instead, I'm focused on like where can we fill the structural data gaps and competencies across the state that way?

I'm not quite sure if I answered your question.

ARNAB CHAKRABORTY: No, I think you've touched upon some really key nuggets. The thing that I captured was across departmental shared challenges and creating intents of purpose around that. Because then that's kind of the mission that everybody kind of identifies with and they feel it's important and that's how you get everybody's attention.

JOY BONAGURO: Yeah, and they also don't feel like you're getting in their data business in an appropriate way. There's always – there can be elements in every organization of territorialism around data. And so, when you're instead, one, solving problems people care about. Two, working on where the structural gaps are organizationally, then that's part of the culture change is meeting people where they want you to be and then, expanding into new spaces as the opportunity arises and as the right strategic partners.

I also think working in a very large organization, I think a lot about what I was calling very early on in my listening to what are the key institutional levers to tap into? Because you can do like – or you think what are the key structural levers that need to be shaped or influenced or inserted into. And so, I think a lot about levers and which levers to pull, especially as essentially a startup again and a tiny – you know, starting from scratch like really.

ARNAB CHAKRABORTY: Yeah, absolutely. I think, Joy, as you were speaking, I can pretty much envision and it's just something I've seen as well is all these large data programs are a big change management programs.



JOY BONAGURO: Totally.

ARNAB CHAKRABORTY: And you have to handle that with a lot of care, a lot of good thinking, good strategy and then, executing around that strategy. And this is what the leadership sponsorship becomes super critical and we have seen great successes where the leadership and sponsorship has made it happen and created the confidence and the support. And at the same time, there have been also horror stories that we have seen because of the lack of sponsorship.

So would love to get your perspective as to what has worked from a leadership and sponsorship perspectives and great practices dos and don'ts? Anything you would like to share from that side?

JOY BONAGURO: Yeah, and just on the change management, I'll note that I always joked that my job is about change management and sort of data is like a side gig mainly. And so, if you adopt the change management orientation in strategy, I think you're – again, especially in larger legacy organizations. I have less expertise around brand new organizations, but I did recently work at a startup. But to your point, the role of leadership.

So I actually feel that I'm of like two perhaps splitting into a third mind on the role of leadership. Because in order to use data well and do data well, it sort of needs to be a safe space. And depending on the nature of the leadership, it's not always the best route to go. Like sometimes, you actually want to work with not the leadership level, but a few levels in. Or you want to work with programmatic leader that was in departments and maybe not the person who's at the top because their jobs are sometimes – they're more focused on other things.

So have both seen the role of the leader be very critical and I've seen the role of the leader derail and I've seen the role of the leader be sort of insignificant. So I'm actually like as I've seen more and more patterns, I'm not totally convinced. And here's where the leadership role can derail and I'm actually working on a blog post about that sort of touches on some of these themes is that – what is that, there's this rule or theorem called Good Hearts Rule? Good Hearts Rule, do folks know this?

But it's this notion of once you start measuring something and you turn it into a target, people will start manipulating it.

So, for example, companies needing quarterly targets. Some companies, that shall not be named, like will actually withhold shipments towards the end of the quarter, so then they can book that revenue for the next quarter to smooth out their quarterly earnings. So it's like - and because it's a metric that people key into.

And so, I think the role of leaders in setting the data culture necessarily has to create space for learning and adaptation to occur and not all leaders orient that way. Some of them, they just want it done and ready. And I think becoming more data driven is actually an act of curiosity and exploration and experimentation that does not actually make itself amendable to like quarterly predictable deliverables.



And so, I think there's this incubation space that needs to be made and so, going back to my sort of first comment. In addition to diagnosing your organizational position as a new CDO, the organizational need, you kind of have to diagnose your leadership and their style and what approaches to adopting additional data methods is going to work out most successfully and how that leader style interacts with the other parts of the organization.

ARNAB CHAKRABORTY: This is great, Joy. I think what you really brought about the diagnosis of the leadership style is super critical because it's not about just following the leadership style. Maybe we have to also change the leadership style which is where are going within the space of data and analytics because it requires the whole experimentation, it requires the aptitude to actually make (inaudible) and learn from that. And if it is always defined to only succeed, then people are not going to take any of this, they're not going to experiment. And it's also our jobs in your roles to at times to actually educate the leaders in terms of what's the kind of environment they need to create, so that these things can actually flourish in the organization.

And sometimes, depending on the nature of the leader's role and at the state, our departments have a huge range of sort of political salience in their work. Sometimes the best thing they can do is stay away, which is sort of counterintuitive, but creating that space because other stuff might follow them around.

But the reality is that you can do what you can, but whoever your leader is, they're going to be who they are and you'll have some level of success in that or not. I fortunately have been blessed with leadership that really has embraced the sort of longer term nuance of what we're trying to do and not push for quarterly results, which we want progress, but not be sort of artificial pressures when you're working on something like institutional change making, which is not an overnight thing.

ARNAB CHAKRABORTY: Absolutely. So this is great, Joy. So maybe, why don't we dive in a little bit more around the brass tacks of this journey. And one of the things you touched upon earlier was kind of the fluency, the fluency that we need in the organization around data and analytics and how do we create maybe some sort of a program that enables and empowers people across the organization to create the fluency? And I think you have done a lot of that work yourself, Joy. So maybe share some of the success tips on how to go about doing that?

JOY BONAGURO: Yeah, so I mean I'll maybe share a few things that we've done around that fluency, but I certainly, there's so many things that people are doing out there. And actually, we have a grad student working research project right now, sort of like looking externally, what is the best stuff around data fluency and literacy? What's the best thinking? What are actual evidence based practices to this concept and even, what does it mean?

I suspect it means something more than training, but what is that? What does it mean to be organizationally fluent with data as opposed to individually? So I've done a few things in the past, all of which I'm not entirely sure if I need to replicate or duplicate or scale. But one of them was we actually had an in-house data academy that we developed. And it was both demand driven, but there was also a pull factor to it.



So we knew people in our world, people are sort of – they don't get a lot of professional development, they don't get a lot of access to professional development. And so, what we did was we set up a free training program and people loved it. So we called it our gateway drug because by giving people something free that they weren't used to getting and they really wanted, it really brought them into our sort of sphere of services.

And so, what we would do with that training is we sort of incubate additional concepts and thoughts and other services that we offered. So they weren't just getting the training, they were slowly being indoctrinated into our way of thinking by the examples we'd use, by the hands-on training.

Another key part of that was that we created this network of trainers and we focused on peer teaching. We did not outsource our teaching, partly out of poverty, but the other reason was because we saw it as part of a cultural aspect. And we took this to the next level where we did deep dive trainings in areas and then, we created communities of practices around those skills and techniques.

So it wasn't just training. It was about creating fabrics of people and networks, irrespective of what department or group they were coming in. They were becoming part of a larger and cross department cutting community.

And we paired it with other services. So what we could do through that gateway drug of free accessible training, we quite intentionally leveraged concepts like reciprocity from like Cialdini's, Tools of Influence. I forget what his book is called. You know, the six ones. But like consciously using training as a tool of reciprocity, so that when we would come to departments and ask them for other things like, oh yeah, they gave us that great free training that we loved.

Also, I think the other piece that I think is worth maybe touching on is when we're introducing data science as a service, one of our biggest problems was what we called the truffle pig problem. And the truffle pig problem in a nutshell was that it was hard to sniff out good questions for data science. And I will say in truffle pigs, they sniff out truffles and they're delicious, a sometimes rare treat as I like to say. So they sniff out good data science problems and we knew we had a truffle pig problem because like people would ask us to build them dashboards. And as I always say, you never want to be as a data team, you never want to be in the dashboard building business. It's the worst business to be in. Instead, you want to build capacity in your departments to build their own dashboards or they want warehouses or they want you to automate a process, which is great for general service teams, but not quite what we wanted to do.

And so, we used sort of design thinking approaches and methods like card sorting, to come up with what we called the Project Topology. And what the Project Topology did was it built up the capacity essentially. It gave different types of data science projects and examples of the types and I'll give an example shortly. And we would give those



types and then, we would back them up with a bunch of industry relevant examples.

So we'd give them this nomenclature, plus a bunch of examples and not essentially talk the organization to opportunities, thought data science, within their entity. As opposed to us coming and pitching them ideas. Instead, we trained them on opportunities thought in competency if that makes sense.

So I'll give an example on one we call, Prioritize Your Backlog. So you have a queue of stuff. You have the queue of inspections, cases, assignments, whatever it was. And traditionally, you assigned it FIFO, First In, First Out. What data science does is we come in and we organize and classify your cases and then, we help you reprioritize your backlog based on whatever your priority is. It could be highest need, highest risk, greatest opportunity.

And then, we gave an example of how we helped our assessor, recorder, prioritize their backlog of house sales in terms of reassessing property taxes. And so, by giving people this topology, we essentially like spun up a whole bunch of truffle pigs in each department and they were able to find really relevant and interesting data science projects and we didn't talk to them about AI or machine learning or supervised algorithms. We didn't use that language. Instead, we used these operationally focused topologies along with rich palatable examples.

Had we gone in there and given them a bunch of like private sector examples, they probably would have ignored us.

ARNAB CHAKRABORTY: This is fascinating, Joy. And the visuals that was going in my mind when you were speaking about the examples of truffle pigs. It's like not getting the fish, but teaching them how to fish it. And that's what you did and it's a huge empowerment. It's not about just training, it's actually the empowerment and the set of upskilling them with new capabilities that help them to spot opportunities that were not probably possible before, which is what it did.

JOY BONAGURO: And not just that, it's also going back to sort of what I said in the beginning. It's focusing it on their needs and their priorities. You're giving them the tools to pull out their priorities. You're not projecting what you think their priorities should be on them. And that's another underlying value around change management.

I'm not going to come in and like tell you what to do. I'm going to work with you and help you unpack your business and its needs and help you translate those needs into what data can help you with, not being a data dictator.

ARNAB CHAKRABORTY: This is great. I think you've touched up on it very nicely. And another aspect that I was going to ask you, which is about adoption. How do you drive the adoption on these data driven solutions? I think you can you explain that in the way you approach the data fluency program to help them on their own spot those opportunities and create their own ideas based on the tools and capabilities you empowered the organization with?



JOY BONAGURO: I mean I'll say another thing that we did was we also deliberately in a sense. And so, when we offered some of our services, we used scarcity as an incentive. So we had noticed a common phenomenon was that departments that wouldn't necessarily want to work with you or collaborate if you were asking them to. If you, instead said, hey, we're offering this service. You can apply to work with us.

And so, what this did, it would invert the power dynamic. So instead of as a new data team going around being like please work with us, please work with us. Instead, we noticed that when there were excess resources around, people would suddenly collaborate and work to get those resources. So we essentially turned ourselves into a scarce resource that other people had to apply with. And what we were able to do by inverting that power dynamic, as part of their application process and as part of onboarding a new project, we would have their senior leadership sign onto the change that was needed. Because we didn't want to just have analytics projects like sitting on the shelf waiting to be acted upon. The entire analytics process involved full deployment and then, getting the result story.

And the other piece that we added onto that was we would take on – so the application would invert and create an incentive, an enticement for people to participate. Oh, we get new resources as opposed to us being like please work with us. And then, in order to close up the projects, we would take our projects in cohorts because the hardest thing is getting – anyone can do the analytics. That's the easy part. Deploying the analysts project and changing the business process is the hard part.

And so, what we would do in our cohorts, A) in the application process, they had to envision change from day one, but then, what we did is we made each cohort time bound and ended on a demo day where they'd have to present out to their peers about not only what was the business problem, what were the analytical insights, what was the business change and what was the result? And we made them the center of the demo day, so everyone was really incented to have a good story and to actually not just identify a potential change as a result to analytics, but to implement it.

And so, if you think about your data science service and your analytic services as creating a project list cycle, what can you do throughout that project lifecycle to incent the ultimate end result, which is better use of data baked into the organization, not these cute little like insights off to the side?

ARNAB CHAKRABORTY: I love the way, Joy, you talked about the incent and also, I think you created a platform that enabled the visibility and amplified the visibility of the impact these data projects are making for the organization. And in turn, the humans who are driving them became sort of the heroes or whatever you call it.

JOY BONAGURO: Exactly. You create heroes out of the project champions. And they get to tell this awesome story and we'd even build the deck, so that all they had to do was tell the story and we'd coach them on telling their story. So you're also making the – you're sort of putting yourself in the background and you're letting your business partner be the hero and you're sort of subjugating yourself to the glory.





ARNAB CHAKRABORTY: And that kind of brings to the first point you mentioned about being a catalyst. That is where you're really serving the role of the catalyst.

JOY BONAGURO: Exactly. And then, now maybe they can build a business case to get more analytics in-house and then, we become the sort of over time, the center - probably eventually a hybrid model where they can come for expertise, standards, approaches, extra capacity when needed, but we really wanted to catalyze these functions in the departments themselves.

I never got to see that full lifecycle because (inaudible) and I had to leave too early, but that was the goal. It was a good hypothesis. Who knows how it would have worked out?

ARNAB CHAKRABORTY: Absolutely, absolutely. So I think, Joy, this is great conversation. I will ask one final question, advice from you for our audience. As you have taken this journey and as many of the leaders here and all take similar journeys, what would be one word of advice, especially as somebody who is creating a data organization in their enterprise, what is one advice you would give to them based on the learnings over the last many years?

JOY BONAGURO: That's hard. I guess I'll just sort of say a few philosophical points and attempt to be succinct. One, put aside your own ego. Two, think of this as change management. And then, three, design with those things in mind.

ARNAB CHAKRABORTY: Awesome. Awesome. This is great, Joy, thanks a lot for having the conversation with me today. It's really fantastic to just see what you have achieved in multiple organizations and sharing that with all of us today. In our audience, if you have questions, feel free to get in touch with Joy or myself, but thanks again for listening to both of us. Really appreciate it.

JOY BONAGURO: Thanks for having me. It was fun.