



## **Episode 17: "Using BI to Improve and Design Programs"**

with Monica Soliman, Senior Research and Innovation Advisor at Employment and Social Development Canada (ESDC)

Monica Soliman has worked in a number of BI roles in government, including roles at Immigration, Refugees and Citizenship Canada and Employment and Social Development Canada. In chatting about the growing variety of BI roles in the public sector, Monica shares her experiences working on projects that use BI to improve existing programs as well as projects that incorporate BI into the design of new programs.

## Transcript:

KIRSTIN APPELT, HOST: Welcome to this edition of Calling DIBS. I'm your host, Kirstin Appelt, Research Director with UBC Decision Insights for Business and Society, or DIBS for short. Today, we're calling DIBS on Monica Soliman. And I'm really excited that we have Monica on our podcast today.

I met Monica this past fall when she presented at BIG Difference BC, and I was really struck by the neat, careful BI project she and her colleagues had done at Immigration, Refugees and Citizenship Canada. And I hadn't previously been well aware of the unit or of Monica, so I was really excited to make that connection. And I'm looking forward to getting to know Monica a bit better today. So welcome to the podcast, Monica.

MONICA SOLIMAN, GUEST: Thank you, Kirstin.

APPELT: Can you start us off by just telling us a little bit about yourself and your background?

SOLIMAN: Alright. My background is in behavioural science. I hold a PhD in Social Psychology from Wilfrid Laurier University and a Master's in Marketing and Consumer Studies from the University of Guelph. I've been working in government since 2016. I've worked in a number of different departments. I've worked in Central Agency and the Privy Council Office's Innovation Hub or Impact and Innovation Unit as it's currently called. I've also worked in Employment and Social Development Canada, in the Innovation Lab.

And this is where I currently work. And I used to work in Immigration, Refugees and Citizenship Canada, Client Experience Branch as well. In all of these roles, I've been applying behavioural science in different ways to different challenges across the federal government.

APPELT: That's great. And where did your interest in behavioural insights begin?

SOLIMAN: I've always been really interested in how people make decisions and what motivates them to action. In grad school, I studied different topics and my research was broadly situated in the area of judgement and decision making. What motivates people to act? What motivates people to engage in proenvironmental behaviours, for example? But also what types of heuristics and shortcuts do people take to making decisions? And how do these sometimes lead to biases? These are questions that I've been really

interested in since grad school. And the different opportunities in government gave me a great place to apply this interest to real-world problems and see the impact.

APPELT: That definitely resonates with me. It's really interesting doing the podcast that I get to see there's so many of us have these similar, ongoing themes in the background of being really interested, but wanting to be able to apply them more. Is that what made you do the transition from academia to public sector, the interest in application?

SOLIMAN: Yes, for sure.

APPELT: And you recently started a new role back at ESDC. Can you tell us a bit about that role?

SOLIMAN: So, yeah, my current role is in a department that I worked in previously. But now, I'm getting a bit outside my comfort zone. I'm working on a very multidisciplinary team. I'm not just running behavioural insights trials anymore, but I'm trying to work on broader multidisciplinary projects to make sure that our understanding of how people think and behave is embedded from the get go in the way we design policy, rather than just to fix problems at the end. So, definitely taking me outside my comfort zone, definitely learning a lot, and trying to integrate and apply different tools and methods with my colleagues.

APPELT: That's really fascinating and I think a lot of us have been talking about that's really where we hope the field goes, is this upfront integration. So that's exciting that you're on the frontlines of that. And I'm curious because you've had BI roles at a few different government organizations. What common themes have you seen in how BI is used in these different organizations, and these different teams and units?

SOLIMAN: Great question. Since 2016, I've seen behavioural insights, there's growing interest in the area. And now, it's being applied to address many different challenges. But certainly, as you say, there are common themes in different departments. So, for the most part, I have seen behavioural insights being used to address barriers to accessing programs, for example. There's a lot of integration of behavioural insights to simplify our communication to Canadians, to ensure that we send them timely reminders, to act on time, to try and use it to increase program uptake or facilitate transitions from one channel to the next. These are, I guess, general themes across different departments.

What I'm seeing more and more interest in is integrating behavioural insights in the designed from the get go. And this is where I think this area is still new. But it's a very exciting avenue for behavioural insights to be. So rather than using it as a Band-Aid, making sure that from the very beginning, we're using and leveraging the knowledge that we have for designing programs that work best for Canadians.

APPELT: Yeah, I think that's just so valuable, and I'm really excited to see what you and your team are able to do there, because I think once we have, you know, some organizations leading the charge there, it'll be easier for other organizations to follow through. I think a lot of organizations, when they're first starting to use BI, they want these, like you said, Band-Aid fixes, because it's a quick proof of concept.

But once they've seen BI integrated from the beginning, then they can start to understand how that would work for them. So that's really exciting. You mentioned some of the common themes. Are there differences in how you're seeing BI used in these different organizations and roles?

SOLIMAN: I think it depends on where BI is in the organization. In my very first role I was working in a central agency, so working with different departments and working on high-level priority problems. In my role at

Employment and Social Development Canada, behavioural insights was part of the Innovation Lab in the strategic policy branch. You can see that they're working with different programs and policy areas within the department.

And in IRCC or Immigration, Refugees and Citizenship Canada, we were embedded in an operation sector. It was very different there. I think we got deeper and deeper into the weeds of operations and working on problems within the day-to-day operations of the department, processing of applications and specific communications with clients regarding very technical issues. I think the difference is where the BI team or unit is situated in a given department or organization, it can affect the types of problems and the granularity of problems that you work with.

APPELT: Yeah, that makes a lot of sense. And it's really interesting because we do see, like you said, these BI units being integrated in different places, whether it's standalone or integrated in a larger team. It's really interesting to think about how that works so differently.

SOLIMAN: Yeah, I think one of the amazing things about working on multidisciplinary teams is that you can build bridges and find connections to like leverage mixed methods in research. And depending on the team that the behavioural scientist is embedded in, there may be great opportunities to work with designers, and to work with policy analysts, and to work with other people of different expertise to kind of leverage that expertise into the design of behavioural insights experiments. And the experiments can look different depending on who you're able to work with and the collaboration that you can make.

APPELT: Yeah, I've definitely seen that in my own experience that, yeah, depending on if, you know, if you have the data team really closely integrated or separate, or the design team, it does really change the way that the projects look, the results are able to get the flexibility you have. Absolutely. Well, I think that's a good segue to asking if there are any favourite projects that you can tell us about?

SOLIMAN: Yeah, there's one of the projects that I really enjoyed was on the Canada Learning Bond. Many people may not be familiar with the Canada Learning Bond, but be more familiar with RESPs or Registered Education Savings Plans for children. So basically, the Canada Learning Bond is like a free benefit, if you will, that low-income families can have access to once they open a RESP for their children.

And the challenge with this project was that even though for this benefit, people don't need to put in savings, people don't need to put in money, only 30 percent were taking this free money that was on the table essentially because it wasn't so free. They needed to go to the bank and address many, many barriers to open a RESP for their children.

And so, this project was really interesting because there was a huge qualitative component. We talked to families from low income, we talked to stakeholders. We gathered a lot of information, and we also designed different types of solutions, ranging from modified communication to Canadians to other, bigger, longer-term interventions that can be leveraged. And in behavioural insights trials, we sent letters to Canadian families who are eligible for this benefit, and integrating different types of methods and approaches from behavioural insights.

And we saw increase in uptake for some of the most vulnerable groups of the population. This project is really rewarding because we saw meaningful impact and people actually going and opening the accounts and accessing the benefits that they're entitled to. It was great that it was also one of those projects where we were able to leverage different tools, different methods, the ability to communicate directly with Canadians, and to embed these insights into our trials, which is something I always recommend. Whenever you get a

chance to actually explore the problem space, to talk to the end users that you're going to be designing interventions for, and get their feedback early and often, that's like the best way to get to well-designed interventions. And then you put them to the test and see what works and what doesn't. This was one that I really enjoyed working on.

APPELT: That's really neat, because I've actually read a lot about that project and I've always been really impressed with it, both the insights that, you know, in some ways, once you hear about them, like, "Oh, of course, that makes sense", but you wouldn't think of prospectively things like just the need to go into the bank and not having child care for when you're at the bank.

And then we actually tried to do a similar project, but we ran into one of the common challenges and BI projects where we can actually access the data. The group we were working with only knew on aggregate how many people were getting the provincial version of the Canada Learning Bond, and they didn't know for any given person whether they had it or not. So, we couldn't actually do anything.

I think that's a good segue to my next question, which is that, you know, BI projects are really rewarding, but they have challenges. Whether it's measuring behaviour and being able to tie the behavior to the solution, randomization, scaling. What are some of the challenges that you have found to be most common?

SOLIMAN: So, early on, I think a big one was just building awareness around behavioural insights and what it can do and what it can offer to the organization. And finding the common language around things like experimentation, because even a word like experimentation can mean very different things to people from different backgrounds. So just trying to communicate in a way that's clear enough for people to understand what we're trying to do and to get the buy-in. In this respect I found in every organization where I work that it's always hard to launch that first project, and get that first project off the ground. But as soon as one or two projects are launched, the appetite for experimentation and applying behavioural insights grows so much. So that's a challenge that kind of solves itself with time, and with building those cases and showcasing those first examples in the organization.

Another challenge that you pointed out, it resonates so much with me, is data. Because oftentimes, we're using administrative data that was not designed for this type of research. Administrative data can be really complex. It can be messy sometimes. Working with data that is less than perfect, trying to find ways around measurement sometimes because as you mentioned, sometimes you cannot measure things at the individual level. The data is simply not there. What is our next best thing, right? Trying to find approaches to measurement that work around the existing environmental challenges, like challenges in the environment.

And just in general, working in government requires a ton of collaboration with different partners from different backgrounds. So always trying to bring everyone to be on the same page, making sure that we're trying to address the problem at the right time, and having the right players around the table. This is really important to get a project launched properly, and implemented properly, and be able to get all the pieces together.

APPELT: Absolutely, I totally agree with all three of those points. I like your point about experimentation. And it's interesting because experimentation, like you said, means different things to different people. It has a very specific scientific definition. But in lay talk, often when we say it's experimental, people just hear that and they think, oh, it means it's risky. Not that it's something we will be testing. I definitely have found that we have to think about how we communicate experimentation. And sometimes the word 'experiment' is just like a no-go for some folks. They hear that word and it's a "No".

And then, like you said, the data piece and then the collaboration across people with different backgrounds and I was thinking when you were introducing your background and, you know, just acronyms like everyone has their own set of acronyms, ESDC and IRCC. And so just getting that common language often takes some time. And every time you do a new project, often you have new acronyms you're learning. So sometimes I have to on some projects, a little acronym dictionary to remind myself. Like with this team, this acronym means this thing. So definitely underscore your points.

SOLIMAN: Yeah, certainly transitioning from one department to the next, sometimes I have to unlearn the acronyms from the one department to be able to understand the new meaning of the same acronym in the new department.

APPELT: Exactly. Yeah. It's a funny facet of our work. So those are some of the challenges. Are there certain parts of projects that you find tend to work smoothly and don't tend to have challenges?

SOLIMAN: I think depends on the project. I guess there are parts of the projects that I enjoyed the most. Like I enjoy the interaction with clients. I enjoy the design of experiments. Like which parts run smoothly, I think it would depend on the challenge you're working with.

APPELT: There's kind of like no two projects are the same. Yeah. Very true. You're kind of alluding to some of what you find rewarding—the client relationships. Any other parts that you find rewarding?

SOLIMAN: So definitely when we do get results. I guess it's more rewarding when you found that some of the interventions have an impact. But even when they don't, I find it really interesting once the results come in to learn from interventions that didn't work and try to think of, "Okay, what's next?". For me, where there's room for iteration, from one experiment to the next, where there is room for integrating learnings and building on the research, I find that very rewarding. So, yes, seeing the impact, but also seeing when things don't work.

APPELT: Yeah, I definitely agree that I think maybe particularly coming from my academic background, that we're okay with that failure because we know failure isn't a failure of the process, it's just a failure of a specific design and that we can learn and change. And if you don't ever fail, it worked, but was there something that we could have done better? So those failures are definitely helpful.

Another thing I thought it'd be interesting to chat with you about today is your different roles, because our BI practitioners in training are curious about the different roles out there. You've talked a bit about how your roles differed across organizations and how you've been either more on the tweaking existing products and policies, or being more on the front end of the design. Are there other ways your roles have differed?

SOLIMAN: I think a number of my roles also included a capacity-building component. Using the knowledge that we have, whether on research methods and experimentation, or specific behavioural insights concepts, and sharing these within the organization. I think this is a role that many behavioural insights practitioners in government are currently playing as well.

APPELT: And I'm wondering, because you are also mentioning before, related to this, the idea of the first project, you are having to do an explanation of why do we experiment? What is experimentation? Do you have any tips for how to do that well when people are coming from these different backgrounds? And how to get people on the same page, and speaking a common language?

SOLIMAN: That's a great question. We try and use jargon as little as we could, and sometimes it doesn't feel very natural. But coming up with examples and visuals helps a lot. Sometimes using words like testing what works resonates better with people in an experiment. And sometimes it gets the point across more. But also having lots of examples, both from the same organization, but also familiarizing yourself with examples from other organizations that can always draw upon to illustrate the point.

I think using these concrete examples helps a lot in getting people on the same page. Simple language, no jargon. Yeah, like I think these are some of the key pieces and also understanding where your audience are coming from. Some people may be more comfortable with numbers, for example, where you can draw upon that expertise and build on it as you're explaining concepts. Other people may be more interested in the impact side of things. Knowing where your partner is coming from and doing your homework, I think it helps a lot because different audiences, even within the same organization, can benefit from using slightly different language.

APPELT: Yeah, so it kind of reminds me of this idea that we have to be using BI, not in just our projects, but how we communicate. We need to communicate simply. We need to use examples. We need to tailor things to the audience. Sometimes that's hard to do because we're you know, we're all so in our own mindset, it's hard to do that perspective taking. But like you said, it's so valuable and it really does help get everyone calibrated

SOLIMAN: Totally.

APPELT: I'm wondering, I've definitely seen over the last few years that there's been an increase in the number of BI roles or roles that have BI type terms as keywords. Is that something you've seen as well? Are you seeing an increasing number of BI roles?

SOLIMAN: For sure. More and more departments in government now, compared to when it first started, are using behavioural insights. More and more departments have their own units. But even within the same department, you can see different pockets in the organization that use behavioural science expertise in different ways. It's certainly grown so much over the past five years or so.

APPELT: I'm wondering, because this is an area where I think we as a field maybe aren't using BI as best we could on ourselves, is that a lot of the roles don't necessarily have BI in the job title or in the description. Or even in the field, sometimes it's called applied behavioural science, sometimes it's called behavioural insights. It can be called different things. So how do you go about finding roles that would be appropriate? Do you have strategies you use to kind of fill in those blanks or connect the dots?

SOLIMAN: That's a great question. This really is a challenge that different terms are used, sometimes it's behavioural insights, sometimes it's behavioural science. Experimentation is sometimes used more broadly to refer to positions where behavioural insights experimentation is what's really needed, right? So that's another term to use. But also, within certain pockets of the organization that try to use user-centered approaches in general or client-centred approaches, you may see under this umbrella an interest in behavioural science and behavioural insights.

So, like I said, my previous position was embedded in client experience branch in a department. And under that, there was user experience and use of human-centred design, but also interest in behavioural insights and experimentation. So, with government position in general, I would recommend looking at the types of experiences that are needed for each and many research positions do have that user-centred or client-centred angle to them. And, yeah, like you said, it's not easy because not every position would say behavioural science

or behavioural insights, but most of the challenges that we deal with in government have a human component to them. A lot of the research can make use of this angle.

Even general researcher positions, I would encourage people who are interested in behavioural insights research to apply to general research positions within government, because especially in areas where there's a strong human component, and departments that deal directly with clients, offer benefits directly to clients or supports, or manage client applications directly. Because all of that has a human component to its applied research. I would encourage people to apply to different roles that are interesting and challenges that have a human component where they can integrate their experience in interesting ways.

APPELT: Yeah, that resonates with me as well. Just thinking about the various titles that have been effects to some of my own on jobs or the teams that I've worked with, there is just such a huge variety. But I like what you said about that even if it doesn't mention BI, if it's a research-oriented role or user-oriented role, consumer-oriented role, there's going to be BI involved. Even potentially, that might not be on the hirer's mind, but in reality, that's part of what's going to be required and potentially can be built even more into the role over time.

I just had one other question, which I didn't have in the prenup, so feel free to bat this one aside. But I really loved what you brought up about your new role and how you are moving to this idea of using BI prospectively, proactively at the beginning. I was wondering just if you can tell us a little bit more about that, because I think throughout the program, we've more often been focused on having to use BI on something that's already built. Are there any examples you can give or any tips or tricks or challenges, anything about that experience of being involved in the front end?

SOLIMAN: Still very new in the current role and in the current project. But I can speak to some of my earlier projects that have included that. So personally, I find there are lots of opportunities when working with human-centered design projects for example, embedding a behavioural science component in them.

I mentioned the Canada Learning Bond project, part of that was embedding behavioural science in a human-centred design framework. Kind of working on exploratory research and bringing the behavioural science lens to the analysis. And being in that exploratory space, the challenge with that sometimes is that you may not be designing interventions right away, but it does open lots of opportunities, as you understand the problems space to identify intervention points and be able to design around those. It's a different model of working. It's very multidisciplinary.

But it is an area where I see lots of opportunity in integrating these approaches and in working with people who have the experience in design, working collaboratively together to kind of bring that behavioural science knowledge to the analysis, but also leverage the openness and the opportunity to do exploratory work with people directly. So, this is one model that I've again, like tested out in some projects early on. And I'm now doing more and more of this type of work. But it is very multidisciplinary in nature, and every project looks very, very different. And it's not just the typical, not just going through a linear, typical process of designing trials, but rather diverging at one point and being open to possibilities and then narrowing down on specific intervention points later in the process. I hope that answers your question.

APPELT: Yeah, no, I think it does, and I think it's just interesting to hear, for the students to be exposed to this other way of working that I think we've alluded to, but we haven't spent as much time on, so thank you. And so just our last question. Do you have a message or any advice or tips for our BI practitioners in training?

SOLIMAN: I think the message that I want to share is that it's a very exciting time to be working on behavioural insights and behavioural science. There's so much opportunity out there. Try and explore different things and be open to different possibilities. Most of government challenges, whether it's service delivery, policy, program challenges, they all have a human component. And so having more and more people with this expertise can help us design better programs, better services, and really achieve the goals of our organizations better.

So, there's so much opportunity. I can't highlight that enough. And I really hope we can move BI from just addressing problems after the fact as being a Band-Aid, to really thinking through every program and every policy that we do from this lens, early on. This is an area where I wish to see us all headed.

APPELT: I think that is a fantastic note to end on, and I totally underscore everything you said that I think it's just an exciting time to be in the area and you're really getting in, you know, either at the ground floor or maybe the first level. You know, we've made some progress, but the field is still growing, and the field still has so many contributions to give. I think that's a great message.

it was really lovely to chat. I'm so thrilled that I got to get to know you a little bit more, and hear about some of our common experiences and hear about the neat projects you've gotten to work on, and the projects you're undertaking now, which also sounds just so rewarding. And I think our listeners will have a lot of takeaways about working in the BI space in different ways. Thank you for joining us today.

SOLIMAN: Thank you so much for having me.

APPELT: And thanks to our listeners for joining another episode of Calling DIBS.