## Building Data Literacy in Your Business Ecosystem

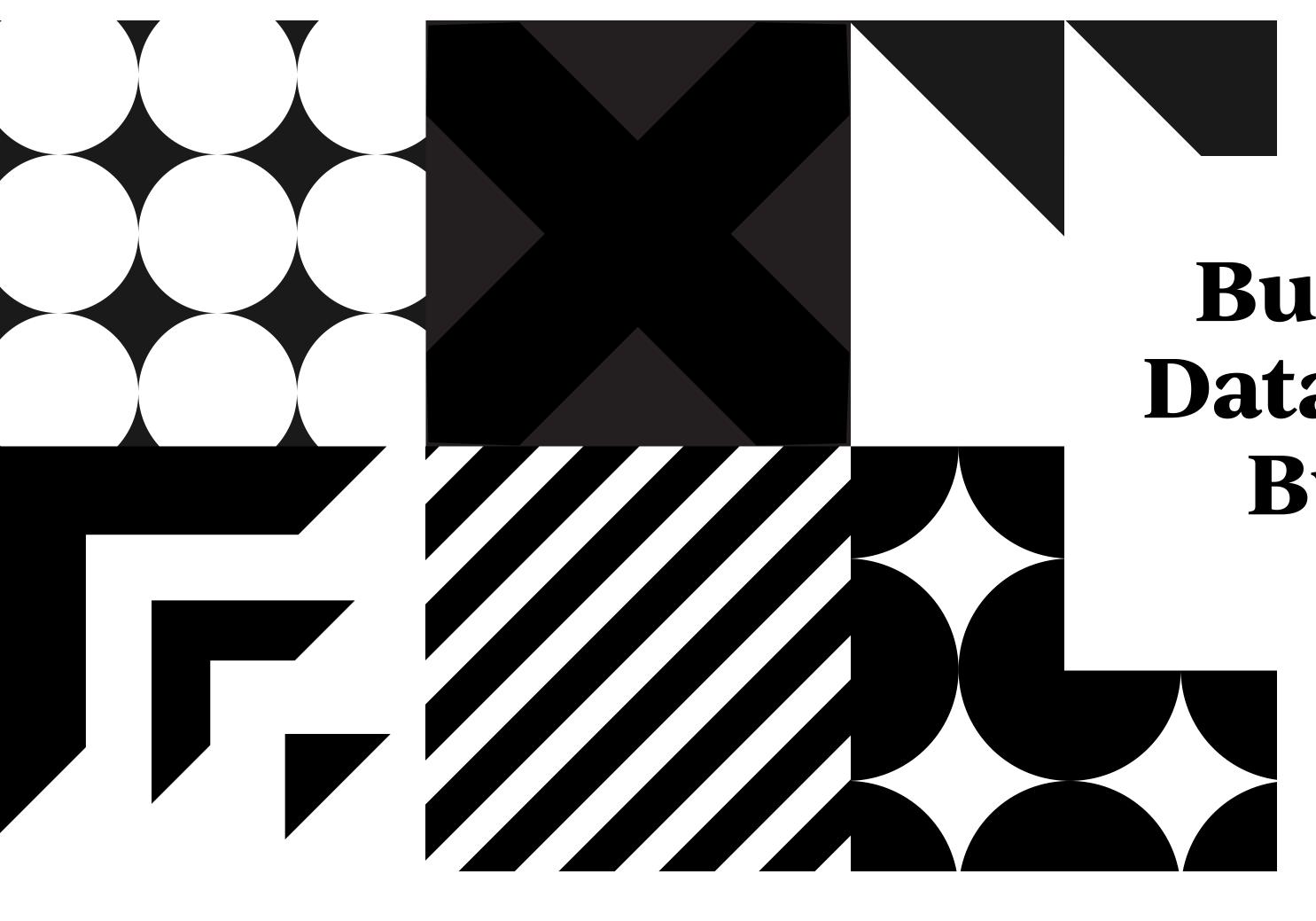
**Community Roundtable** 

Data Leadership Collaborative

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Building Data Literacy in Your Business Ecosystem

Data literacy topics get ample attention in our 24/7 world, but what role could data literacy have in building a stronger client and partner ecosystem? In this discussion, four data leaders share their experiences helping colleagues explore, understand, and communicate with data, and consider the role that technology can play in accelerating data literacy and building data and market leadership.

## Panelist Profiles



**Ben Jones** CEO, Data Literacy, LLC



**Heidi Lanford** CDO, Fitch Ratings



Suki Panesar

Deputy Director

Strategy and Development

(Data and Analytics), NHS



Josh Tapley
Senior Director,
Data Visualization, Comcast



## What Is Data Literacy?

Data Leadership Collaborative (DLC): Before diving into topics about the role data literacy plays, it would be interesting to start with first principles. Ben, since teaching data literacy is your nine-to-five career, how do you define it, given the increasing need for people to know how to read, interpret, and even shape data? And is "literacy" even the right term?

**Ben Jones** Data literacy encompasses a wide variety of skills, but ultimately it's the ability to read and understand data, and also create and communicate it. So there's a receiving end and there's also a delivering end. A transmission, if you will.

Is it the right term? There is a lot of conversation about that lately, but I do like the term data literacy. I like that it talks about this idea that I need to be able to take in information, and that's really such a core part of what we do when we interact with data. It's also really approachable for people who are data-phobic. There are so many people who are feeling left behind by the data revolution happening all around us. So literacy is a good starting point and a welcoming phrase.

## DLC: And part of the reason you like "literacy" is because no one is completely data illiterate?

Ben Jones That's right. There's no such thing. We all have some innate ability to understand what's in front



### 01. What Is Data Literacy? (cont'd)

of us. If we show someone a chart, there are things that they notice and look at. Their brain works in certain ways from the get-go. I also like data literacy because it borrows some of the notion of the literacy push over our lifetime to help people around the world read language and books. Data literacy does bring the focus into view.

Heidi Lanford I love the language analogy we've been using for data literacy. There's conversational French, there's fluent French, there's "I dream in French." And being data literate doesn't mean you have to be fluent. So I don't think we should try to invent another term for it. And besides, it's really taken off. It's a globally recognized initiative now, and the fact that it's got that prominence is a great thing for those of us in the data profession.

## DLC: Heidi, you're a chief data officer. How do you think about your role in driving data literacy through your organization?

Heidi Lanford I see the chief data officer as a great resource to champion a data literacy program. If you think about the remit of a CDO, we're responsible for the data assets of an organization. To me, data literacy enables adoption of the data assets and furthers data-driven decision making. You want to ensure that data is being used fully to make decisions and change behavior. Data literacy almost completes the responsibilities of a CDO. Delivering high-quality data and making it as accessible as possible is just one step. But to me, data literacy is about ensuring that consumers of data are super confident and comfortable with the data that they're using so that they can actually make a decision or change how they do their day job with data and information.

## DLC: What about you, Josh, from the large corporate perspective?

**Josh Tapley** I feel data literacy is understandable and approachable. It's something that we can think about addressing, growing, and increasing. We're a technology company, and lots and lots of people are using data. However, there are varying ways to use data, and if they're done incorrectly, they can be misleading and confusing.

Across the organization, I think we're still very much in a spreadsheet world. Granted, it's great that we're that far, but at the same time, I know there are faster and more elegant ways for us to be consuming information. And then the question is, how do you get everybody on the same page when

we're crossing generations in the workplace that have different approaches on how to use this information? People also learn and consume information differently. So it's probably not a one-size-fits-all solution. I would say everybody in my organization sees the value of data, but whether or not everybody's using it every day to their fullest extent is probably a different question.

DLC: Ben, that triggers a question. Do you have corporate or other clients that are actually initiating cross-organizational data literacy efforts? Or is it more small groups, departments in pockets, or just individuals that you're dealing with?

Ben Jones There are definitely massive companies and government agencies that are doing this across the entire organization, coming up with roadmaps and personas at multiple levels, but smaller groups and individuals are doing this as well. Typically, we see a combined approach, where there is a subset of people who need a different level of resource than others. Some are looking for ways to find a game plan, and others are pretty well along the way. So, as Josh mentioned, data literacy is not a one-size-fits-all approach. It's about training and also about looking at your processes and your tools and even your culture to find out how you can change to promote the use of data.

DLC: When you alluded to people who've struggled with data literacy for decades, the assumption is that you've dealt with pretty senior executives who feel uncomfortable coming forward and saying, "Look, I can't read data. I don't really get it."

Ben Jones Absolutely. So one thing we're doing with them right now is trying to help them understand the current state of their teams and what they as leaders can do to help shift things in the right direction. We usually do that through a team-based self-assessment called the data literacy score. But I think you're right. An actual program is needed for executives, and that is in our pipeline of things to develop in the coming year.

I love the language analogy that we've been using for data literacy. There's conversational French, there's fluent French, there's "I dream in French." And being data literate doesn't mean you have to be fluent.

- Heidi Lanford, Fitch Ratings



# Bringing Data Literacy to Life

DLC: Suki, now that you've got an extended team of 540 people fanned out across the NHS, what are some signs you've seen that data isn't understood consistently in your organization, and how are you trying to evangelize about its importance?

**Suki Panesar** We have some very senior policymakers who rely on data to make their decisions. But they basically understand that as, "Here's a report, here are some numbers, and this is how you churn out national policy." What we found during the pandemic is that this is probably the most immature way of thinking about data and analytics. To get them to think about tools and platforms, we're trying to move away from Excel, avoid copy/paste from our various platforms into a PowerPoint deck, and actually get some of our senior execs used to interrogating, self-serving, and playing with the data. We want them to speak the language of data and analytics.

In terms of how we know data literacy initiatives are working in our business at the moment, what we've decided for the next 12 to 18 months is that we're going to fire a whole load of multimodal strategies. The first bit is going to be, how do we level up our existing data and analytical workforce? How do we level up our customers? And then there are some people who don't need leveling up and clearly are more in the data science realm, so how do we add more oomph behind them through things such as improving our processes or improving the technologies that we give them? And then I think the most important thing has been a realization that, actually in the NHS, we didn't have a CXO member who's responsible for data and analytics until very recently. We need more CXOs in data and analytics across health and care organisations.

## 02. Bringing Data Literacy to Life (cont'd)

Today, we're actually getting rid of our old ways of accessing data and creating trusted national repositories where we can get academics and organizations coming to play using synthetic data. We're creating virtual environments. We think if we try to do more of that in the new world order, as I describe it, eventually the old might just disappear.

## DLC: Heidi, is part of your message to the organization that data literacy is a vital lever in building influence with customers and partners, since Fitch Ratings is essentially selling data?

Heidi Lanford Yes. I think it enhances almost everything we do. If you think about a salesperson in our industry or any industry, if they're armed with more data, they can have a much better, more influential conversation with a customer or prospect. On the support side, if you have the right data that you understand, you know how to service and support your customers better. If you're on the product development side and you have access to insightful data about which features or functionality of your product are more problematic, generate more tickets, etcetera, it helps influence your product roadmap. All of these things, I think, are essential to empowering individuals in every realm.

That's what data literacy is about—training people just enough so that they know to ask the right questions and have confidence about the kinds of decisions they are able to make with the data and information that they have.

## DLC: Josh, you're in a pretty competitive industry. How are you using data to build influence and build competitive advantage with customers and partners?

**Josh Tapley** Bringing alignment across the organization on standardized metrics and goals will allow everyone to use data for a consistent and common goal. Unfortunately, it is hard to get all of your data clean and organized when data volumes are growing so quickly. Once we get the basics nailed down, advanced modeling and augmented intelligence are the keys to building a competitive advantage.

DLC: Switching gears to partners and customers, Suki, obviously you have lots of end users and recipients of your data-providers, patients, policymakers, and so on. To what extent is your outreach also to help make those recipients of data more literate in ways that you hope will create higher-quality care and lower costs?

**Suki Panesar** We want to attack both the demand side and the supply side in equal measure. So, for our customers, we're going to be launching immersive, multi-modal learning. We'll be providing this with some of our other government colleagues because people feel comforted when they're with their colleagues and they can learn in a safe space.

And then the thing we're trying to do for everyone across the board, be it our analysts or be it the non-analysts, will be in crowdsourcing what we call the Analytics Learning Exchange. There probably are about 4,000 different mini-courses out there, essentially creating a Yellow Pages for everyone. Because one of the problems we have in our organization is nobody quite knows where to begin when it comes to learning. And the first thing you do normally is look for a vendor and what courses they're offering, and you might not recognize the plurality that is available for you.





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We're creating virtual environments to unleash the power of data and analytics in a safe and ethical manner.

Suki Panesar, NHS



# How Data Governance Supports Data Literacy

DLC: Ben, since you are the only one on this panel who is at the partner level, actually working with organizations and going into organizations, how do you think about the role of data governance and data literacy?

Ben Jones To me, it's critical. We can hire the best people who know how to use all the most sophisticated tools and read all the fanciest possible charts that could be created. But if they're doing that on top of flawed data, or if they can't get access to that data at all, or, even worse, if there are security or even ethical concerns about that data, then maybe what will happen is more harm than good.

So data governance, data quality, and data ethics are bedrocks. We want to have those pieces in place. And when we work with organizations to assess their level of data literacy, those are topics we cover, and we try to uncover issues there with them as we go through the process to recommend that they make improvements where it seems that there are dire needs. If all we do is train people on how to use data, but we give them bad data, then it's garbage in, garbage out.

**Heidi Lanford** I think it's helping actually to raise the prominence and expectations of what data governance can do for an organization. So like you were saying, Ben, you have to have it, but now those tools have got to be user-friendly and accessible not just to the IT and data science organization. If you're going to have the average Joe out there who's looking at a dashboard maybe once a week, he or she should have access to some of those metadata products. It's important to both raise the profile and also put more pressure on data governance to be more relevant to a wider population.

## 03. How Data Governance Supports Data Literacy (cont'd)

Ben Jones Data governance is a fairly comprehensive topic, but it can almost feel overwhelming for some organizations because the data is pretty flawed. That's why it's important to establish trust within the employees themselves. You want them to trust the data. You want them to feel like they have access to it. When we talk to them, they're lost right now. They feel like data is a labyrinth and they can't find their way through it. They don't know where to go to access the data. They lose the access. And of course, access is competing with a separate priority, which is that you only want individuals accessing data that's applicable to them, that they have clearance to, for privacy and security reasons. So there are competing priorities.

It's a balance, and some people make it look easy, and the rest of us know it's not, so we'll fall over pretty quickly.

## DLC: How have you seen different organizations try to manage this balance?

Ben Jones We see companies locking everything down, which leads to a lot of frustrated employees and talented people who walk away. We've also seen over the past decade or so organizations opening up the vaults probably too much, to the point where data is floating around and getting into the hands of people who probably shouldn't have it. Customers or stakeholders are being compromised because of that. So it is not an easy feat, and I don't think we speak of it as such, but it is a necessary set of disciplines to focus on and tackle in order for data literacy initiatives to be helpful as opposed to harmful.

DLC: Heidi, you recently launched a data governance working group at Fitch. How have you been able to connect its importance to themes of increasing data literacy, increasing market competitiveness, and so on?

**Heidi Lanford** Probably three months into our council starting, we had done a hundred interviews on pain points around the organization, and we identified a lot of the dynamics Ben was just talking about:

struggles with accessibility, with quality, etcetera. So we categorized all of this information, and then on the fly we asked the council members to vote on the top three domains that we were going to focus on this year.

It was so interesting. People were initially saying, "Well we did all this detailed work, thank you." But then they wanted to go see all the detailed work because there was this incredible sense of, "I'm really deciding what this organization is going to be focusing on and where we're going to see measured improvements in quality." That was like a precursor to data ownership, which we just rolled out this past month.

So the biggest transformation has been in recognition of the amount of responsibility that these council members have. And the next phase is going to be working on how we communicate what they're deciding on behalf of the organizations that they're representing. We actually just hired a communications person to help us support the messaging coming out of data governance council meetings and some other things, so we can ensure that the information goes back out into the organization.

**Suki Panesar** Data governance is a very important one. I think of it as the other side of the coin to data literacy. I think where we're trying to get to is how do we make it dynamic and enabling? Because one of the problems we have in an organization that is not data and analytically mature, as much as it needs to be, is folk tend to hold on to data. They don't want to share it, under this myth that if I own the data, I'm very powerful in the organization. And then you get down all sorts of strange rabbit holes. Like if you share the data while the patient hasn't agreed to it.

And then we have some very archaic processes to deal with. The stance we've taken there is, yes, we will chip away and try to refine or tweak those processes. But we can't wait so long for those processes to be sorted out. So can we be a bit more creative, thinking about the use of alternative sources of data, such as synthetic data, or do we create more sandboxes where we can allow some of our innovative companies outside the NHS to come work with us?



# They feel like data is a labyrinth and they can't find their way through it.

- Ben Jones, Data Literacy



# Technologies and Strategies to Accelerate Data Literacy

DLC: Josh, in a tech-forward organization like Comcast, have you seen technology starting to step up and accelerate data literacy since a lot of organizations are just behind on it?

**Josh Tapley** It's an interesting and complicated scenario, right? We're also an organization that's been around for a while. So we have legacy processes, complex data, and institutional knowledge that make data literacy more complicated.

There are lots of great tools and technologies there, but it takes a while for these things to mature. And if you start the project today to document all your data governance, I think everybody's always concerned too, what will these tools look like a year from now? Will they solve that? The hope is that there's always a silver bullet and there never is. It's just a lot of time and a lot of hard work. With technology tools, it gets tricky to know what the right answer is and what will be different tomorrow. And at some point, we probably just need to get started and really put a full effort in, even if we know we may never be 100% successful because it's always evolving so fast.

DLC: Ben, what have you seen in terms of new ways and approaches to measure and accelerate data literacy in organizations? And what are some of the best practices that can help people not only start to become data literate but also start to make that connection to the fact that this actually can have some bottom-line impact or propel the organization forward?

### 04. Technologies and Strategies to Accelerate Data Literacy (cont'd)

Ben Jones I think that there are a few things that they can do. One is to assign an owner. It's a culture change initiative that needs to take place. So someone's got to really spearhead that. That's a simple first step. Oftentimes those owners need to come up with a playbook. They need to come up with a roadmap for them to implement a series of changes, not just one change to technology, not just one change to data quality. It has to really incorporate a variety of those different aspects of what it means for an organization to make effective use of data.

Ultimately, there needs to be some training, although it is not all about training. Suki mentioned a Yellow Pages approach where people have access to a wide variety of resources. I think there are some great programs out there to help cover common topics. Ultimately, an organization needs to develop some of their own training on their own systems about their own data and their own metrics and dashboards.

## DLC: But you've got to know where you're starting from, right?

Ben Jones You do. What's your baseline? How do you measure where you are today? Those are common questions that arise, and they're not easy ones to answer. We can think of measuring data literacy along a few different lines, none of which is perfect. We could look at a measure of activity, like utilization of dashboards or something like that, as a very simplistic measure that tells you how much people are using data, but it doesn't really tell you how well they're using it. That would be akin to measuring how fast a basketball player runs. Even if they can speed down the court, they also can miss the layup. Still, I do think that there's some usefulness in measuring activity levels.

Another lens is to gauge the pulse. What do people think? How do people feel? Is data working for them? Do they feel frustrated? What are their pain points? You're getting a subjective take on what people think about where they are today. That's what we do with our data literacy score, which is one way of measuring people's perspective about data and how well it's working today.

Ultimately, the third metric is performance. And that, to me, is coming down to the organization's ultimate objectives, not related to data, but related to the organization and then assessing how well data is helping them achieve those specific goals. Is it customer adoption? Is it market share? Is it profitability? Let's look at those core metrics and have the data literacy piece simply be one way that we are investing in achieving those overall metrics, those overall goals of the organization.

Sometimes just the metric itself can help shine the spotlight and focus the organization's attention on this topic. What we should be thinking about when we start these initiatives is, how do we get to the place where they're no longer needed as soon as possible?

DLC: That's a great way to frame it. Heidi, having been in your organization for about a year now, how much more explicit did you have to make the ties between data literacy and some of those points that Ben was just talking about, like new customer acquisition, customer retention and loyalty, Net Promoter Score, and so on?

Heidi Lanford Communicating and messaging out these successes is critical. They could come from the marketing organization; it could come from the HR team. For example, "Joe Smith" recognized that attrition was significantly higher in this particular area, so he developed an employee retention program, and he can highlight what data was used to inform that program. And then you start to pull all these pieces together about how the organization can just be humming along when we make more data-informed decisions.





There are lots of great tools and technologies there, but it takes a while for these things to mature. And if you start the project today to document all your data governance, I think everybody's always concerned too, what will these tools look like a year from now?

Josh Tapley, Comcast



## The Road Forward

## DLC: Suki, before we close, it would be interesting to hear how you measure success linked to higher data literacy: Is it through higher patient satisfaction?

**Suki Panesar** We have metrics that assess patient satisfaction, such as patient-reported outcome measures or the friends and family test, which is close to the Net Promoter Score. But I think back to the point that the panel raised, which is that we probably need to find more outcome metrics that directly tie to the value of data and analytics.

Heidi Lanford I'd like to ask my fellow panelists how successful they've been in the training aspect of data literacy. And I don't want to presume that data literacy is just a training program. It's much more than that, so I wonder if you've developed course content or tied data literacy to be part of employees' annual development plans. I see that as a great way to really solidify the significance of data literacy as a core competency and skill that we're expecting employees, associates, etcetera, to have, and also partnership with maybe an internal training or learning and development team. But also then getting managers to say, "Let's include some data literacy coursework as part of your learning and development. It might be as simple as, 'I expect you to show up with a statistic in your area every Monday for our staff meeting.' And tell me how you're going to use that to change whatever you're doing: marketing plans, demand gen, recruiting efforts, etcetera.

**Suki Panesar** Those metrics are pervasive in everything we do, but it really feels like the focus is around leveling up the data science academy versus the baseline data literacy. And I think it goes a lot back to your



### 05. The Road Forward

points about clustering sample sizes, AI, complicated mathematics, and so forth. And it seems like that's more exclusive but more focused. We want to entice people to get to that next level. And I think that we're not focused enough on the baseline skill, truthfully.

Ben Jones I knew if I focused on buzzworthy topics like ML and AI in my new business, we'd probably sell better. But we said, "No, we're going to start by laying a firm foundation." So what is data? How does it apply to me? How do I read charts and graphs? Can I use some of my own and bring them to the table and read them and interpret them, have conversations with my colleagues about them? How do I understand the difference between one kind of variable and another in these tables that I'm being asked to read and understand? Those foundational, fundamental programs haven't really been out there. In a lot of ways, that's going back and doing what maybe our formal education should have done.

Ultimately, I think the question is just how do we close the gap? And the gap right now has been beautifully defined by Heidi: People do not feel confident and comfortable. Okay, how do we start to build that confidence? How do we start to help them understand that actually I do work with data? So there are some great programs, but I also love the suggestion of "Let's not just talk about 'Did you get the badge or the certificate?'" Let's talk about examples, let's share success stories, let's shine the spotlight on cases where people found an example of the dataset or even justa metric. Something they can use to think about their roles differently.

DLC: That's a great note to end on, Ben. Thank you to everyone for joining. And here's to feeling more confident and comfortable with data.

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- Heidi Lanford, Fitch Ratings



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