Supplemental Material: Codebook

Codebook

Code	Description	Example
Compliance of model usage	Auditing, or ensuring that the development, deployment, and results of a certain system are compliant with a particular set of standards (whether they are legal, ethical, safety, or other). Individuals or groups within an organization may also have their own internal standards they want to ensure are met.	PID07: No, we couldn't because the way that we work, unfortunately, is that **you can only access the production data when you're in production. You can't access it before**, which means that you can't really see the true performance of your models or anything, really... Until after you go live. So it's, **it's a risk inherent in the way that we work,** unfortunately. It's just a. **It's a policy that we have in our company**. So **when you're building any kind of analytics**... Platform, or anything ,you **can't access production data unless you pay extra for it**, which. I don't know if it's worth doing it that way, so you don't really get an idea of how your... Design performs. Until much later.
Understanding the model	Developing a general understanding of a model, whether over time through exposure or through direct question answering provided by the data scientist.	PID09: Uh, and somewhere that I know that if I want to understand a little bit more about **how the model was built**. But I could quickly click in the same place, so at the top right corner, every time or wherever that place is, if I quickly want to refresh or see that information, but also that it's not, you know, overwhelming taking over, you know the visuals either so you know it's it's a standard place to go to get the information if I want. If I don't want it, it's not in my way.
Building trust in the model	Requesting or giving more information in order to accept new technologies or the results of a predictive model.	PID09: Might get a little bit more buy in and you know whatever this end, whatever this platform or you know the end. If I'm indeed the end user. And yeah, I think I **probably would have more trust in something I've I've had a chance to play with a little bit**.
Understanding what the output means	At a high level, understanding the context for what is produced or predicted by the model. This may be a semantic explanation of what the output is and how it is represented. This code should not be used for technicalities of the model, or what types of actions or decisions can be made based on the output of the model.	PID07: Yeah, I think I mean, it wouldn't be the model itself, **it would be whatever outputs we would be expected to use in the project**, or as a part of the project so, it would be sort of walking in the steps of the user. So the person who was going to receive this output and be told to **make a decision based on this information**. What kind of **steps would we be guiding them to take based on the outputs of the model**? I mean not the actual, sort of code of the model itself, but **if it gives me a number, what do I do with that number**? There is a process that needs to come around it. **OK, this means, you know, the water is not drinkable. This means that the water is drinkable. This, these are the things that you need to do.**
Debug a model	The objective of correcting a model's mistakes, often posed in terms of the needs of developers or the stakeholders who understand the consequences of the error.	PID02: Tune your model. Look at the performance for the different folds, but then you can also look at the **distribution of the errors at the model makes**, right? Because sometimes. There are, for example, many cases where the model makes small mistakes right. Talking about regression problem. Maybe there are let's say 1000 examples or projects where you know you are off just by little. But then there are **some cases where you you know are... the model gets it wrong**, right? It's it's it's i**t's. Off quite quite a bit**, so we can also **plot the distribution of errors that the model** for example makes. And then **also investigate, right? I mean what happened? Why it doesn't model have difficulty? And I mean why does it perform well on certain cases? And then why does it, you know struggle with in other cases, right? Is it may be that it's you know, a certain subpopulation.**
Improve a model	The objective of improving a model or its performance.	PID05: Right, so they should understand what is the output of the regression at the end of the day, so they can apply their business understanding because as a data scientist like for example, if I consider my case, I'm new to pharma, right? But I'm expert in regression. I'm just saying that so you know, maybe I don't know. I based on my I can run the mathematical model and based on the model I'm getting getting ABC variable is significant, but as a business user. He can say me OK, you're not considering D. Maybe it is not significant mathematically, but **D can bring lots of business value** so that kind of communication I want should happen between these stakeholders and data scientists where they can add their experience. Their point of view to improvise the process and at the end they should definitely share their feedback. Like you know, this is the part A. **How can we improvise it further in the next run**?
Justify actions influenced by output	Desire to justify decisions or actions that are influenced by a model's output to end-users or colleagues of the end-user.	PID05: Yeah I want to add one more point. I I also want to have a slide of the **next steps** like once the you have shown me the results. I know what should be this step for me, but **how can we take the engagement further**? Because that is very important **when we're presenting any kind of regression or you know any analysis to the user.**
Insights from predictions	Gaining insights about a particular subject or domain by reviewing the model's predictions. This may be to better understand future predictions in a given domain, or general scientific discovery.	PID01: Uh, this, so, sorry. The sort of... when we added when we added another dimension, **we saw that arousal was also important in all of the data sets, but not reddit.** I could be wrong, but so because, yeah, so we really basically we try to add another dimension, just to see, because there was another also like related hypothesis, and **we also observed that it was the only data set, reddit,** that did not have the same the same dimensions, like the one that we were explaining this likes, dislikes. And maybe if I remember it. It was used as kind of a way to explain that there is really the difference between the datasets. Uh, that that's causing this. So that the model is not performing as we want it, or it's not explaining the hypothesis we had. And yeah, I believe that, I yeah, I think that was it.
Output to actions	Need for guidance on whether and how to incorporate model predictions into further actions — whether that involves relating the model's output to relevant and actionable decisions, or understanding how much weight to place on the model's prediction.	PID07: You know, is it as simple as whatever [the] number it is: The higher the number, the more... Toxic the water is, or the more potable the water is. Is it that easy to interpret? Are there questions that come up? Are there borderline results that come up? **So all those practical... practicalities, and elements of how to translate... The regression model into actions, and into process**, would be what I would be wanting to gain from this sort of interactive experience.

Real life examples	Real life scenarios, applications, or use cases of a model that illustrate how it can solve a real-world problem on real-world data. Inclusion criteria: any reference to a use case or example of the outputs for the model.	PID06: Yes, so for for the example that **we have chosen the underreporting**. So underreporting is very critical for clinical trials because it is a safety information and the safety information needs to be notified from the science to the teams to the company within 24 hours, and then it when then we have some regulatory obligations to make sure that report is processed in a database and submitted to the regulatory authorities within a defined timelines. And if we do not meet those timelines, our compliance gets hit and if our compliances. Uh, are severely low then that will invite audits, inspections from the health authorities and then that will impose as the fines. And also there is a risk to the patient safety because we have not addressed a safety issue which has come up on time and that may have an impact on changing the safety profile of the drug. So it has. It has quite an impact.
Contesting model outputs	Having the ability to (or understanding the inability to) push back against model outputs that seem incorrect, arbitrary, or unfair.	PID06: This is where we take into the consideration of few specific data points. For example, for a particular study, you want to identify underreporting. We look at the patient information, so how many patients or subjects have been enrolled in a particular study? So if there are patients who are currently under treatment, there are around 1000 and we do not have any adverse event reported, then it is a sure shot confirmation that yes, there is some underreporting issue and we have to investigate and see why is that. There is no any adverse event because at this **unlikely to have zero reports from that particular study with you know, hundreds of patients under treatment**. Then the other scenario is to check whether the reporting is happening as expected, meaning you have thousands of patients under treatment, but you have received only like 2 adverse events, which is again not expected you can. Uh, it's it's very less to have only two adverse events for study of 100 patients who are currently under treatment in that scenario, **that is where we try to define certain rules**. For example, **if there are hundred patients, maybe you should have at least like 30 or 40 adverse events coming up**. So based on the duration of the study, trying to add the timeline as well so at least 30 to 40 and **if it is lower than 30 or lower than 20 for example, then that is an alert to actually trigger an investigation**. So you try to **bank on these specific data points to define certain thresholds and then check and this is not again one time activity and these thresholds are not written in stone**.
Reliability of the model	Understanding the reliability of a given prediction, typically in the context of the wider objective for the model. Statements made about a model being reproducable, in the sense that the output or performance is consistent, are included in this code. Note that references made to a model being able to be re-used or re-purposed should be labeled with "Reproducibility"	PID06: So I think the the main objectives is going to be very much defined because we know what are the variables. For example, just what are the variables? What does that exactly we're looking at? I think those are the ones that thresholds we. We can be very much clear about. But once we start using the the model and when we see the results, that is when we will get to know more about the need for changing any of these variables or and **their reliability based on the validation**. Right? I, I think that is where we, uh, you know there will be an option to keep changing our approach in in making the model better.
Reproducibility / Reusability of a model	The ability for a regression model to be reused or slightly refactored for another problem, or on different data. Note that this does NOT include the reliability or consistency of the model (reliability of the model). [Note: maybe this should be "Generalizability" of a model to prevent misuse with "Reliability"]	PID03: Does a. 2 scenarios, one is where I want to just directly use a model. Pre-trained and "as is" and not make any adjustments versus. Something that is more like it's an architecture or a you know. Or an algorithm and. And these are the. Base results, but that you would be taking it and then doing **additional training** or. Or something like that, so I guess it depends on which if it's that I'm going to use it directly, then I'm gonna then I'm using it to. I'd be using the metrics to determine. Uh, if it looks like it's good enough, you know. If I feel confident or **comfortable using it. For other purposes**. Uh as is and then if if it's for something that I might want to **train further,** then I would want to see. Metrics from like multiple different kinds of. Applications of it too and see how **how well it does apply to different, you know trained or tuned to different. Uh. Tasks**.
Comparing the model	Given a regression model that is either under evaluation or complete, the end-user wants the model to be compared to something else: a baseline model, a perfect model, or the end-user's current practices.	PID13: Well, OK if it's a single slide then so again again the same things. I think along the same lines as I've said before, uh, the the difference between the scores and predicted scores and the ground truth. So to see some kind of single measure of that. And whatever different measures can be kind of formulated in terms of what makes sense. So for example, R square is one thing, or then you have things like model evidencing that how strong the model. Uh, has evidence for the data. Uh, but that again sometimes you look at it right away, so I think if it's one slide then I would see at least some absolute measure and a possibly a relative measure. Saying that i**n comparison to whatever 2-3 models or some current way of working this is this, you know, this is the kind of improvement I get, or this is some kind of delta improvement I get if I use this model versus something else**. It was the **default way of working**. So something to compare to say. You're right. Why is this model is? **Why should I look at this model**? You know? Well how does? **How do I gain? In terms of either performance or you know it may be other aspects like saving time**. For example for for a person in order to assess water quality. If there is water quality to be assist at, you know several locations and it's a very large exercise. Lot of cost involved, so **I want to see the trade offs**.
Strengths of the model	Understanding the model's overall strengths, e.g., when deciding on which model to use.	PID06: Yeah personally, yes I would be very much interested in knowing this in **depth on the strengths** and weaknesses of the model, because then I can correlate with my business need as well to see **where the model is strong** and what are the areas that model based on the weaknesses. That model cannot deliver certain targets or the objectives that cannot be fulfilled. So I think this will be help me to **correlate with the business need** and try to match and check.
Weaknesses and limitations	Understanding the model's overall potential weaknesses or limitations, especially when a decision must be made around the model's predictions.	PID07: Uhm, are there any **gaps, like, or limitations to the model?** Does it... is it sensitive up to a certain point and then it kind of s**tops being a reliable prediction model**? All of these kinds of aspects would come into it.

Errors from the model (technical)	Unlike the outliers, limitations, or weaknesses of the model, this code describes implicit or explicit TECHNICAL errors of a model. This can be due to strange behavior of the model (i.e., wrong model chosen) or mistakes made by the data scientists (i.e., wrong data used).	PID05: I would say, like you know, with the 80% accuracy when it get deployed, sometimes we encounter **some issues in the model,** right? So and the second part is like you know could this issues have been better understood when the model was being assist. Then again I feel that you know when we are creating the model, the. Of, you know as a data scientist. I will try to **evaluate all the metrics related to a model**. Like you know we're talking about regression. As I mentioned. We'll check the assumption. I'll check all the technical terms related to it. But if after getting deployed there might be some variable we they start, you know, putting in the model which was not taking into consideration or you know there are **sudden outliers, which maybe we wouldn't have taken care before**. Right, so in that case, yeah, I. I mean, I would say I cannot say that this can be better understand when the model was being assessed it depends on the kind of issue you encounter, whether that that is an existing that is an issue because of the existing variables or it is because of some new changes. Or you know some additional effect.
Errors or issues with model (non-technical)	Statements made that imply there is an issue with the model, whether the model has been deployed and has run into an issue, or, ran into an issue during development. This code should be used for NON TECHNICAL issues with a model, e.g., the user interface was confusing, or the data was inaccessible. For technical issues, use the code "Errors from the model (technical)".	PID12: But then it becomes **so complex** that the end user who were should work with that **doesn't understand the tool**. But then the **tool becomes so complex** that the end user will have to spend one week before he gets the results he want. And then he he simply forget about that too. Because. And basically, what happens then? The end user and I fear that still the case the end user goes back to what he knows. And what does the end user know the best in our industry is excel.
Outliers / Anomalies	Outliers or anomalies of the model that are not a result of an error from the model but perhaps due to incomplete, misleading, or irrelevant used in training.	PID07: I think maybe. Answering questions about **anomalies** that you find and helping us to **decipher those anomalies** and how to educate others on how to **interpret those anomalies**. Yeah. If there are any, I don't know. Some models might be perfect, but if you have... S**trange things coming up in the data**, then partnering with us to **decipher those**, and to figure out w**here is the the gap**, and **how important is the gap within, or the anomaly** within, the bigger picture of the regression model as well.
Assumptions made	Any assumptions that are made surrounding the use of a regression model or its use in practice. This can include assumptions made by the audience, data scientists, or SMEs/stakeholders with regards to the data, final objective, how often the model is used, how simple or complex it is, due to missing gaps, etc.	"I would definitely want to see the assumptive values that the algorithm takes into consideration. So basically any of the gaps you know we weren't sure about this, so we kind of had an assumption, so I would want to know what all the assumptions were."
Context provided by SME	SMEs provide additional context about the data, the objective of a model, the reality of the data or the domain space. This code is specific to the SME providing context to others, e.g. data scientists, who would otherwise not know that context.	"Correct, because this [data scientist] didn't know anything about a clinical trial per se, they knew about how you know the behavior of the model, whereas for me, if I said, well, let's tweak this input here and there because I knew you know the the historicals of these, of this information that you know. Let's say I set a Max. I know that you couldn't tweak it anymore beyond this, whereas if he was in there, he could have easily just said look, I'm going to adjust these values and I don't know if this is a reality or not."
Context provided by DS	Data scientists provide additional context about the model, including technicalities surrounding data science, ML, or the data itself. This includes expected and unexpected behavior of a model. Specifically, this code should be used when a data scientist provides context to others, e.g. SMEs, who would otherwise not know that context.	PID07: Usually it was, usually it's presented, so it's presented as part of showing, sort of demonstrating **showing how the model works**. It's probably a bit of both because I think... Most people that we've had present these kinds of models will share... The r**elevant details in terms of limitations, strengths, weaknesses, features, etc**. I mean, they won't go into kind of, you know, code level detail, but t**hey provide the relevant information that allow... Someone to be able to assess**: OK, this makes sense or no, this doesn't make any sense and we shouldn't use it.
Honest or explicit communication	Statements made about building trust in the model or in a collaborative partner by receiving honest or explicit feedback. Specifically, statements encapsulated by this code MUST have references to the *communication* between parties being honest, upfront, transparent, etc. about the objectives of a model, the performance of a model, how the performance was derived, etc.	I would be very, **very surprised in a negative way if I don't see an earnest declaration of both [strengths and weaknesses].** So if it's really... If you're selling me 20 minutes presentation about strength and weakness of the model, I would expect a little bit of discussion of [...] some earnest-like weaknesses. Yeah, due to the lack of. The uh, training samples covering these corner cases. We must admit that in that particular situation the the performance of the model are weaker than on average. **I would be very surprised if I don't see that, especially if you if you sell me as a strength and weakness of the model, and then I see only strengths. That smells a bit.**
Unmet business needs or expectations	Statements made directly about not meeting the business' needs or expectations with regards to a model or its performance. This code will likely be used with "Communication barrier", however, this code is specific to a gap between reality of the ML and the expectations of the business.	PID02: But in data science, a lot of work is really exploratory, so it's not like OK now two weeks we develop the model and then the next iteration will be in four weeks. **It doesn't really work like this and I think**. T**his is often not clear to the business or to the SMEs how data scientists actually work.**
Data descriptions and details	Understanding comprehensive details of the data / features used in the training and/or setup of the model. This may include the desire to understand high level groups of features instead of individual features. (Specifically, statements that refer to *which* features are being used BEFORE THE MODEL EXISTS, and NOT the weighting of the features or pre-processing of the data - see separate codes).	PID01: I would also look at maybe the **distribution of features** and how they're distributed, [whether they are] normally distributed. Or **maybe they are skewed** because that would mean... we're talking about in depth, right? You want, I mean to know w**hether the features are normal, normally distributed**.

How features influence output	Understanding how different factors *influence* the output / predictive outcome. Unlike "Details about the data", this task may not provide a comprehensive understanding of the features used and is more focused on the ways those features influence the output. This code should not be used for *how* certain features are weighted. Instead, this code should be used when someone is understanding how the OUTPUT is affected by certain features, e.g., by giving more or less weight to a certain feature to see how the outcome is affected. ** Inclusion criteria: Used for data AFTER the model**	PID01: I'm just wondering. OK, maybe what would be helpful, you know, if we could **interactively add and remove features**. You know, if there's this, OK, that's-- OK. That's maybe something [helpful], right. Maybe I mean, if it's a linear regression with multiple dimensions, then it would help with, you know, to t**ry out [the model] with all [of the] dimensions, then maybe remove, one or maybe two [dimensions]**. Or maybe **look at the ones that are of interest**... that could help. But I have [encountered] this situations before and never had such interactive tool. But now, when I think about it, maybe it adds value.
Weighting of features	Statements made around the weight or importance of certain data / features / inputs used in the model. [Note: may need to revisit]	PID09: I think it's still some of the information I mentioned earlier, like I would want to understand the data sources over which time which attributes are being considered to build the model. The **weightings of the attributes**.
Preprocessing of data	More information was requested about the preprocessing of features that were used in training the model. This can be about the transformations of the features (e.g., if they were normalized). For information related to what features were used vs. not used, refer to the code "Details about the data", and for information related to the weighting or influence of features, use "Weighting of features".	PID01: We [would] need the software tool [as a] kind of add on for the 20 minutes, but [for the] second one, yes [it] would be great to know how [or] whether there was **any normalization**, whether the features were categorical. Maybe there was some time series data. You know, having this [water quality] example, I don't remember the features but yeah.
Data quality (source, goodness)	More information was requested about the quality of the data used for training or prediction. This includes how trustworthy the data's source is, how accessible the data is, whether the data is labeled correctly or incorrectly, or how rich/robust the dataset is. References made to data quality being poor due to limited data should use BOTH codes (data quality + data quantity). Note: This code alone is NOT the same as asking if there is "enough" or "missing" or "limited" data (data quantity).	PID06: Maybe what other must haves for predictive model that without these that the model cannot progress and there will be challenges and there is absolute absolutely no way to move forward without these and these elements and we (<gabe>: hard to hear, but probably not we.) data or the quality of the data and whether we need to correct the data. Maybe that will help us also to understand. Where do we stand in terms of the **data quality** and also where do we stand in terms of providing the right data inputs?
Data quantity (availability, completeness)	More information requested specifically about the quantity or amount (little or a lot) and availability (limited or not limited) of data needed or used for the model. This is not the same as asking about the quality or source for data values (data quality - source, goodness). Instead, this code should be used for references to the AMOUNT or availability of data in terms of its limitedness or completeness.	It was more so when you just had scarce parameters and it was very rare and it was ... **The data was very limited in what you could put in [to the model]**. So ultimately, when you had to have the system give more assumptions than you gave as inputs, that's when you really started to get a high degree of variability in the output.
Algorithm (jargon)	Statements made around requesting the name of the algorithm used (as in technical, "jargon" terms). This code should be used when participants reference high-level technical names of algorithms or techniques, *without* a reference to the explanation of the technique. E.g., "Tell me what algorithm you used." should be used with this code, while "Explain to me what the algorithm does that you used" should use the code "algorithm (explained)"	PID02: Um, yeah, maybe the the **model parameters**, I mean the **hyperparameters** maybe also for the model, right? Uhm? What else would be would be important. Maybe yeah, how it was **trained**, what kind of you know actually algorithm was used to **train it**. And then, depending on you know, maybe the the the **architecture**, how well did it **converge**. What was the **loss**, uh, how well the **loss decreased** right over over **multiple epochs of training** or seeing the data. This is always gives you kind of a feeling if. Yeah, gives you already a feeling about how much the model is able to extract, how much information models able to extract from the data. It c**onverges early**, or maybe if it's you know even worse, **training**... Some **further epochs**, right?
Algorithm (explained)	Statements made around how the model works, or why that particular model was chosen, by describing or explaining the algorithm used or referenced (not specifically in technical language or terms. For technical language references, refer to algorithm (jargon)).	PID02: Well, for example, let's say it **decision tree** right here. The question will be how does **learnt tree look like**? What, what are the **features that are most important**? Uhm, can you maybe show a r**anking of the features that have been identified**, right? Uh, to play a role and which which, **which are driving force for the predictions** it's these kind of things.
Expected behavior of a model	Statements made regarding the expected, unexpected, "realistic", or unrealistic behavior of a regression / predictive model. To be clear, this code represents any references to the behavior of the model (expected or unexpected) [Note: should probably change this to "behavior of the model"?]	Well, I mean I, I think an intro to how does that one [model] work would be helpful. So to make sure we're comparing apples to apples. [...] **So that way [I would know that] the...the behaviors [of the model] could be comparable**.
Audience-dependent	Statements made about the AUDIENCE being essential to how information is presented, structured, or communicated. In particular, the audience-dependent code should include references made to situations where the audience should be considered or factored in.	Absolutely and first and foremost, **it's also your audience, right?** The single PowerPoint executive side is going to obviously go to the executive, basically the individual who is going to sponsor this and say yes we would agree to this and here's that same thing with, you know, looking at the the strengths and weaknesses of the model. So that kind of helps, that's also, the **person or the individual who's going to support the build.**
Business (explained)	In-depth explanations of, or references to, business objectives or needs with regards to a model's use or purpose. These explanations are typically provided by SMEs or stakeholders. Inclusion criteria: (similar to algorithm (explained))	PID06: Yeah so, with the data scientists, one thing that we have done is **explain the background as to the business need in detail as to why are we looking at this.** Uh, and this business need? **What is the impact of it and what is the risk of not identifying or not getting the proper results for the business need?**

Business (jargon)	Business vocabulary, needs, and objectives using jargon typically common to SMEs or stakeholders. (Similar to algorithm (jargon)).	PID06: I think some of the **jargon that we use in business in terms of defining certain data points**. Uh, purely which are **business related**? For example, s**ite number. The site number is different in the regular explanation or the theoretical explanation of the concept, and when it comes to the data point, instead of using site number, they use a term called Center number**. So these **kind of keywords** or **different jargons in the business**. I think this is where we have to be very clear with the data science team so that they can accurately pick up the data points that we are talking about.
Metric performance (results)	Resultant performance of the model in terms of some quantitative metric - this code encapsulates references to S, R2, and other standard metrics used to represent error or goodness of fit. This code also includes references to arbitrary metrics or performance measures that are not explicitly stated.	PID02: Uhm, I believe for regression models there are couple of **metrics** that one could use. I mean, for example **mean, mean average error** or **mean squared error**. And yeah, these, these kind of measures right? Which usually give you a feeling about how close are you to the actual value.
Metric performance (technical details)	Technicalities surrounding how the metrics for a model were calculated or derived. Unlike "metric performance", this code should be used for statements that reference the need for technical details related to a derived metric score and NOT just the score itself to determine the performance of the model.	PID09: I have seen scores and recently even working with REDACTED. Yeah, I've seen. I've seen some scores and and I've also **observed others and myself wanting to know what was behind the score, how it was derived**. So I would say a great deal of skepticism around a score and less it's, and I think it's something that needs to be described or defined fairly quickly upfront.
Visualizations or charts	References made to a visualization, chart, infographic, that is related to the communication of, use, or assessment of a regression model.	Well, the person who actually would run the model was a data scientist, and so when the iterations were done, **we would actually look at the output and we would look at how well the bell, how well informed the bell curve was** and where we had sporadic outputs, we kind of knew that something wasn't right, and so therefore there was too many assumptions on the back of the model, so it was really **dependent on the output of the bell curve**.
Prefers single slide	Statement made about preferring a single slide, or executive summary, in regards to being presented information about a regression model and its performance.	PID10: I think it depends on which level you are right? That said for me from the finance point of view, I would prefer maybe this **single high level right PowerPoint slide**
Prefers 20 min pres	Statement made about preferring an in-depth, 20-minute presentation on the strengths and weaknesses of a model.	PID14: You know, I think this is a **better format**. Uh, well it depends on the complexity of the model and the data as well. So I mean, if it's, uh, I'm leaning towards the more more complex modeling scenario. You know questions might come up in terms of, you know how the data set was prepared. So for example, you know, did we look at the the covariates. **A little more in depth than like a 1 slider would let us** ask questions to the team that did the modeling.
Prefers interactive tool	Statement made about preferring some kind of interactive tool or user interface that allows for exploration or interactive assessment of a regression model. Any references to an interactive system that allows for hands-on adjustments to a model is included.	The problem was **the user interface was much easier on this home grown one only for the simple reason that we could control every aspect of it**, whereas this vendor. They built it the way they wanted and it didn't. So for me that this single slide executive summary is probably the least preferable, and then again defaulting what I said before **the interactive is probably the most preferable**.
Not using the model	Statements made that indicate the model was not used in its intended form at some point. This may refer to models that are cut, models that "die", models that are replaced, or not used in favor of another approach (whether an inferior or superior approach).	And then, as users, we didn't have to use this model at all. Sadly, you can just do your linear model where you just said OK, you know 10 sites and randomization rate of whatever and this much time to kind of plot of a linear curve.
Communication or language barrier	Statements that directly refer to barriers in language or communication between multiple entities (data scientists, SMEs, supervisors, funders, etc.)	PID03: For this I would just say you know understanding a more **nuanced definition of accuracy.** Normally people think of OK accuracy as in some simplistic sense. But really, yeah, just understanding kind of the **different ways that you can measure how good something is and then knowing some of those t**erms and and things like that, or at **least some shared understanding and language around that**.
Communication solution or recommendation	Opposite of the code "communication or language barrier". This could should represent posed solutions or recommendations that either work well or will improve communication.	PID06: What works the best **is data scientists approaching the business team** and telling us, 'this is what we are doing in our project as well.' Whenever **data scientists have any question relating to business concepts,** they immediately **approach us via email or a quick call and we're able to talk it through** and get it resolved, yeah.
NOT USED IN INTERVIEWS:		
Dependencies		
Ranges / Thresholds		
Realistic expectations		
Benefits of the model		
Data Privacy		