

## Mostafa Khosravy - 00:00

What you need to do is you need to do it by the. By the code, not by the like option on the right side. You need to draft a script. Okay, I'll work with that. Like. Yeah, a specification here. So this is at. What I'm thinking is we just need this like a denim for the hourly data set when it goes to the daily one monthly and more like less granular data. We don't have any issue just for the hourly data. It seems like we need to leverage the capability of the denf.



Abhishek Rastogi - 00:55

So here we can do also the like small multiples because of the. In the. In independent variable. Also need this work?



Mostafa Khosravy - 01:03

No. So you need to spend some times on that one. So I'm thinking that from the. If you go back to the. Go back to. To the sample you have from the existing one with the. That multiplier and like open that like a existing file.



Maya Mahesan - 01:30

Okay.



Mostafa Khosravy - 01:33

So what is important for us is see the energy. For the energy. Right. So what you're gonna. What you're gonna present is the energy without any other independent variable. So this is going to be like energy. Then when it goes to the independent variable. This is for the. For the hourly data set. Right. So we're going to show the energy consumption entire energy consumption on a 10,000 using that Tenebron the. The bottom as the filter. Also possible to have it like the same configuration. It's going to be like very similar to this one. Now you select the temperature and the PMS for example or AVI as the independent variable for the hourly data set. Right. And you're using this multiplier here to present them with hourly data set. What I'm thinking is we are going to just show one chart at the.



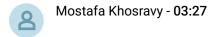
Mostafa Khosravy - 02:54

At the. At the selection of the user. Not multiple one side by side. Let's say for example I'm using independent variable temperature. It shows the temperature only Then I. I'm gonna go with the BMS1 temperature is going to be deselected and BMS1 is selected and just one chart is going to be presented here. You see my point?



Abhishek Rastogi - 03:21

Yeah, I understand. At a time we will show the one. One data one chart.



Perfect. This is just for the hourly data set. When it goes to the daily monthly and whatever granularity the same concept happened. Like there is no change the existing configuration that you have main. But this is just for the hourly which we wanted to present like more than 3,500.



Abhishek Rastogi - 03:53

Okay.



Mostafa Khosravy - 03:54

Okay. So what I'm recommending is look at those samples. There are like. I would Say a hundred samples out there. And this is very configurable. The important part is this can be. That can be presented like 10,000 data point which is sufficient for us for one year of the 8,000, something like that. We wanted to show it with that granularity. And this is going to be for the baseline and that data exploration. This is my like first priority. Have a look at that one and then if you can develop something, let's schedule another meeting and then you can discuss it. If this plan failed for some reason, let's say you have some difficulty or some. Something come up. I don't know.



Mostafa Khosravy - 05:05

I wanted to push for this one but if something happen, what I'm thinking is we need to change it to the scatter plot. When you change it to the scatter plot normally what happen is the horizontal scrolling is enabled so we are not able to see the entire. I would say the entire spectrum of the data. It's going to be like a scroll to the left based on the. Based on the duration of the data set. And that is fine. You see my point? Are you following me? Right? So this is plan B. If for some reason that the net isn't working, we're gonna go with this like a scatter plot which is like the only option for us. But I'm thinking Abhishek you should, you're very smart.



Mostafa Khosravy - 06:08

I'm thinking that dene bond you can use it for this like a pitfall and resolve the issue.



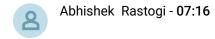
Abhishek Rastogi - 06:19

Actually one more thing. Actually I also today one. One more thing. So maybe I need to some highlight that point. So actually we can also try with the R language. Actually that is the one method to create the visual.



Mostafa Khosravy - 06:38

Yeah, I, I look at that one as well. R + Python. So both of them are recommended as the last resource. I'm thinking if we go with plan B and for some reason plan B like that a scatter is kind of. Is a no go that are like a script as resource for us. Like my hesitation to go with R is we lose that like a selection filter and everything. It looks like the static chart.



No, no, actually I tried.



Mostafa Khosravy - 07:20

Oh, you can filter it?



Abhishek Rastogi - 07:22

Yeah, actually just to give me one second. Actually I tried but here many things I need to explore because of the. For the tooltips or everything we need to like. Like we need to write a code for that one. We don't have anything in the visuals for the like inbuilt feature to add them. So for example I created this one. So suppose for an example this is the Whatever we have a line graph if I am selecting the filter so it will be working according to them like I am disabling the Just one second. Firstly I have disabled this one.



Mostafa Khosravy - 08:10

So.



Abhishek Rastogi - 08:11

I don't need grab okay, this I don't need so suppose this is something related Looks like what we have in the energy okay, so we have a three in the five 530 like one is the facility congestion and two we have a meter so if I am creating as well in the simple line what? What I have a line graph in below that one with the filter one. So suppose I created this one with the reading here. Okay, I need that one reduce the quarter so filter zoom in filter also will work in the R language.



Abhishek Rastogi - 09:06

Okay, here one more thing is the beneficial is that in the R language we have a limitation is 1.5 lakh sorry values in the graph like in the normal club we have limitation is 3,500 so in our language we have a limitation is the 1.5 lakhs much more than very high but for the R language I need to search many things about that one because of the here I don't have anything in the inbuilt features it will fully created by the our code with the code.



Mostafa Khosravy - 09:56

Can you hear me?



Yeah.



Mostafa Khosravy - 09:59

Okay, for some reason I lost connection and I don't want to interrupt you Just show me the like a filter one how it looks like so suppose.



Abhishek Rastogi - 10:12

Same thing what we have in the line energy so this is the showing the three you can see here the facility consumption and two meters okay, what we have in the energy one so if I am using the filtering from the graph it will same replicant what we want but some modification maybe I need to find out with the codes for the tool tips and just hide the grid and all lines so that I need to search about it because of the everything we need to do with the codes we can't do anything in the inbuilt feature.



Mostafa Khosravy - 10:49

That like removing the title, changing the legend to some other place or something those are all possible with the R script. What I'm thinking is see the for example you have the meter number one, meter number two, meter number three, whatever Like a dynamic field is going to be added are without adding them in the code like without writing a script Are you able to do it like when the user added another meter or independent variable.



Abhishek Rastogi - 11:30

Just give me one second. Just give me just one second. So I'm just telling you meter, name colors. Yeah, yeah, it's mostly happened.



Mostafa Khosravy - 11:54

Okay, so let's. Let's do it this way if you are comfortable with the R. But in the.



Abhishek Rastogi - 12:03

In the. Like in the independence variable can be fixed with the one selection. Because of the here for the canvas for the scrolling feature. I am getting much issue on that one in the R language.



Mostafa Khosravy - 12:15

Yes, that's fine. We can do it the same way I explained it with the Dene. One independent variable at a time, not multiple.



Maya Mahesan - 12:26

Sure.



Mostafa Khosravy - 12:28

Okay. So one more question. If we are going to use R, you need to install or like a. Yes, yes.



Abhishek Rastogi - 12:47

Package also we need to install and all that one.



Mostafa Khosravy - 12:51

Okay, so if this is the case because that then app one is a native code like a. Like a power BI native code. It's very similar to this one. Right. So it requires some coding. But the difference is that one use the native code of the power BI as the JSON. It doesn't require any additional installation like R as the additional module. So I would prefer that one for one simple reason at least we have one chart using Dene or Vega. Are you familiar with one chart I'm talking about? Yeah, one chart. We have it on the. Okay, so I. I leave it with Har Sanji to keep you up to speed about that chart which we call it Rolex. It was located somewhere in the summary page of the. Of the software back in the day.



Mostafa Khosravy - 14:02

And Maya and Harsanjit before you joined the team were talking a lot about chart. It shows the temperature and energy consumption on a daily basis with multiple kind of year and a different months of the year. Do you have it ready Harshanji to just present it to Abhishek or Maya?



Harsanjit Bhullar - 14:32

No, I don't have it right now.



Maya Mahesan - 14:34

Are you talking about the word document Mustafa on the visualization?



Mostafa Khosravy - 14:38

The Rolex one. The Rolex chart, that radial chart.



Maya Mahesan - 14:45

Is. Is that based on the word document of visualization? Is it on that document or is it before that time? I'm trying to understand.



Mostafa Khosravy - 14:53

It was before that time. That was the first chart. It was developed for this software. Oh, surprising no one knows about that.



Maya Mahesan - 15:03

No, I don't have. I don't have a view of that one.



Mostafa Khosravy - 15:06

Okay, let. Let me find it.



Harsanjit Bhullar - 15:11

Yeah, go ahead.



Mostafa Khosravy - 15:13

Let me check in with Rohan. Do you remember Rohan? That chart or you don't?



Rohan Garg - 15:21

No, I don't. Some chart that you showed in tableau. I guess.



Mostafa Khosravy - 15:30

Not the tableau one. Okay, let me. Let me find it.



Maya Mahesan - 15:36

Rolex? Mostafa Khosravy - 15:39 Yeah. Abhishek Rastogi - 15:39 Oh the. Rohan Garg - 15:41 The first star that we. The Akash made, right? Mostafa Khosravy - 15:44 Yes. Maya Mahesan - 15:45 Yes, yes. Rohan Garg - 15:46 That I remember. What about that. Mostafa Khosravy - 15:50

Yeah, what I'm saying that chart developed based on the. Based on the dinner. So basically yeah, for the. With the Vega one. So since we have one chart using. Using Vega, I would recommend to develop the other one based on this one as well. Okay.

Maya Mahesan - 16:22

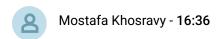
Are you talking about when we open, when we.

Rohan Garg - 16:25

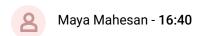
Is that. Remember the video chart, right?



Yeah, it looked like a Rolex. I guess it looked like Rolex. Is that the one when you open the bottle initially it had sort of like a Rolex view.



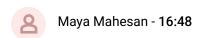
That's. That's the one. Yeah, yeah.



I remember that seeing it on the initial portal. I think it was revision one of the initial portal.



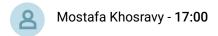
Yeah, it was the chart one visualization one. Correct. Correct.



Yeah.



Sorry for interrupt you. So actually I need to firstly focus on the DNA or the R language.



Because I would recommend. I would recommend the Denef because this. Let me find it. So this chart. Yes, I. I don't have the. Let me share my screen.



Abhishek Rastogi - 17:19

Yes, sir.



Mostafa Khosravy - 17:23

So I think this was already embedded in the portal. Like from the portal you have something like with the white background at that one. So it's located right now we are looking at the baseline or performance or the data exploration there. In the summary, like as may indicated in the summary we have this one here and this chart looks like this configuration. And underneath of this chart we have the table like this table. So this one developed based on the Vega. So since we have at least one chart here from the Vega, I would prefer not to pivot to the RS screen.



Abhishek Rastogi - 18:08

Okay.



Mostafa Khosravy - 18:11

Okay. So the portal right now show this one. I think we have something like a year here as well instead of the year here. A year located somewhere here. But the temperature and the consumption. Energy consumption based on selection of the months is presented like this.



Abhishek Rastogi - 18:34

Okay. Okay. I will just search briefly deeply on the DNA for the lines are to implement on the energy as well as in the independent variable with the single solution.



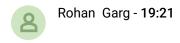
Mostafa Khosravy - 18:52

Okay, so I'm gonna. I have to jump into another meeting in four minutes.



Abhishek Rastogi - 19:00

Okay. So actually one more thing I need to. Something clear. Clear the point actually for the baseline model. Rohan, give me the idea. Like we have a data in the form of the. Like. Sorry and just missed the run.



Yeah, that baseline chart.



Abhishek Rastogi - 19:23

Yeah, for the baseline it's Mustafa.



Rohan Garg - 19:25

So after baseline modeling or the visualization that we need to show.



Maya Mahesan - 19:28

Right.



Rohan Garg - 19:28

We have the data of observed predicted, the timestamp and the independent variables. But Abhishek was confused because the data exploration chart that contains I think facility meter parameters, you know, like what. What were those column names? Abhishek.



Abhishek Rastogi - 19:47

I understand. Yeah. Actually Mustafa, last time what we discussed the baseline model. So we shared one document with the Hashanjit and Maya with the remark they shared with me on which we mention the energy that is facility consumption, grid import and generation, something like that in the field. But Rohan told me like we have some other fields on that one in the baseline model.



Mostafa Khosravy - 20:16

Can you like share your screen and like remind me about that one?



Abhishek Rastogi - 20:22

Yes, sure. Just to give me one second. Yeah. Actually last time we discussed we need to create in this format for the baseline model for the grass in the all monthly, weekly and daily in which we have at the, under the energy graph like facility consumption, generation at grade import, something like this. But Rohan told me like in this format we don't have a data in the baseline model. We have a data in the something like observed predicted value.



Maya Mahesan - 21:41

Yeah. So what's happened is in the portal itself, Mustafa, when you get to baseline, there's energy use which is your facility consumption and then there is predicted which is in your baseline. Right. But this on the top here, it only has facility consumption, it has generation grid import. So this kind of speaks back to data exploration as opposed to baseline modeling. I guess that's what he's trying to understand.



Mostafa Khosravy - 22:09

Okay, okay, so what I'm hearing is when it goes to the data exploration, we have the facility consumption, generation and grid import and maybe grid export. So all of them are presented in the data exploration. And when it goes to the baseline we have only the facility consumption. We have the aggregation of all the energy as the generation grid import converted to the facility consumption. And of course we have that like a prediction as well. So regardless of the prediction for the baseline, if we have only one parameter as the facility consumption, that's fine. So if we don't have it like the entire parameters for the baseline, we can leave it with the exploration to present them. Right. And then for the baseline just one parameter as the facility consumption. What I'm saying that should be fine.



Mostafa Khosravy - 23:21

So leave the rest with the data exploration, generation, grid import. Right. Facility consumption is going to be presented from the baseline perspective.



Maya Mahesan - 23:35

What about predicting? Mustafa, you don't want to see that.



Mostafa Khosravy - 23:37

Yet for the baseline.



Maya Mahesan - 23:43

You don't want to see the comparison like how we do.



Mostafa Khosravy - 23:45

We can show it, we can show it that way as well. So let me see if I have some like a preliminary visualization because in.



Maya Mahesan - 23:59

That, in that word document that you said you sent for visualization in there, it's got the actual prediction and residue predict.



Abhishek Rastogi - 24:08

Okay.



Mostafa Khosravy - 24:08

Yeah, yeah. If that is there, we can Present it that way as well. Just to give you Abhishek a little like let me share my screen. So what Maya indicated here is. So after you create the prediction versus the actual for the baseline, forget about this configuration because that was changed. So it's going to be something like this one shows a prediction versus the actual this configuration here and then we have a card here. It shows the total like a sum of them from the perspective. Right. So from the baseline actual predicted and then the residual also can be presented there as well.



Maya Mahesan - 25:09

Okay, can we use the same wording that the portal currently has Mustafa in the graphs so that we can connect it right now on the Excel tables that we download from the portal it's energy use and I think it's observed. Rohan, correct me if I'm wrong, that's the wording at the moment in the graphs. Right. It's predicted and observed values. So.



Rohan Garg - 25:30

Right.



Maya Mahesan - 25:31

Can we use the same in the graph? So then it all links up to the Excel sheet that an applicant would download as well so he knows where the values are, where it's coming from.



Yeah, I agree with that one. Okay, so. So since I have to jump into another meeting, I just wanted to make sure we resolve the issue of that 3500 limitation for the hourly one. I most interested to see that one resolved. Right. So what I like to hear Abhishek is he used that then app one and then you created like for the hourly with the same feature. The only like feature we will lose is the selection or that multiplier and that is a very minor one. It doesn't have any concern from the overall perspective. Right. So look at the Denef one. First look at the limitation. I remember that was 10,000 data points as the limit of the denim. With that like a denim Vega Lite or Vega full version and that is free. There is no concern about.



Mostafa Khosravy - 27:06

At least from those sample I created there wasn't any difference in terms of the visualization speed like showing the dot or changing the dot to line and something like that. It wasn't. It wasn't. It was pretty good, pretty fast. So first try that those kind of feature and if everything's fine just create a sample and then I think it's better to schedule another kind of meeting. So you similar to that like RS script, you just present it to us and if everything's fine we can close the loop on the 3,000 limits.



Abhishek Rastogi - 27:50

Okay, sure. Firstly I will second maybe if possible tomorrow to fix it this all. So I will update you to we will schedule it tomorrow. Otherwise we will schedule the next day to finalize this data exploration. Then we will schedule again one meeting for the data baseline model to know the better one to understand the fully to how to create what is the exact requirement to create that the visual for the time series.



Mostafa Khosravy - 28:17

Wonderful, thank you. I, I, I, I, I leave and I turn it over to Har Sanjit and Maya to continue the discussion. Thank you.



Harsanjit Bhullar - 28:26

Yeah, thank you. Yeah.



Abhishek Rastogi - 28:34

So actually for the data exploration I will work on it. But for the baseline model we need to clear the picture because of the Mustafa also told today for that one like for the generation grid import, something like we need to create the data exploration. So we already have a one time series. So we need to create dual for the time series in the data exploration. That is the first question mark. Okay. And the secondly when we will.



Harsanjit Bhullar - 29:05

Yeah, can you repeat the first question?



Yeah, the first question is like Mustafa told by today like what we have in right now in the dummy one where we have a generational grid import, something like that in the visible that we need to have in the data exploration. Right? That is testament told by the. Yeah, so yeah, so the my question is like we already created one time series in the data explosion. So again we need to create the time series for that kind of the visuals. So if we create that one so meaningful that is we need to two time series in the data exploration. So that is the question mark.



Maya Mahesan - 29:53

No. Abhishek, you know, can you share that PDF or that sheet, that screen that you just showed Mustafa? The dummy screen that you just showed Mustafa. So what Mustafa is saying is you see facility consumption, generation, grid import. Those are three different ways that consumption could come to a facility. Right now in data exploration you have facility consumption, meter one, meter two, right? You have like two different meters in your sample. So instead of meter one and meter two, facility consumption would be one, then meter one. You could have one, an additional meter. You should, you could have a second meter. You could also have generation and you could also have grid import. Those are all different ways that the power could come to the facility. So what he was trying to say was add those cards.



Maya Mahesan - 30:44

The only cards you don't have currently in your data exploration is generation and grid import. Right. In your current data exploration you have facility consumption. You have meter one. If they have another meter and you have meter two. Correct?



Abhishek Rastogi - 30:59

Right.



Maya Mahesan - 31:00

What he's saying is add generation and grid import to there. If the facility has that, does that make sense?



Abhishek Rastogi - 31:17

So we need to add this generation and grid import in what we created exploration.



That's what he was trying to. That's how I understood what he was trying to say.



Abhishek Rastogi - 31:27

But until the now what we created in this complete running schedule time, no one told me like we need to create a generation and grid import in the current data exploration. Because this is the very different thing.



Maya Mahesan - 31:43

Why is this different? Like if the applicant has a generation or if it has a grid import, if they bringing in it currently generation.



Abhishek Rastogi - 31:52

Just one second for the generation and grid import. That is. That is similar with the metadata. Sorry for the meta name because of the like. For an example, we have a 10 meter in the one facility ID. Okay, currently what we created in which one is showing for the facility congestion and 10 meter visible for that facility ID.



Maya Mahesan - 32:18

Consumption is your total and your. Your meters are your individual meters that add up to the facility consumption, correct?



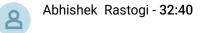
Abhishek Rastogi - 32:25

Correct. If we are thinking about generation and grade import. So that meaning is within a 10 meter, maybe 4 meter from the generation and 6 meter from the grid input.

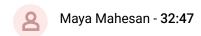


Maya Mahesan - 32:39

No, I don't think that's.



This generation and grid import is not beyond of that data. It. It's within a data.

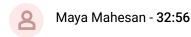


It's within the data. Yes, correct. Because all of it added together gives you the facility consumption.



Mostafa Khosravy - 32:54

Right?



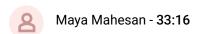
All of it added together gives the facility consumption, right. So generation and grid import would be part and parcel of it, no? Am I understanding the question?



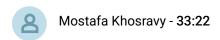
Great. Import is the part of the facility, right?



Yes.



It's all going to be part and parcel of the facility consumption. Facility consumption is your total, right?



Right.



So right now, when. Okay, let me ask a question. In currently, when an applicant goes in and adds 2 meters, okay. They could call the 1 meter 1 meter 2. Say they add a third meter and they say this is generation, then it comes up automatically, isn't it? As a, as a card, right?



Mostafa Khosravy - 33:47

Right.



Maya Mahesan - 33:47

So that card name is linked to what? The way the applicant uploads it on the portal. So the card name, how is that linked? You know, in your data exploration currently now you have meter one, meter two that naming, how is that coming? Where's the link for that? How is it linked? Is it linked to the file that's uploaded? And the naming that's done by the applicant under energy, right? Is that what's happening?



Abhishek Rastogi - 34:17

Yeah.



Maya Mahesan - 34:18

Okay, so then if they upload a file called generation or grid import, then only it will show up as generation grid body, ls that correct?



Abhishek Rastogi - 34:29

Right, but. But for an example, you are. You told me like we add some, rename some name with the generation and Grid import. But previously what we work that generation at green import is the logic not in a mentioned name anywhere.



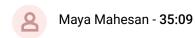
Maya Mahesan - 34:54

I don't think I understand that. What do you mean by logic? I'm not. I'm not sure I understand that.



Abhishek Rastogi - 34:59

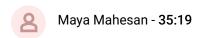
This logic means in the our data one column we have something like purchase from grid. The name of the column.



Yes.



So we are identifying if we purchase from grid that is that kind of the meter are from the grid import, correct?



Yes. And then generation on site. Generation. Yeah like PV or solar.



Suppose same in that column. If, suppose that is false value. So we are assuming that is from the generation.



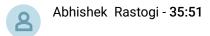
Oh, so is that the logic that's currently in?



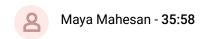
Yeah, so that's why I told you.



Oh, so where do you see that visually? So you only you were going to implement this in baseline model.



So that is my question. Where you want this kind of the logic or you don't want.



No, according to Mustafa he wants that in data expert because that's what he just said. He wants that in data exploration.



Abhishek Rastogi - 36:05

So, so for that one right now we created from the last 20 days or 30 days we are creating on data exploration. So I am not getting any input. Like we need to add generation grid import because of this is not a meter name. This is the logics.



Maya Mahesan - 36:23

Yes. See what you're saying Hassanjit, how would you deal with this? Because dot exploration currently now he's right, he's only got meters because that's the only sort of data that he's put in. The logic for generation and grid import is that's a separate logic. So would that be a separate tab or how would that work?



Harsanjit Bhullar - 36:46

I'm thinking it would be a separate tab. But this is like. I think I need to spend some time thinking about this because this is more difficult than I thought that.



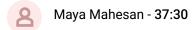
Maya Mahesan - 36:57

Because. Yeah, yeah.



Abhishek Rastogi - 36:59

So actually for suppose I work on the DNA. If it's work for tomorrow then I will update you. If it's working then we will close it the data exploration time series. Okay, so at least we clear that one. We don't need any modification further in the time series of the data exploration because of again it will come so we will more time consume in the data exploration itself. We will not go in that baseline model and performance what we have in the much.



But I think we need to clarify this Hasanji because Mustafa just made a comment saying he wants generation and grid import in data acceleration. So that needs to be clarified because if he wants it there. Because I'm also thinking if we get. If A facility gets Abhishek. If a facility has grid import and has so for example pv which is generation on site, how is that going to be handled by data exploration at the moment? Is it just going to sum it up and show it as facility consumption?



Abhishek Rastogi - 38:04

Can you tell me again?



Maya Mahesan - 38:06

So if an applicant uploads one the meter data, okay. And then they also upload a second data called for example PV or polar what's it behind the meter generation chp. They upload two data sheets, energy consumption sheets into the energy tab. When it comes to data exploration visualization, how will that appear? You'll have facility consumption, which is the sum of those two. But there's no logic. It'll just appear as metadata and one would be the behind the meter generation. Is that correct in that exploration right now?



Abhishek Rastogi - 38:51

So actually in when we are checking data in the database. So I am not getting such kind of the columns. I am getting the column for the behind of meter generation and all like what I told us what I told you like that the field 1 column is available like and forgetting again the name of that column. Yeah, sorry, I just give me just one second. I'll just show you to better understanding. So you can see here. So we have one column that is purchased from gate. Okay. So we have the two types of value, true and false. So suppose in one facility ID we have a 5 meters. So facility consumption is always the summation of those 5 meter.



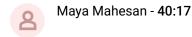
Maya Mahesan - 40:12

Yes.



Abhishek Rastogi - 40:13

Does not matter is purchase from grid or not or generation.



Yes.



Abhishek Rastogi - 40:18

Yeah, for the generation and grid imports are defined from this column. If purchase from grid then is import from giddy other. But if it's false, then it be considered like it's from the generation.



Maya Mahesan - 40:35

Okay, but. Okay, where. So when you get. When you. When. When it's false, where does the false come in? Where in the portal.



Abhishek Rastogi - 40:44

Yeah, yeah. So I don't know on the portal. How. How do you add the data? I don't know about that one. So I am just. I just checked. So I'm just telling you. Like for example, like I have a 5 meter. So suppose you. You are adding 3 meters. Maybe that is from the true value from the purchase from grid or maybe 2 meter. Basically generation and green import meter are segregated like we that kind of data we don't have some. For example, we have a one meter. Those meter. And also in the from grid import and the generation. So we are segregating according to meters. You also have a data according to them. So maybe you are. When you are adding data or inserting data. Maybe you are selecting something checkbox or anything for this one. Rohan, can you.



Abhishek Rastogi - 41:43

Do you have any idea about that one? How its column will take the data for the.



Maya Mahesan - 41:55

I don't think Rohan's on the call.



Abhishek Rastogi - 41:58

Rohan?



Harsanjit Bhullar - 42:01

Yeah, I don't see him on the call here. I think it's just DRV Sheikh.



Maya Mahesan - 42:06

Yeah, yeah. Okay, because I think that's the first question. Like if it is 2 meters. Hasanjeet, if it. Because that was not one of the tests that was done. Like if we had to add a PV meter or how would they segregate it? Like how is it? Like there's a probe. There's obviously something in place here where it says purchase from grid in this code. But what I'm trying to understand is.



Abhishek Rastogi - 42:32

In the portal, how is it actually Maya, actually the. Our main question is that with the Mustafa as well, like what we created time series in the data exploration. So if we fix the. With the Denev, with what the restriction of the 3500. So this is the final one for the time series or we need also create the time series for the data explosion. Because if it's final. So we know discussion on the generation and grade import because of the. They already know about what we created.



Maya Mahesan - 43:02

Right now I don't think we can ignore Mustafa's comments. That's my personal opinion, Hasanjit. I don't think we can ignore his comment about adding grid and generation to data exploration. If anything, I think we need to clarify that with him just to make sure. Because right now in energy you see here, abhishek, you have 1 to 312 month ABI whatever, right? BMG. Like for example BMG is behind the meter generation. So that's not grid. So BMG is behind the meter generation. That's actually what BMG is. It's behind them. It's not grid. It's not. Yeah, it's not from grid.



Abhishek Rastogi - 43:42

It's not a meter name.



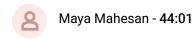
Maya Mahesan - 43:44

It's not a meter generation. It's behind the meter generation. So it's not a grid import, it's a generation. Right?



Abhishek Rastogi - 43:52

So, so right now, right now I am taking this BMG because of this is available in the meter name.



Exactly, that's my question. So what I'm asking is if it's available in the meter. So when it comes in the meet in the portal as two different files, whatever the file name is. So my question is bmg. You see, you got BMG there. Where is that name coming from? Is that name coming? Because that is how the applicant uploaded it on SharePoint. I mean, on the portal in Energies.



Mostafa Khosravy - 44:22

Yes.



Maya Mahesan - 44:23

Okay, so that means whatever the applicant calls is what you're going to show in the visualization, is that correct?



Mostafa Khosravy - 44:30

Right.



Maya Mahesan - 44:31

So whether it's generation or whether it is grid import, that's how if the applicant, when uploading the meter data, calls it Meter one, grid, and if the applicant calls it meter two and doesn't say it's generation, that's how it's going to appear in the visualization, is that correct?



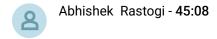
Mostafa Khosravy - 44:49

Right.



Maya Mahesan - 44:50

Okay, so Hasanji, that's what we need to be clear on right now. We're not picking up, we're not saying, okay, this is grid. That's not what the portal is doing. The portal in data exploration is showing whatever metadata is uploaded in the energy tab.



Specifically.



Maya Mahesan - 45:10

Yeah. Specific to whatever the applicant calls the meter name that he uploads. Is that correct? Right, Hassanjit? I think that's what we've got at the moment. And if Mustafa is happy with that, then I think. I don't see why that would be a problem. Because the applicant would have to upload whether it's behind the meter generation or if it's meter, direct meter. Do you understand what I mean?



Harsanjit Bhullar - 45:33

Yeah, like that's the thing. I don't know how this is necessarily a problem, but.



Maya Mahesan - 45:37

No, I don't think so. Yeah, I feel like as long because it's up to the applicant and the way they upload it.



Harsanjit Bhullar - 45:43

Yeah. Like we have.



Maya Mahesan - 45:44

And how they name it.



Mostafa Khosravy - 45:45

Yeah.



Maya Mahesan - 45:47

Do you know what I mean? So I don't think this is. Yeah. I don't see this as something that. Well, that's my thinking. It's. It's based on whoever's uploading to the portal and how they name it. So because the visualization, as long as we are clear, Abhishek, that the naming at the top is based on how the applicant uploads in energy.



Abhishek Rastogi - 46:08

Right.



Maya Mahesan - 46:10

That's what your. That's what your link is. Right. So, for example, if I upload two files, one is called meter 41 and the other one I upload is called meter 43, that's how it's going to appear in visualization under data exploration. Is that correct?



Harsanjit Bhullar - 46:24

Right.



Mostafa Khosravy - 46:24

Right.



Maya Mahesan - 46:25

Okay. The same name with the same name and only the facility consumption is different because that you've inputted. And that's a summation of the two. Correct.



Abhishek Rastogi - 46:33

Right, Right.



Maya Mahesan - 46:35

I think that sort of answers it. I think we just need to make sure we clearly tell most of. I think Mustafa should be fine with that. Hasanji, in my opinion, I'll send him.



Harsanjit Bhullar - 46:43

An email to clarify that. But I'm pretty sure this would still be fine then.



Maya Mahesan - 46:47

Yeah, I. I genuinely think it should be fine.



Harsanjit Bhullar - 46:50

Okay, right after this meeting, I'll send him an email then.



Maya Mahesan - 46:54

Yeah. Abhishek, you are right. The PDF documents that we edited, the, you know, the documents that was edited and sent back. Hasanjeet, that's what Abhishek was asking Mustafa about. Because it should reflect whatever is on the portal, what the word or the naming is on the portal or the values that are available. So Abhishek, if you go back to that PDF document we sent you for baseline model, do you have that with the comments?



Abhishek Rastogi - 47:24

Yeah.



Maya Mahesan - 47:36

This one. So this one. So this you see at the top there. Facility consumption. So this should read very similar to the Word document. In the Word document that Mustafa has given, it's clearly states it's supposed to be. And I guess you can't use the Word document either. You need to use what it's called on the portal. See, on the Word document.



Abhishek Rastogi - 48:04

Yeah, I know. For the facility consumption. That is fully same mention in the Word document as well.



Maya Mahesan - 48:10

Yeah, no, but in the Word document it says actual predicted and residual. Right. So you won't be using actual. Because in the portal it's called. Called energy use. That's what I was asking Rohan. See, the tables are called different. It's called. No, sorry, observed values and predicted values.



See if I'm referring the Word document. So this is the Word document.



Maya Mahesan - 48:36

Yeah. So in the Word document, if you go to the baseline charts.



Abhishek Rastogi - 48:43

You go.



Maya Mahesan - 48:43

Down to the baseline charts. So this is. Okay. No energy, no incentive savings, no baseline calculation. Okay, so this is.



Abhishek Rastogi - 49:01

I think this is residual and everything. I think.



Maya Mahesan - 49:04

Yes. So baseline versus real. But there's a. Oh, this is just him. I think he's showing you the calculation or the format or how to do it, I guess. But if you look at this. Sorry. Then it's the scatter plot. If you go up, baseline go up, go up this one and go up the one with blue and. Yeah, that one. The blue and red. So if you look at this baseline chart, scatter plot. So if you look at the dots at the top. So those are what you would want to see. You see actual predicted and residual underneath the baseline chart. Scatter plot. Can you see that? There's a blue dot, there's a red dot and then there's a sort of like a navy blue. The legend below the baseline Chart, scatter plot, There's a legend there.



Harsanjit Bhullar - 49:45

So.



Abhishek Rastogi - 49:45

So this kind of the visual we need in the data baseline model, this.



Maya Mahesan - 49:50

Is one of it. This is the scatter.



Abhishek Rastogi - 49:52

This is one of the charts where we will fix for the scatter. Like we are just talking about like a daily, monthly, weekly and hour. So we are.



Maya Mahesan - 50:04

Yes. So firstly you would want to see. So these are the options that Mustafa has given, right? So if you go to the one before this. G. Go to G. So here calculations. Baseline creation requires selection of variables and baseline period, which is not described here. So the chart also includes bar chart referencing the model residual. So the charts that you have, you know the PDF document you sent, you said that was based on something that you've already sent before, right? That was agreed. Is that correct? Okay. Now the naming at the moment on that PDF document is facility, consumption, generation and import. That is pretty much is what is in the data exploration. When it goes to baseline model, it needs to reference back to. To the tables that are in the portal. Okay.



Maya Mahesan - 50:58

So the tables in the portal or the values that you're going to bring in to generate the graphs is going to be observed and predicted because that is what Rohan's Excel sheet calls it. One is called observed values and predicted values. Do you see that in the portal? So if you go down to the, in the, if you go to the next chart here, Observed. You see actual. You see actual there in blue, the legend. Yes. See the actual predicted and residual. Actual in the portal at the moment is called observed. So the portal is calling actual values. Observed values at the moment. Okay. In the portal predicted is the prediction in the portal is currently called predicted values. Okay. And then residual. You can ask Rohan, he's got a table for it. I can't remember what he calls it in his Excel sheet.



Maya Mahesan - 52:01

I think he might be calling it residual. But there's tables in the portal where the wording or the naming is different to this but it's the same things that's required. It's just a different name.



Abhishek Rastogi - 52:15

Okay, so I understand what we have data in the baseline model like actual, predictable, sorry observed, predicted and the residual. Okay but my. I want to clarify on that one how to what kind of the design we need to create because of. If we want scatter plot in. In this all section or we read a line or dot graphs, you need dot.



Maya Mahesan - 52:48

Well, my current understanding and Hassanji, the word document is not very clear and we might want to go back and just make sure on this but right now what about the next graph? If you look at the chart, what's this graph here that Mr. Fuzz got the. On the word document. I'm looking at the baseline chart. Oh, there's a pair. He's got it. Baseline chart, regression residue. So the one is prediction predicted versus actual. He's got one. H1. H1.



Abhishek Rastogi - 53:36

Sorry, H H sorry. Just give me one second.



Maya Mahesan - 53:49

Okay. First he says so first is the scatter plot. That's what he wants. First the scatter plot. So Hasanji, where's the PDF document coming from? Because the PDF document has different graphs there is that what is required or.



Abhishek Rastogi - 54:02

PDF document is created by me. That is only what most people at the initial time related to this one. So what we have here, facility, consideration, grid import. According to them I created at the initial time.



Maya Mahesan - 54:20

That is exploration or that would have been only for that exploration.



Abhishek Rastogi - 54:24

That is not clear at the starting time where we will insert this one. But they give the idea how to create what we. What they need. So I created them for that one.



Okay, and now we in base. Okay. And then in baseline model though. Because if you go down here to the baseline model. If you go. If you go down to baseline model he tells you what graphs he's expecting. If you go down. The first one is with the scatter plot. Is the first one. The chart shows the relationship between the independent variables energy consumption on a daily hourly basis. This is the daily monthly hourly. But it's for the baseline. It shows the relationship between independent variable and the energy consumption.



Abhishek Rastogi - 55:20

Okay.



Maya Mahesan - 55:22

See.



Abhishek Rastogi - 55:22

Do one thing Maya. We can. We can do one thing. Firstly we will close by tomorrow. Maybe I will update you by evening. Then we will schedule one call where we will discuss from initially we will blank about it for the baseline model. So firstly we will take actually guidance or feedback from the Mustafa. What actually they need from the scratch. We don't know about the baseline model because of the. If we are referring this one and. And this chart this side will give them more confusion for that one.



Maya Mahesan - 55:57

Yeah. So this chart. Abhishek, did you send this to Mustafa already? And he okayed it. Is that what happened with these pds.



Abhishek Rastogi - 56:04

Actually last time on the last call with the Mustafa already in the call. I. I told you multiple times. Can I create the same graph for the baseline model? You all are told me like you just create it. But again when I check with the data because of the. You know I am comes in the middle of the time. So I don't know about the much about the data. What we have in the our this project. So when I checked with the Rohan so they told me like we have a data not in that format. We have with the some observed and predicted value. So how do you create that? Then the questions comes in my mind.



So I plan with the meeting with you also what your actual requirement and why we are referring this one if we don't have a data according to this one.



Maya Mahesan - 56:56

Just one second. Right. If I take it a step back in data exploration. Currently we don't have monthly, weekly and daily. Correct. In data exploration.



Abhishek Rastogi - 57:09

Correct.



Maya Mahesan - 57:13

We only have a scrolling feature and we have a filter feature. But we aren't able to do monthly, weekly and daily at the moment. So this bar chart that you see here you can't implement at the moment in your data exploration. Correct?



Abhishek Rastogi - 57:30

Right, right. This is the fully different actually for the data explosion. Mustafa told us like from the last course and before that one when we work on the data exploration. So the initial feedback and review is that one like we need to create the basic one. We don't need a monthly weekly something because of that data explosion person will come to see the complete date range. So they don't want to do multiple insights with the weekly monthly. So we don't need that also we skip that one.



Maya Mahesan - 58:04

Okay, so then there was no need to go through this PDF then Because this PDF only speaks about if that was already agreed. When was that agreed? Like before with Mustafa. Directly with Mustafa. That was already agreed. So then what was the need to go through this PDF? That's my. That's what I'm trying to understand. Why did we do this PDF again? That's. That's what I'm trying to understand.



Abhishek Rastogi - 58:25

So that's why I. I'm just telling you now we don't need to refer this document. This PDF one.



Maya Mahesan - 58:33

Yeah, yeah. Because if it has already been agreed with Mustafa that none of this is required. That's what I'm a bit confused about. If that's not required, I'm not sure why we still then we why we're referring to this PDF. Because this PDF speaks about similar things to what you're putting in the data exploration. But it has more here.



Abhishek Rastogi - 58:54

Yeah, so that's why. That's why I want something like we need to firstly fix it with the data exploration what we discussed by today. So we fix it. Then we will go with the. When we will go for the baseline model. We will discuss about with the initial stage. What. What is the exact requirement because of. I am very confused for the multiples Graph and everywhere. Yeah, so I can't because of the. If I am wasting my time in this one, then again your site input will come like we don't need this one, we will create something else so it will wasting time in the project so you don't go in this way.



Maya Mahesan - 59:31

Okay, Hasanjit, I think the easiest solution for this, I'm not sure if you can agree with me, but maybe we should set up a meeting just with you, me and Mustafa and Inot, maybe a draft of the expectation of the graphs and then I think that's a.



Harsanjit Bhullar - 59:48

Better idea than they can instead.



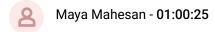
Maya Mahesan - 59:50

Right? Yeah, because otherwise. Sorry, but everyone's coming at a different time I think. Like obviously there's been a lot of meetings before with Mustafa and Abhishek and now we've come in all at different times. So I think we all need to be on the same page before we, you know, go back and forth on this.



Abhishek Rastogi - 01:00:08

My one suggestion from my side, if possible, like you are discussing with the Mustafa with the internally if possible, can you just create one the basic idea in the. Maybe in the Excel or Word, something like that, something dummy design, something like that.



I think that's what I'm also thinking. Hasanjit. We take one of the examples on the portal, we download one of the Excel sheets and then create the charts with the expectations. That's it.



Abhishek Rastogi - 01:00:34

Okay.



Harsanjit Bhullar - 01:00:35

Yeah, that's a good way of looking at it. So when do we want to schedule the next meeting then? Because I think Abhisheki said you want to discuss some stuff tomorrow.



Abhishek Rastogi - 01:00:43

So I will inform you maybe with before that your starting time because of the first line to work on the DNA. If it's completed then I will inform you to review it with the Mustafa itself. Then we will go with the data baseline model with me. Otherwise you can internally you will check with the Mustafa time frame to you can discuss about the baseline model and all this stuff.



Harsanjit Bhullar - 01:01:08

Yeah, okay, sure, sounds good.



Maya Mahesan - 01:01:11

I think the DNMB needs to happen regardless. So I think I can carry on with that while we, I think have an internal meeting.



Harsanjit Bhullar - 01:01:21

Yeah, yeah, okay.



Maya Mahesan - 01:01:24

Okay. Is there anything else for this one?



Harsanjit Bhullar - 01:01:30

I think that's it for now. I'm running into another meeting here. So Maya, I'll send an email to Mustafa, just outline the graph because I think like we said, if they're inputting their own data then that can work and then I have to schedule.



Maya Mahesan - 01:01:50

Yeah, I want to just ask him if he has some time, like 30 minutes for us to just run through the expectations based on the word document and based on what Abhishek has currently created in data exploration. You know what I mean?



Harsanjit Bhullar - 01:02:03

Yeah, but like, you mean schedule that.



Maya Mahesan - 01:02:05

For today if he has availability. I know he's really busy since he's been back.



Harsanjit Bhullar - 01:02:10

Yeah, I know he's been busy too. I mean like, if you want to check with him, I can join that meeting as well. I can do anytime in the like after what, 11:00am MST my time. So that's 1:00 for you.



Maya Mahesan - 01:02:25

Okay, so must I. Okay, so do you want me to message him and ask him if there's any. If he has any availability today?



Harsanjit Bhullar - 01:02:31

Yeah, yeah, that'd be good.



Maya Mahesan - 01:02:32

Yeah, I think the sooner we sort out, the better it is.



Harsanjit Bhullar - 01:02:35

Yeah, I agree. Yeah.



Abhishek Rastogi - 01:02:38

Yeah, One more point. I. I need to highlight that I mailed you in the morning with the actual one where we need.



Mostafa Khosravy - 01:02:44

Yeah, yeah, okay.



Harsanjit Bhullar - 01:02:47

Yeah, no, I saw that already. So we'll start working on that also.



Abhishek Rastogi - 01:02:51

Yeah, finally. Also try to work on it maybe.



Harsanjit Bhullar - 01:02:55

Yeah, okay. Yeah, like I've been really backed up with a lot of stuff here, so what I'll do is I'll get to that later this week. But Maya, if you can schedule like, let's see if Mustafa is available today. If anything we can do tomorrow morning as well. But like you said, the sooner the better. We can try to iron out some of these requirements and then at least we're on the same page as well.



Mostafa Khosravy - 01:03:17

Yeah, yeah.



Maya Mahesan - 01:03:18

Okay, perfect. Okay, thanks. Okay, sounds good.



Harsanjit Bhullar - 01:03:20

Okay, thank you everyone. Thanks Maya. Thanks Abhishek.



Bye.



Harsanjit Bhullar - 01:03:24

Yeah, bye.