ISOJ 2020: Day 1, Brunch Workshop

No-code data journalism: How to go beyond infographics and engage audiences

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Mallary Tenore Welcome, everyone. Thank you so much for being here today for our first workshop of the week. We're very excited to get started, but before we do, I just wanted to share a few housekeeping notes.

I want to remind everyone that the panels, workshops and keynotes are all being translated simultaneously into Spanish. And so if you click on the interpretation button below, you will be able to select the Spanish channel, and then you'll be able to hear the interpretations live. I also want to mention that we are streaming everything to YouTube, both in English and in Spanish. And so if you have any technical issues in Zoom and you just want to follow the live stream, you're more than welcome to do that, and you will find the links to the YouTube channels in the chat feature in Zoom.

And then I also just want to mention that you are welcome to share questions during this workshop, in the chat feature within Zoom. And our team will be monitoring those, and we'll try our best to answer them. Feel free as well to share social media highlights using the hashtag #ISOJ2020.

So without further ado, I would like to introduce our workshop, which is titled No-Code Data Journalism: How to Go Beyond Infographics and Engage Audiences. And this workshop would not be possible without Microsoft's support, so thank you. The workshop will be led by a terrific trio, Vera Chan from Microsoft News Lab, Cathleen Crowley from the Albany Times Union and Verah Okeyo of the Daily Nation in Kenya. So thank you to all three of you for being here with us today, and we're really excited to learn from you.

Vera Chan Hello, good morning. And I just want to make sure that Verah Okeyo and Cathleen Crowley, who are with me today, you're welcome to unmute and share your audio.

Verah Okeyo I am here.

Vera Chan Hi. Hey, guys. Thank you so much for joining us today. I know this is the brunch workshop. We didn't quite parachute food in for you guys. I hope that's all right. I hope you guys have snacks on hand. I have coconut water, so that is going to be my brunch. So, again, thank you for joining our No-Code Data Journalism Workshop. We've got two terrific people with me on the panel today.

There will be opportunities. I know there's a lot of you on the call. If we can't get to all the questions today, which, you know, we're showing some good things, so if we can't get to your questions, there will be means for you to reach out to us.

I do want to thank you again for joining something that we think is just so incredibly important for the industry. Data journalism is something that all of us aspire to do, but it's just a matter of resources. And we're hoping that today we're going to introduce you some opportunities to see, like you can do this, whether you're in a broadcast newsroom, you're in a small digital-only operation, that this is something that's attainable to you with limited resources.

And actually, what I wanted to start off, just so you know what the agenda is today, we'll be doing some introductions. Again, my name is Vera Chan. I'm the senior manager for Worldwide Journalists Relations at Microsoft News Labs. I'll talk about myself a little bit more later, but I want to introduce our panel. They'll introduce themselves, actually, Cathleen and Vera will. And then we'll go into some things that we've done with other newsrooms, and then they're going to show you some really good stuff. All right. So, Cathleen, even though you look frozen to me at the moment, I might start with you.

Cathleen Crowley I hope you can see me. Yeah, I can see you. All right, great. My name's Cathleen Crowley. I'm a reporter at the Albany Times Union in upstate New York. I think my story in data journalism is something that maybe a lot of you share. I didn't start out as a data journalist. I just kind of stumbled into it, and slowly it grew as part of my career. I've been a beat reporter for twenty years, covering every beat, cops, courts, schools and health, and I've always dabbled in Excel and liked it. But there was always some people in the newsroom who were the data journalists in the data team. But as downsizing, layoffs and attrition kind of hit our industry, one day I looked around the newsroom, and I was about the only one there who really knew Excel. And that's unfortunate, but I also thought, "Well, that's an opportunity to kind of dig in and become my newspaper's data person."

So I really started studying Excel. I taught myself through YouTube videos, and then I hit a wall because I wanted to merge data sets, and compare them, and analyze them together. And I did Vlookup and pivot tables. But I just couldn't get past that, and it didn't really work that well. So I was trying around for other tools, and I came across Power BI. It was actually being piloted in an AP data sharing program. So I stumbled upon that and decided to give it a try, and it has really become my go-to tool because I'm a one-person data team in my newsroom. I help other reporters with downloading the data sets, cleaning the data sets, and analyzing, and then helping visualize them. And I can do that all right with Power BI. I can download information from the web, or I can upload Excel files, or CSV files. I can clean it in Power BI, and then I can start analyzing it, and studying it, and then create these beautiful visuals that look great on our website. So a little bit later I'm going to actually build right before your eyes an interactive using a data set. So I look forward to that.

So I want to introduce you to someone whose name I love, and who knew I could meet someone who has my namesake in another continent. So, Verah Okeyo?

Verah Okeyo Oh, hi, guys. The difference between Vera and mine is an "h." I have an "h." So you can say, "Verah with an 'h'.".

So my personal story is I've never loved data at all, like even in my post-graduate studies. But when I came to the newsroom, I had been reporting on health for a long time. And after some times you go to the editor and tell them, "This is a pretty important story." And then they're like, "How many people have died?" It's not as catchy anymore because, you know, the news cycle in the newsroom is something has to have that shock factor.

So data sort of like has always been able to give me that way of making news fresh and have the news value. And this goes on to the fact that the position of health, the beat that I cover health and science, is it's in the newsroom because of prestige, where we have politics and sports, and advertising. But science and health has never had that kind of ability.

So when I started doing data, that was the only way for me to get this kind of news on page one, page two. And even now, I'm still in the newsroom, and we're still going to have a major story tomorrow. That has kind of like helped me to do that. And when I applied for my grant from ICFJ and saw it was for data, I never knew that I was going to use Power BI. But when working with with Fern and Vera, they introduced me to that tool, and now I'm hoping that I'm going to upscale it in my newsroom to be able to use the Power BI.

So my personal stories like data and Power BI has enabled me to explore other skills in the newsroom and build my other skills that are not necessarily journalistic. And Vera is going to share a slide of that later, about the work that I did, my first work with Power BI, and how that turned out there.

Vera Chan Hey, guys, sorry I have to click on quite a few screens right here. So one thing that I do want to talk about is some of the partnerships that we have done. And then while I pull that up just for my own background, you know, I've been in journalism since the 20th century, and my background has been in features reporting, arts and entertainment, and then moved on to business in reporting.

But I really got into data when I moved from the daily newsroom to Yahoo!, where I was the buzz trends reporter, and I got to be able to see anonymized search data at a massive aggregate level. And that was to me just a just a mind blowing experience. I've been now with Microsoft for some years, and with the Microsoft News Team the last two. And I'm sure some of you on the call are amongst our partners. We work with about 1,200 publishers that represent about 4,500 brands. Globally 440 companies.

Our data journalism program has been running now for about three, four years, and we've worked with many, many different types of partners, wire services like AP who used it for elections. We've worked with local, regional newspapers as well, and also some nontraditional outlets. Because, you know, data Power BI is actually built as a business intelligence dashboard, but we just realized because of the easy way you can pull in visuals, how you can self serve a lot of this. It had really huge value with data journalism. And some of the partners that have worked with it have really had huge aspirations.

So, for instance, Politico EU, they wanted to see what were the repercussions that a single citizen's vote could have across the continent. And so how could they engage citizens across borders? How could they tell this very complicated story? And as someone from the U.S. who already thinks that their election cycle is complicated, the elections, people in Europe, you guys know, is just phenomenally complicated. And they were able to create like horseshoe visualizations built on polling and allow people to drill down on that country

level, because, yes, you want kind of that snapshot of what's happening, what's important. But what is it? How is it relevant to you?

Recode has been another organization that has utilized the tool to build very, very different types of business reporting. The classic one is the milk grocery cart story, which you can just kind of drag in and see how different online and brick-and-mortar retailers compare. But the thing is it's important to use these visualizations is that you can create a template that's actually reusable. So the milk grocery cart visualization, even though right now you see big name brands of food and grocery items, imagine if it was like a fantasy football team that you were building. Like, is there a way that you as an individual can create something that you can flow in different data but not have to rebuild the whole visualization over and over?

And the other examples, if you can see my screen, is the kind of different appealing. It's got to be appealing to be able to interact. You want to sort of entice people, and you also have to train your people, your audiences how to interact with this as well. But to invite them to something that's kind of esthetically entrancing is actually quite helpful.

And then another example that I wanted to show you is not a newsroom. What they did with the tool, Power BI, is create a table of contents. So it's clickable to be able to go to see hundreds of different trends. So that's another way in which you can think of data journalism in sort of a nonstandard way.

Cathleen Crowley Vera, this is Cathleen. We're not seeing your screen.

Vera Chan Oh, you're not seeing my screen. Well, guess what, guys? Everything I'm showing you is absolutely amazing, so I'm going to do it again. And then I'm sharing. OK, wrong screen. I'm just going to keep on this one. So let's just keep on the screen and just switch. You know what? We'll just stay on this. Because right now, my sharing is a little bit funky.

So here I just want to show you the Recode thing that I was talking about. Right. And then this was the non-obvious interaction, where it was the table of contents. And then one of the last things that I wanted to show you was a broadcast company, a Seattle King 5, which is a local Tegna station, wanted to be able to tell all sorts of different. First of all, they wanted to experiment with different types of storytelling, and they needed something that would work on TV as well would translate well when people would follow up going online. And so they told stories about immunization rates, and marijuana excise tax, and even traffic because there was something, a bioduct that was going to be shut down. And so these were all sort of more complicated stories that they needed to make sure it showed up well. S.

O those are some of the things that we're going to be talking about today. But before we start building, I do want to kick it over to Verah Okeyo, so that she can actually just talk about her experience, about again, as she said, she's never been the number one fan of data, but it was so vital for her to claim it.

Verah Okeyo All right. OK, so here I am. My work was mostly on reporting on undefined mortality since 1960. That's about the time Kenya got its independence. And we have had a change of government ever since, which has had an impact on our health governance, and most recently in 2010, when we came from the centralized system to the default system. So I wanted to report on whether there's been any change at all. And this was part

of the project that I did with Microsoft and ICJ, International Center for Journalists, and I did this story.

So my interaction with this was kind of like very interesting, and in my presentation, the next thing I had my little toolkit. So I realized that apart from the Power BI itself, like running a data journalism project is much more than having the tool, the Power BI tool itself, and having the data. It has other skills that I needed to be able to do that.

So the first thing was how to collect that data. Like I, I remember I had this, you know, internally what I was visualizing, and like I was at point A and the Z was these amazing things that I wanted to do. So when I was starting to collect the data, I remember my mentor at that time was from the Washington Post, and I was just swimming in data. And I'm like, "Oh my God, I've collected this. I've collected that. I still need much more than this." And Van, the person I was working with, Vera Chan's colleague, was always like, "I could still visualize that. But I needed to have a direct line of the kind of storyline that you will need to work on.".

So eventually I settled on working with a Ph.D. research student, the one that she had been doing for the last six years, so we had collected that data. And eventually I decided that, you know what data can be numbers, but at the same time, the qualitative root of it; and because I come from a social science background, like the skill of interviewing was very, very key for this. So eventually I just settled for the data, for just the mortalities. Like each year how many children had died, and then looking at the 47 counties, the 47 regional governments that we have in our country, to see how that has changed.

And here was the interesting part. Initially before working with Power BI, I had this preset things about how we should report about certain regions of our country. Right. So the urban areas and the rural areas, I expected, of course, the rural areas are going to have a lot of deaths, and it's just going to be a ghastly, sad story of children dying because of the much money that we put in it. But when we worked with Power BI, I started noticing that, you know, there is a little bit of change, like in some areas. There was actually, we have never seen that before, like I have never seen that before. I never seen that in that way. So I was able to see that between a certain period of time, like between 1990 and say 2000, an area had experienced tremendous change. And this had never been reported because when you're in the news cycle, you report on what has happened in 2013. And then you report in 2014, and there's a new report in 2015. And you're just like, "Oh, my, the people are dying." But you're not looking at what progress has been made, so Power BI was able to bring in that kind of creativity in terms of getting new story lines. Like the western part of the country, we call it "the massacre of children." Children have been dying in such big numbers, but nobody had actually ever sat down and saw the progress. As much as the numbers are still high, the problems in western Kenya and Nyanza, nobody had ever sat down to see that the progress had reduced the mortality by up to 70%, despite the numbers being so high.

And so Power BI kind of like helped me to see that the stories can change. The story can change on how you report on it, on how you tell the stories. And then to build up on that element is that most people, especially where I come from, where data journalism is just taking its root, we are enthusiastic about it. Newsrooms in Kenya are enthusiastic about it, but it's still the basic, what percentage? But data sometimes actually doesn't influence storylines that much. All right. We've got a way of telling this story in such a way that I've never imagined before.

And just as I wind up, I began to realize that there were some elements in my newsroom that I wasn't exploiting, should I say. People that I wasn't using before. Like, whenever we are in the newsroom, it is always the reporter that is taking the credit. It is always the reporter that is seen. And if you want to expand your digital journalism and the power of visualization and use of data, you ignore some people. You ignore, you know, the graphic designers. You ignore the people who do the layout of the website. And because of my project, I was able to bring all of those people together to be able to do that kind of reporting. Like for once, it was not just the reporter. It was much more than just me going to the field and me coming back to the newsroom with the stories and laying it out. And I remember the first story that we did, I had to sit down with the person laying out the paper to match what I was seeing online on our layout.

And I think I have like two minutes. And one of the things that this project and the use of Power BI kind of like taught me, is the leadership in it. Like, this was a big project. It was many stories, working with different teams from many other parts of the country. You know, people scattered all over. The national media group is kind of like a big news. We are scattered all over East Africa. So being able to get stories to support the data that I was having from the 47 counties meant that I did not have to go to the field myself. So I had to kind of like rely on those people. And what that taught me is that I had to teach my teammates, like this is how you do an interview. This is how contact your fieldwork. It's important that you schedule your team this way. And after that project, I am happy to announce that it's in its third week, like I was able to be given a new responsibility in the newsroom to be the head of diversity, inclusion and belonging in reporting. I think that was kind of like influenced by the data that I saw when I was working with Power BI. Like I just realized, "Oh my God, we never report on these parts of the country." Because I was seeing the data. I would never do that. Like, why was this, when I was analyzing the data and working, I was like, "OK, in the northern area of the country, we see in this five year time, there was this change. Let's go to the field and find out." And then when I go to the field, a place I've never been to before, Kenya is quite diverse in terms of not just the location, the geographic, but even the people, the socio-economics. So I was like, "We have to put in a little bit of effort to report on these places, on these places that we completely used to ignore." Like the northern part of the country was always just about this hunger. But now I saw we needed to have a more nuanced way of reporting about this place.

So because of the data journalism, it reminds so many things. Maybe I'll have a kit for my newsroom on how to do things. Your strategy, what long term effect that project had on the newsroom and then working with the team. We pushed them to a certain level. Like when they go to the field, I have to watch out. "Are you OK? Are you want to get of?" In pursuit of this one data journalism project. Vera, I think that is what I've got to share up to now. I'll be open to questions later.

Vera Chan And I know a lot of you guys in the chat want to see a demo. Cathleen is going to show you a demo. It is true that Power BI is a Window's PC tool. There is a Power BI online. It's mostly for after you've built your data journalism project. It's more robust than you can do online through Mac or PC. But the initial building is going to be. But Cathleen is going to tell you more.

Cathleen Crowley All right, I know you guys are eager to see the tool, so I'm going to bring you through a visual I did. In upstate New York, we have a horse racing track, and there are way too many horse deaths here. And so the New York state runs this open data website. And they keep these great databases, and they're updated daily. So when a

horse dies, it goes into this data set right away. So I could download it as an Excel file, or I'm going to go a different route. I click export, and I'm using OData, which is basically like an API. It's a data connection. It's a URL. And every time that Power BI goes to that your URL, it's going to pull down the most recent version of it.

So now I'm going to hop over to Power BI, and here we are in Power BI. Let me take you through it a bit and get you oriented. I have it set up so that I have a template here with my fonts, my headlines, my logo, so I can hit the ground running. It also has my colors built in, my color palette. And this is the canvas where you do the data visualization part of it. Over here on the far right side of their fields, this is where when I add a data set, where there's an Excel file or something else, the column headers will all show up over there. This visualization pane is all the default visuals that are available to me. And down here are the values that you put into them. So when we have some data here, I'll literally be dragging the fields over to these value buckets to start creating the visuals.

But first we need data. So I go to the "get data" tab right here. And this dialog box comes up, and these are all the different data connections that you can make. Obviously Excel files, CSV files, those are the easy ones. Power BI actually does a great job of getting tables off of a PDF. And, you know, as reporters, the PDF's are like the bane of our existence. When someone responds to a data request with a PDF, you just shake your head. But it does a pretty good job. This list is very long of all the different ways you can pull in data to the tool, and we're going to use the OData feed. So click on that. Click connect. It's going to ask me for the URL. I put it in there. Hit OK. And now it's going to ask me if I just want to load it up and start working on it, or do I want to clean up the data a bit. So here's a little preview of it. And I'm going to say I need to clean this up. So I'm going to hit transform the data.

All right, and this is the power query editor. This is kind of like under the hood or in the basement of the tool. This is where all your data work will be done. And it's a really powerful tool, where you can clean up your data, you can filter it, and make it smaller, and cleaner, and faster. It gives you a preview about the first thousand columns. But any changes I make to the data in here are not going to change the underlying data set. It's just going to keep track of what you want to happen to the data.

And I do want to do a little cleaning here because I want to show it to you a bit. So first over here, there's the year column, and the year column is being brought in is as a number. And that's a problem. You don't want it to sum up to what's 2009 plus 2009. No, it's not really a number. In our case, it's a category. So we want to change it to text. And this is how I change the data types right here. Also cleaning up your data is very important. If the people entering the data spell "Aqueduct Racetrack" wrong, it's going to show up differently. I can quickly take a look at the tracks that are here. And it looks like they did enter them pretty cleanly, and everyone spelled "Aquaduct" right and "Finger Lakes" right. But some of them are really long, so I just want to slim down how long some of these are. Let's see. I'll show you. This is going to be very similar to Word. I want to get rid of "NYRA" out of there. I'm going to right click there, and hit replace values. And I want to get rid of "NYRA," so I'm going to replace it with nothing. I'm going to hit OK. That's going to run through the entire data set and get rid of any time that it says NYRA. I also want to get rid of "gaming &" because we're just focused on the racetrack side of it. So let's get rid of "gaming &." And oh, this one in Monticello, I need to get rid of "Mighty M Gaming." OK.

All right, that cleaned that up. That's just a quick view of how you can start cleaning your data. And one of the best parts of this, on the right hand rail here, you're going to see a

history of everything I've done. It's like a breadcrumb trail showing you everything, every transformation, you've done on your data. And that is so helpful when you've made a mistake and can go back and track it. Also, if you dip back into a project a month later and say, "What did I do to this data set?" It's right there and shows you.

I'm going to keep this ID here, which is a unique ID. I'm actually going to use that as we build this. I'm going to change the name of this to "equine deaths." This is the name of my data set. Just, it comes in with this really generic "query one." Now we hit close and apply. And we're going to go back to our; it's applying them right now. This yellow shows up while it's applying those query changes, it's called.

And then we're going to start building. First, I want to build just a simple bar chart that shows how many horses died each year. So that's a pretty simple one. We just need the year and how many incidents there were.

You know what I realized. I need to go back and transform. I forgot to filter that down. I just want equine deaths because this data set also includes injuries, like major injuries. So we want the incident. Where is the incident? Incident. We want equine death. Sorry. So I'm just filtering that down. All the other injuries are going to be filtered out of this. I'll hit close and apply again.

I see someone raise their hand/ maybe someone can help offline while I keep going right here. All right, so now here we are.

We see all the column headers showed up here in our fields. And so to build the column chart, I'm going to click on this clustered column chart. You're going to see an empty container show up here. And here are the fields that it's asking me to fill in to create this chart. So on the axis, I'm going to just literally drag over the year. And for the values, I want it to be the account of the number of incidents, so I'm going to use that unique ID and put it in the values. There it shows up. Now, if you look at it, a little something strange is happening. Do you see how it's sorted? It's sorted from highest to lowest, and we want it to go in chronological order. So I'm going to click on these three ellipses dots and say "sort by year." And then I'm going to say "sort ascending."

Here we go, and now we have it shows you by year. Now, let's style this a bit more and make it a little easier for the user to see. I'm to go over to the styling tab. See this paint brush here? This is where you access all the styles that are connected to this chart. And I'm going to turn data labels on. That's going to show the value of how many horses died each year right above the column. I like that. And I'm going to turn the background on so that a little background shows up behind the number. And I think that looks pretty sharp, and it's pretty helpful to the end user. I'm also going to get rid of this little header that comes in automatically there. That is helpful to know what data you're looking at there, and what you brought in. But I don't think we need that.

All right. Now let's make it a little more interactive. I'd like my users to be able to decide what track they want to look at. So in Power BI and Excel speak, that's called a "slicer." It's basically a filter. And it's going to be a user filter that they can use. So I go back over to my visualization pane. I need to make sure that nothing is selected on this side. So nothing is selected, and I'm going to choose the slicer. There's that little filter right there, and it shows up right over here. And I'm going to drag the track in. So it's asking, "What field do you want in there?" I want the track to be in there. So there we have all the tracks. They just

showed up. I can resize things pretty easily. I just click around and use these little handles on each of the container boxes to make sure it's the right size there.

And one thing I really love about Power BI is that interaction is automatic. I don't have to tell Power BI I want these two charts to interact. It automatically assumes it. So if I click on "Bellmont," you're going to see down here, the chart is going to change and show me "Bellmont." If I want to see "Aquaduct," it'll show up right there.

So I think I want this filter to have a "select all," so the user can go back. So I'm going to go over to the styling tab again. Click on that. And under "selection controls," I'll say "show select all." I also want to give them a little advice on what to do. I am going to turn that automatic header off, and I'm going to put a title on. I'm going to say "select a track." And I find my readers are not used to these interactives, and they need a little advice and tips on what to do. So I try to use bright colors to tell them, "Come on over here. There's something you should do. You can play around with this." So let's increase the size of that, and maybe make it a little more bold.

There are quite a few formatting, styling options here. If you are an artistic type person, you can spend a lot of time fine tuning this to perfection, and you'll find there's quite a few options on how to do it. So I'm going to make that big enough so it goes there.

So there we go. We have a basic interactive right there. We can add a headline and subhead. Can someone give me a little idea of how much time? How are we doing on time here? We're good? All right.

So maybe someone can suggest some headlines in the chat, and, Vera, maybe you can tell me that? What a good headline is?

And I'm going to work on "dynamic text" right here in the subhead. So dynamic text means if someone clicks on one of the tracks, something different will show up right here, showing you something specific about that track. So we are going to use something called; I'm going to get rid of that text that I had there. It is a placeholder. And I'm going to use something called a "data story." So I go over here to my visuals, and I'm going to use the "enlighten data story." And the data story allows you to pull in fields that you want to change. So we're going to use the track name, and we're going to use the count. I'm going to put it in the order. The count and the track name. And now I click over to the styling field. I think I need to change this to account. Oh, I see. I was on the wrong thing there. I'll go back and make that track again. I selected the slicer by accident when I was trying to style it. That's what got me in trouble.

Got it. All right. Back to here. All right, so back on the dynamic text. I'm going to click over to the "styling" tab, and let's write our story.

Vera Chan We have one suggestion for a headline, "don't bet on these horses."

Cathleen Crowley "Don't bet on these horses." I like it. Thank you. Oh, boy. All right. So we're going to say. Yeah, this hashtag is telling Power BI where to put the first data point, and the number of deaths, actually it needs to be a count, the number of counts in the track. So this is our first data point, and that's our second data point. And the hashtag tells it where to insert it, so "there were datapoint one deaths at" and this is the racetrack. And so you can see a preview of it right there. There were 760 deaths at Aqueduct Track. And we could change this. We could filter this to be just in 2019, and I think I'll do that. I'm

going to drag the year over to the filter, and I'm going to select just 2019. Well, there were no deaths at Aqueduct in 2019. Interesting.

Vera Chan And while you're doing this, Cathleen, we have a comment. This is the true cost of professional horseracing.

Cathleen Crowley Indeed, indeed.

All right, so there we go. I've got that showing up, and I'm back to my story. I'm going to add there were "hashtag deaths" at the track in 2019. And now I'm going to make the font sizes a little bit more similar to each other here, so I'm just styling it a bit. So 16. Now I go to the data points, and this is the styling for the data points, font color black. There we go. And so now when we click on another raceway, it'll change that automatically, right there, and also down here on on the chart.

So that was 15 minutes. And so "don't bet on these horses" is our headline here. Written by a true journalist there. Make that a little smaller. And I'll get rid of this little title that's showing up over here. All right. There is a really simple interactive, but I think this would be something that your users, my users, would like to do, to look at their local racetrack and see how many horses have died over the past several years. And it can be powerful, and it's also engaging. And it keeps them in your story and on your website, and that's what we're trying to do, isn't it? So any questions?

Vera Chan Brian got more colorful of what happens with these horses. But people can look in the chat. How do you change the color of the bars, and are all the data related to Santa Anita racetrack?

Cathleen Crowley This is New York State. So this does not have Santa Anita racetrack. You can change the color bars over on the styling menu. There should be a data color tab. There it is. I can choose a basic color. This is my Times Union data colors. We can choose a custom color. You can also make it a formula. So you could base it on the number of deaths at each track, so it's almost like a graduated color bar. So there's a lot of color options there.

Vera Chan So, Cathleen, a million questions are coming in. But the lead ones are how long did it take you to use this or master this? How can you export this? And what are the advantages and disadvantages of Power BI versus Tableau? One minute, go.

Cathleen Crowley Oh, my God. That was a lot, Vera. It helped me tremendously that I had some strong Excel background when I came into this because I found it very familiar, especially on the data connection and data cleanup side. It had a very Excel feeling, so that helped tremendously. I was able to do some very simple interactives right from the get go. But every month my skills have grown. But there was an initial learning curve. Not going to kid you there. There definitely is. I had used Tableau previously. I found this, Power BI, easier than Tableau. And one of the main reasons I moved away from Tableau, which was my first love, it is a great tool, it is a wonderful tool, but it didn't look good on our website. The imbeds look really bad, especially on mobile. So I when I came over and tried Power BI the imbeds look good.

So when it comes time to publish, you go up here, and you click "publish." It publishes it to the Power BI server, and from there, it can create an embed code. And you can use that embed code by itself, or there's actually an optimization tool. And I will send you the URL

for that. And that optimization tool makes it even more dynamic, so it renders well, based on whatever screen you're on. And it's been very successful for me. Although you'll notice my default visual is this portrait style. That works better on my web page just because we have ads on the right and the left, and it just so happens that it looks great on mobile phones that way, too. So I don't have to create two different versions. So that makes it very quick for me. I will share that optimization in the chat.

Vera Chan Great. So I know that we're actually already nearing the end of our hour, and I do want to bring it back to Verah Okeyo. And we will share more links on how to learn more. We do have online tutorials. Yes, we have answers, people. We didn't just show up just to show you something, and then just leave, and not have something for you. So we definitely have things for you. We have tutorials. We have office hours. Cathleen is also available as a trainer. We've gone to places like NICAR. There are self-guided tutorials. Again, I'll share all that. But I want to hand it over to Verah Okeyo. Because I think one thing that is important, that anything that you do that makes you the only person in the newsroom to do this, is that you end up having to lead. Right. And you have to kind of make the newsroom buy in. We hear so many things about like, yes, we want to have data journalism, but we don't have the resources. And Verah is going to track a little bit about what that process was like for her.

Oh, yeah, sometimes when you say resources, you know, with all that's going on in the newsrooms in the world right now, people just think money. People just think money. So at that, I realized from the very beginning, as someone who's been in the newsroom for nine years, this is the only job I've done and I love it, so I realized from the very beginning that if you start on innovation from the point of "can I have more money," that's going to be a problem there. So my strategy was, why don't I use what I already have at the very beginning? All right. Like the storytelling. My colleagues were interested in data. So what worked for me is like I was at a point where newsrooms in Africa, generally in Kenya, they were looking for a way of how they can diversify that content. Because, you know, the newspaper is sticking in this part of the world, but it's not enough. Like if you look at the studies Reuters Institute of Journalism has produced, that we also experiencing that decline.

So I came to my superiors with a solution, like "This is going to give us some sort of a solution. Both for diversifying content, for how to change how it is consumed." And that's how it worked. So when you demonstrate from the very beginning that these are free tools. Like we have the website. It's free. And then now it can be better by having something a little premium. Then once you've demonstrated how this has worked, it will be possible to make a business case for this other one. All right. So how that turned around is like eventually I ended up having Shorthand. Shorthand is another visualization tool, which the company procured for me to be able to show the kind of stuff that we have. Because I wanted to have a platform that can show the photos pretty well, that can show the visualizations pretty well. And that is how it worked. And then the next thing was a buy in within your colleagues so that you don't just become the only person who knows how to work with this. Like anybody was interested, and I'm like, "You got to learn this, because Power BI is not just for visualization for journalism alone. It can work in other sectors of your life. So you're not going to be in the newsroom forever." So people came to try and learn about it because they want to be able to know how to operate.

It. And the good thing is that you can have premium Power BI, like you can pay for the premium version of it. But it is also available for free on the Internet. So you can just use it before you start becoming all complex and techy. It's still available free of charge to be

used on the Internet. And if you have a laptop or a desktop and some Internet, there you go, like you have it. And then just a lot of like I'll have to say I had 10% of this skill and 90% of strategy, and tenacity and passion. Because the buy in was a lot. And then also the journalism. The fieldwork has to be strong so that you are able to visualize something that will accompany a good story. A good story that is text, and interviews, and what you do. So balancing that, that is something I had to learn to balance that. Like, it's not just the visualization. But it's the teamwork, the journalism itself, going to the field, and then now combining all that and making the case for, "Now, let's institutionalize this. Let's not just have it like some little pocket of an assignment that we had. We can make this part of what we do, and how we run our detail and everything." I don't know whether that answers the question, Vera. Does that answer the question?

Vera Chan Yes, all I do is work at a technology company, and, yes, I think that does answer the question. But we've got another minute if you wanted to wrap up about some of your thinking, and I know that you're always open for collaboration as well.

Verah Okeyo Yeah, yeah, there have been a lot of collaborations with that, and I'm still welcoming that. I'm still welcoming a lot of collaboration.

Vera, could you just take it? Yes, "asante sana" is Kiswahili for "thank you very much." So the new desk, the diversity desk, where we are telling all the stories, which was born out of working with Power BI and analyzing the data and work that comes with Power BI, is trying to explore journalism. Journalism that is not the usual ABC kind of reporting, the kind that we are used to every single day. So without Power BI, I would never have realized that, like the creativity and deciding where should you focus your attention would not have come through. So thankfully, because of that, now we have the diversity, inclusion, and belonging desk, where we are trying new methods of telling stories, focusing on subjects and people that we were not usually reporting about. After the experience that I realized there are parts of my country that I never just give attention to, and now I have it. So I welcome this kind of partnerships and all the pointers that anybody could have. So if you want to work on stories on this side, just come over. Thank you.

Vera Chan Thank you. And the one thing I also wanted to mention before we wrap up is that sometimes you win awards for these kinds of things. And I know this is not always your goal. You're just trying to tell a story. But, Cathleen, if you wanted to weigh in a little bit on that. And Cathleen has been winning these awards not just every year, but she's sort of swept by winning first and second place. Cathleen, did you want to say a little bit about this?

Cathleen Crowley Well, I have won some statewide data visualization awards, and it's in the the medium-sized newsroom category. So I'm not competing against New York Times or anything like that, but sometimes I am the only entry in the category. And I do credit being able to work in Power BI that I can do it quickly, and I can do it with making beautiful visuals. And that is something that most mid-sized newsrooms are not able to pull off. So it's a credit to my company that they've given me this role where I can explore this and that they support it. And it has it paid off with awards, which is always nice.

Vera Chan And so we have been sharing links in the chat. We'll share it one more time. Of course, this is being recorded as well. But one of the things that you'll be seeing is a keep in touch, right? We want to be able to help you. Our journalism training is free. Cathleen is also available as a trainer, as she does happy hours. Happy hours! Office hours!But you know what we'll do happy hours too. You just let her know.

But this forum will also not only get you in touch with our Power BI training, but we also do other types of training as well. So we're happy to talk to you about what your needs are. The other link that I shared is actually Microsoft 365 for journalists, where we teach you things like how to use PowerPoint with video hacks, where you can do lay audio tracks on a slide, and things like that. But if you scroll down just a little bit, you'll see the "sharpen data journalism skills." And so you'll have cool stuff like a poster anatomy of Power BI. You have lessons on. You know, we use this when we teach newsrooms, but you guys can also follow along for yourselves and learn how to merge and join data, visualize and interact with their data, and publish a report to the web. We also have off the shelf vizs, if you want to use it right now. Like you don't want to learn anything? Fine. We've got voter turnout data. We've got COVID-19. And we've got election campaign finance. So if you guys want to download that and just use it, please feel free to do so because we all built this so that you can make it just a lot easier for yourself.

And then we have a data journalism playbook. Again, when we partner with King 5, they wanted to write about; they have actually gone to NICAR and talked about what it was like to a broadcast station doing data journalism. And so this was something that we kind of based that model on our playbook and what they said.

And then another thing to think about, too, is Microsoft Power BI community is like everyone, right? Business, intelligence, academics and journalists. We have a community group. So you guys can go and join the forum and just share your stuff and just talk to people, other data junkies, to get their advice. And what's kind of cool about this is there is a category just for news. Cathleen's stuff is also in here as well. So if you want to see what other people are doing. And by the way, the audience in this area is pretty large as well.

So I just want to go ahead and wrap up and kick it over to Mallary.

Mallary Tenore Great, thank you so much, Vera, Verah and Cathleen. That was incredibly informative, and I love how practical it was. I think that journalists will really be able to take what they learned and apply it to their own work in their own newsrooms. And thank you as well to Microsoft again for making this workshop possible.

So to everyone in attendance, we hope that you will join us later this afternoon. We have two other great panels. Our next one starts at 1 p.m. Central. And we'll be learning more about how to cover electoral campaigns in the digital age with a focus on the U.S. presidential election in 2020. And then at 4 p.m. Central, we'll have a great panel that will look at how to reinvent sustainable models to make local journalism thrive and survive in the digital age.

And speaking of happy hours, we will, in fact, have a happy hour later today at 5:30 p.m. Central. And so if you've registered for that, we will be sharing more details with you soon. So I encourage you to visit ISOJ.org and look at our program, where you'll find more information about how to access all of these great events and also look at the speakers who will be speaking with us later on today. So thank you again for being here with us. And we look forward to seeing you back here very soon as ISOJ 2020 continues.