ISOJ 2021: Day 1, Workshop

Lessons from the Global South: How innovation has helped newsrooms around the world

- Ludovic Blecher, head of DNI Innovation Fund, Google
- o Styli Charalambous, CEO, The Daily Maverick (South Africa)
- o <u>Innbal Menashri</u>, data project manager, Haaretz (Israel)
- o <u>Tai Nalon</u>, co-founder, Aos Fatos (Brazil)
- o John-Allan Namu, CEO, Africa Uncensored (Kenya)
- Maria Li, chief operating officer, Tech in Asia (Singapore)

Ludovic Blecher Hi, everyone, and many, many thanks for being with us today. I'm Ludovic Blecher, and I'm the head of innovation for the Google News Initiative, the GNI. I'm a former journalist, a former chief digital officer. And at Google, I'm in charge of a global program called GNI Innovation Challenges, which consists in open calls for projects around the world to stimulate new thinking in the practice of digital journalism and explore new business models for news publishers. Today, you will hear from news publishers established in Brazil, in South Africa, Kenya, Israel and Singapore, all selected by the Innovation Challenge Program to implement an innovative project. It will be all about their learnings from their innovation journey to try to bring a rich and diverse perspective to the topic of this workshop, Lessons From the Global South: How Innovation Has Helped Newsrooms Around the World. You will first hear from each of them as they will give a five-minute update about their projects, and then I will moderate a panel with questions taken from the audience. So get ready to ask your question after you hear from their presentations.

We will start with Styli Charalambous, the CEO and publisher of Daily Maverick in South Africa, and he's going to walk us through his project about the power of data to enhance readers' experience and increase engagement. Styli, floor is yours.

Styli Charalambous Thank you so much, Ludovic, and thank you to the organizers for having us and having the opportunity here today to talk to you about this project that we've been working on for just over a year, and the benefits and the challenges, and some of the learnings that we have from what we call the RevEngine project at Daily Mayerick, which was so kindly sponsored and funded by the Google News Initiative project. So all innovation usually starts with a problem, and the problem that we had that we were trying to solve was that small-medium news publishers like ourselves have no shortage of data. But the trouble is that really we were unable to harness the power of that data due to a number of reasons, the first being cost and other resource implications to implement such solutions. The other big challenge is that we have multiple and disparate systems that we're using, for example, for our newsletter, for our content management system, for our membership and subscription systems. As news publishers of a smaller size, we were unable to build systems from scratch. These often end up in different systems and are very difficult to extract and to aggregate that information. And then finally, it's not often that small-medium news publishers of our size are then able to access the skills that are necessary to actually interpret and take meaningful action from the data insights that are generated.

So what was our solution to this problem? The first thing was that we had to build a data lake, in which we could add a lot of unstructured data from these key systems. We then had to go through the process of structuring and aggregating the data, matching it up so that we were able to make sense and create single views of our readers and their behaviors. And then the next part was to create data insights that could inform our editorial teams, our product teams, and our business teams in the decisions that they were going to be making. So this is what it kind of looked like. We use Campaign Monitor as our newsletter system, so we took data from there, a lot of data. We send around 15 million newsletters per month. We use Woo Commerce to manage our membership program. We use WordPress as our CMS, so the registration data from all our website users and registered users. And then we use an Open Source system to capture browsing data of our readers to our website. All of that went into the data lake that was then structured into various different measures for querying and then used in a number of different ways. which was building a WordPress plugin so that our editors could do stuff with that, sending out email alerts and Slack alerts, and then also creating content recommendation widgets for our readers as well.

So the challenges that we had in this time was obviously as we kicked things off, COVID happened, and we will know the challenges that are familiar with changing behaviors and also changing focus and attention as the business challenges of being in the news and everything else that we were doing demanded a lot of attention of the project team. And so that was probably the biggest challenge that we had to adjust our working behaviors around. We also realized pretty soon that it was quite an ambitious scope that we had taken on for the project, and it kind of got big on us. And so we're continuously having to prioritize and focus our efforts so that we were able to get meaningful results and progress on each of the things that we set out to achieve. And then realizing for the first time that this was our first time at accessing and handling big data and the complications that go with it. I think only once you get to wrestle and wrangle with just the volumes of data that these systems are creating, do you only really get an appreciation for how hard it is and potentially how expensive it is to manage such big data projects. And it's quite easy to get lost in all the detail, in the amounts, and the reams, and the volume of data that gets created in our business. And so it's always having to remind ourselves that data and data insights need to be in the pursuit of strategic goals. So reminding us of setting that, being clear about what those strategic goals were was something that we had to continuously focus on.

And so what were some of the use cases that we managed to get from this? So trying to get a single view of the reader and building what has become known as a customer data platform was one of the big goals for the project so that our editorial teams, our membership teams, and our product teams would be able to find one place where all that data is available, and we can see the relationships of how newsletters drove the majority of our members on the sign up process, and what kind of newsletter they were signed up to, and what kind of behaviors led to membership conversion, for example. As we mentioned, segmenting audiences and being able to identify who's most likely to subscribe and churn was another big use case for us. And then generating content insights, which were the best and worst performing articles, tags, and themes that we've seen in a lot of this information was done in bits and pieces. Marrying that up with which are the best performing newsletters, for example, being able to get a more complete picture of what our content offerings and how they were performing. Resurfacing all the content, you know, when we're going through the great expense and effort of creating really great features and then just seeing them have a shelf life of 24 hours where the majority of their reach is gained, trying to change that was also one of our goals. And then also allowing data and

data insights to help our editors manage the homepage, and order the homepage, and create content recommendations that were better for our readers. And then finally working on some really interesting things, like looking at sentiment and entity analysis from what our articles were generating and then being able to take action based on those insights.

So one really cool example was where we were alerted to a piece of content that was published for the first time in January 2020. In its first publishing, it and achieve 23-thousand pages for us. And once we had implemented some Slack alerts for monitoring the behavior and the traffic to evergreen content in about August, September, a couple of months into that, we were alerted that this article was getting a lot of attention again, exactly a year later related to high school results in South Africa. When we got the alert, we put the article back on the home page and then kept adding it and keeping it back on the home page, because we could see this data was not through and was still generating traffic. And to the extent that because of this alert, we were able to generate almost ten times the number of page views and engagement from its initial publication a year earlier, and so it was really great to see how evergreen content could be reused again to generate engagement in traffic for us.

Some other results. Our newsroom and our editors now use more data to order our home page, where before they were doing this on gut instinct alone and just without any informed data analytics. As I mentioned, resurfacing of old content is now easier through the process of Slack alerts. And we're able to see which of our tags are trending in the last day, in the last seven days, in the last month, and we can use that for a variety of reasons, variety of use cases in our editorial teams and as well in our membership marketing teams. In 2020, we experienced a more than double increase in our membership program, and not all of that is due to having the insights that we have available to us. But we were able to build a dashboard that gave us a more comprehensive understanding of where that traffic was coming from, what was driving the conversions, and then being able to pull those levers. We were able to generate automated daily reports and really comprehensive dashboards that we use on a daily basis to manage our membership. Our article shelf-life increased. Now, instead of having a 24 hour spike on features that sometimes we work on for months, we were able to change the shape of our content so that it has a longer lifespan. And in that process, we were able to double the number of people who visited the site more than 15 times a month, which is our metric for our highly engaged brand lovers. And then in addition to assisting the growth in revenue that comes from having more engaged readers and being able to grow a membership program, we were able to save roughly \$50-thousand dollars or more in having these kinds of systems, and these analytics, and these data insights available to us, generating these daily.

Ludovic Blecher Many thanks, Styli. It's always fascinating for us to see what comes out of this project, to see the impact, and to realize how much it affects many different parts of your business, from content production to monetization and then your revenue. And it's fascinating. I keep my questions for later. Now we go to a completely different region for a completely different topic. We go to Brazil with Aos Fatos and Tai Nalon.

Tai Nalon Hi, thank you. My name is Tai. I am the executive director of Aos Fatos, and I'm here to show you what we have accomplished with Aos Fatos, our real time, low-quality content moniter that was developed in order to detect, prevent, and combat disinformation campaigns on social media in Brazil. So that monitors and oversees what are the most popular pieces of misinformation in Brazilian Portuguese, so it's spots low-quality content. And what is low-quality content? They are posts on social media and websites that have a higher chance of being misleading and fake. So we created, on average, 30 rules for each

social network based on language patterns that are commonly used in disinformation campaigns. We started by monitoring the coronavirus pandemic, but we also have other monitoring currently, like threats to the Brazilian democracy and attacks against the justice. This is Radar, and if you enter aosfatos.org/radar, you will be able to find the whole project.

So how does it work? We have a team that we monitor, as I said before, like COVID, the pandemic, or other types of things in which we select the most common language patterns associated with fake news. We do that based on our database. Aos Fatos is a factchecking unit in Brazil and does very relevant work and has a very big database regarding pieces of misinformation that we have debunked over the years. So with an API data collection using those queries, we map social media platforms and get a huge amount of data that we clean and organize in order to understand and give grades to each of those posts to see if they rank better or worse regarding the quality of their information. So some ways that we find to actually understand how those low-quality content have the most chance of being false or misleading posts is that we use some rules, such as if they are associated with heated emotions, if they are relatives scoring platforms such as CrowdTangle regarding the amount of times that the post was shared. They are viral, and we follow over 900 pages, plus 150 groups in order to gather that amount of information that we monitor. So misspelling, all caps, use of offensive and alarmist terms. Watch the video. Share. Let's make this viral. All of this is relevant for us to map and see if it is moving forward.

This is a classic example of one post that Aos Fatos has actually discovered as potentially as disinformative. This is one other post that uses optical character recognition, which is a very important technology that we have also associated with Radar because this is a very common technology that we have used to gather information in Radar because some patterns, they are somehow inside GIFs, inside videos, inside images, and they are not so easily traced with text language patterns. We have also found that disinformation at scale is in Brazil used as government policy. So we see lots of politicians, high ranking politicians, using this type of disinfromative post in order to engage its supporters. So we found the same patterns on Instagram to emojis, hashtags, all caps, images with OCR. It's something that prevails in many social networks. So we've seen this classic example thrive on Instagram, but also on WhatsApp and sometimes on Facebook as well, using the very same patterns. So here is a classic example of texts that are associated with images on Instagram, with hashtags that promote misleading topics. In the newsroom, those insights provided Radar help our team to decide what topics are trending, and what to cover, and what should be fact checked. And also, we use Radar data and methodology to tell stories about the spread of misinformation in Brazil. Radar is able to give us insights regarding how some specific topics of misinformation are driving on social networks. And we have showed that President Bolsonaro and his colleagues were responsible for 83 percent of misinformation about COVID-19 treatment shared on Facebook and that doctors spread misinformation regarding COVID over than 30 million views on YouTube. That's all. I hope to answer further questions. Thank you.

Ludovic Blecher Thank you so much. It's really inspiring and again underlines the importance of understanding the data, identifying patterns, the content analysis. The work you are doing is really massively important in that space. Now magic of this innovation challenge program will completely change regions again, and we go back to Africa for a deep dive into an experience with Africa Uncensored. John-Allan Namu, co-founder of Africa Uncensored, will walk us through and speak about a new kind of collaboration with readers to generate conversation with the audience.

John-Allan Namu Thank you very much, Ludovic, and thank you very much for having us and for supporting the ideas that we had through the Google News Initiative. As Ludovic said, my name is John-Allan. I'm one of the co-founders of Africa Uncensored. We're an investigative platform based in Nairobi, Kenya. And the name of our initiative is Piga Firimb, and Piga Firimb essentially means blow the whistle in Swahili. And the reason that we chose that as a name was because we began an online initiative in 2019 to fact check lots of misinformation that was going out there, as well as provide whistleblower reports to members of the public who would then share the reports with us.

One of the issues that we faced or one of the challenges that we noticed with regard to Piga Firimbi was something that I think perhaps is noticed in many, many parts of Africa, is that the majority of our audiences, meaning the majority of the public, are not frequently online. And they're not frequently online for very, very specific reasons. They're not online because of the cost of data, the cost of bundles to be able to get online, to be able to share information, to be able to become part of that online conversation that usually generates news for legacy media as well as alternative media here in Kenya and in different parts of Africa. And what we thought that we needed to do was, rather than go forward in terms of trying to inculcate this kind of habit with regard to the conversations that can be very easily picked up from online, was to take a step back, essentially. To take a step back and use technology that would create the least amount of friction with the largest amount of the population who we were interested in speaking to, interested in sharing insights with, and interested in generating a conversation with, which was through the Short Code SMS platform.

Now, why Short Code SMS platform? Because, like I said, Short Code SMS platforms are very, very easy. Very easy in the sense that members of the public are used to them through radio conversations, through televised conversations, where they'd be requested to send specific messages to a specific Short Code in order to generate some sort of conversation. But that conversation is usually initiated in the newsroom, as opposed to conversations that are initiated by members of the public themselves. The Short Code is also something that people are used to because it's being used for various other services, whether to download music onto their phones or to receive news alert, which cost. But in our case, we wanted to create a free Short Code in order to be able to generate that conversation. And another thing, based on cost. The members of the public here and in different parts of sub-Saharan Africa now have massive access to smartphones. The problem still remains one of access. Are they able to use their smartphones to the largest extent, to the greatest extent, in order to be able to access the Internet and access various news sites? That's still an issue here. So at African Uncensored, we created a Short Code in order to trigger subscription from the public. So that's something that can be used both on smartphones and on dumb phones. And of course, the Short Code was a AUC 20705.

And when we generated this Short Code, our goal was to be able to create a subscription base of about 100 people to begin with, just as a test case. A Short Code of a base of about 100 people, who would then subscribe to our platform and then start to generate a conversation with them directly. What would happen on radio shows is that they'd ask a question and then people would send an answer, and so we tried to borrow from that. And once we did that, the second thing that we then went on to do was to publicize the Short Code through the platform that is still most popular in our country, which is radio stations. Because we were targeting underserved communities, we were very specific about the radio stations that we wanted to go to. So we picked radio stations that serve communities in informal settlements, people in underserved areas starting in Nairobi to be able to

publicize the Short Code and to start to discuss issues. And we picked one specific topic to start with, which was health in informal settlements. This, of course, informed by the COVID-19 pandemic. Through those conversations that we generated on two different radio stations, we then were able to start to get responses from some of the questions we asked.

This is what our dashboard looks like, very simple, very straightforward. And we're asking for very short answers. One sentence answers about specific issues. So, for instance, here we are asking about pneumonia in informal settlements and some of the causes that people associated with pneumonia, especially in this point in time. What I should add about this is that if you look at the column on your left, under causes, it says "baridi." Baridi means "cold," right. So knowing that we are able to now go to the areas where these SMS'sare generated and start to ask about the impact of perhaps housing, the quality of housing in those areas, the problems that people are experiencing with cold and respiratory illnesses. That then informs our own reporting generated by people on the ground.

And what the future is Piga Firimbi is that we're now building a more robust platform that is able to map key institutions such as hospitals, police stations, fire stations, anywhere where members of the public in those areas can get services that perhaps they're asking about, and then start to text them back directly about the kinds of things that they're asking. Another thing that we're looking at is polling. Polling what issues matter most to them, and that generates for us the data that we can then use to to start to explain certain trends in those communities. Once again, if we're able to bring these communities into the conversation, it becomes much, much easier to have national conversations that are more meaningful and more driven by public interest.

One of the challenges that we're experiencing is that it's still not that widely publicized. However, we're hoping in the next few weeks and months we'll be able to publicize that even further and get more granular insights from these communities themselves and start to inform more of our reporting as African Uncensored, but also generate reports and data that can be used by members of the public as well as media houses across the country. And that's it. That's our initiative through Africa Uncensored to be able to generate these kinds of conversations. Thank you very much.

Ludovic Blecher This is really interesting, John-Allan. Thanks, and I have tons of questions about the processes. I'm especially amazed by how you are learning through this journey to see how you can expand the scope to serve even better the underserved communities, so stay tuned for the question. We now go to Asia in Singapore for Tech in Asia, and the CEO of Tech in Asia Maria Li will tell us everything about a new user experience through a digital membership platform.

Maria Li Awesome. Thank you, Ludo. So hi, everyone. My name is Maria. I'm the CEO of Tech in Asia. For those of y'all who haven't heard of us before, Tech in Asia, we are a digital media platform. We're here to build and serve Asia's tech and startup community. So our primary product and function is through our newsroom, so we really try to cover the startup scene here and kind of elevate Southeast Asia startup scene onto a global scale. There's a quick snapshot here about our 10-year journey. I think I would just really like to highlight that we've gone through a lot of ups and downs that many digital publishers have gone through in the last decade or so. So starting off from an ad based and traffic model, over to event sponsorship, and most importantly, in 2018, we did launch a new news subscription product. And so that was relatively early for this region. I think here in

Southeast Asia, like many of the other regions represented by the panelists in this event, people actually hate to pay for media, and so it's been a battle for us to make our media paywall work from a business perspective. But I do think that the journey that we've gone through in the last 2.5 years, has helped us start to rethink about our content. We started to rethink about what quality coverage really means. And our paywall has enabled us to start thinking about our own business as a SAS business, software as a service, where you want recurring stacking revenue.

So that is where we ended up applying to GNI in January of last year. So our original submission was to build a digital membership platform. And what that meant was really creating a continuous feedback loop between our readers as well as our newsroom, so that we always had a pulse on the beat of what people wanted to read and what kind of content that they wanted to consume. So, I mean, it's a platform because it has two sides, right. So on the reader side, we wanted to be able to allow our readers and users to kind of customize their preferences, customize their content recommendations, push personalized content, make additional content recommendations based on their reading history. Things that we were kind of doing previously by instinct, we wanted to automate it all and tap into the power of tech in order to help us do so. And then similarly, on the editorial side, we wanted to automate the ability to do trend analysis, audience segmentation and really provide much more tailored journalism for our various readers through our newsroom content.

So where we're at now. Across both dashboards, we've kind of redefined what success really meant. So from a reader side, we are no longer really looking at page views and traffic. We're really looking at the level of engagement, the number of times that they're engaging with one of our premium content, which is our content that's kind of locked behind the paywall, and providing an increasingly personalized touch through our user preference and interest center. We've developed new interfaces for our premium content, as well as multimedia content to try and create stickier and stickier products for our membership platform. And then on the editorial side, we've basically created this editorial dashboard. You can see a snapshot of it here. It's a dashboard that's hosted in Tableau. And basically story by story, we can now start tracking how many subscribers that particular story began to convert. And so, like I said, this for us was like a total shift of how we kind of viewed success. And instead of chasing traffic numbers, we can now tell exactly what kind of content are people willing to pay for. And that to us, is a key indicator of what quality content really means.

And so some of the results that we've been able to achieve to date. So definitely, like I said, retention rate have gone from 70 percent from prior to launching this editorial dashboard to now 75 percent. Seventy-five percent, if you track any SAS numbers, is actually a really healthy retention number. I think like some of the best companies in the world top out around 90 percent. So we're pretty proud of that, and that's something that we're continuously trying to grow. Additionally, conversion rates. So if you look at our overall website traffic and how many of those are website traffic being converted, we've also been able to slightly nudge up that number. But of course, I do think there's a lot of room to grow there. And then more on the business side, stepping away from the metrics a bit. So that editorial dashboard has given us a lot more control of our own ROI, which means that we can have increased confidence when we're making editorial hiring decisions, we're making investments into particular stories or journalists and so on and so forth, because we can actually match that ROI from that particular story back into the investment that we've made. And so overall, it's kind of unlocked this new world where all of our business metrics, there's not a lot more guesswork and going based off your

intuition. We've aligned our business metrics to our content quality metrics, and honestly it's been pretty freeing for our newsroom as a result.

So I think what's left to do. Our editorial dashboard, I think the MVP is there. It's really much more on the user engagement side. Like I said, we have started to spin up more personalized pages. This is an example of our premium content page as well as our multimedia page. But in order to actually produce personalized, customized content, you have to be producing a lot more content in order to personalize it, so that's one challenge for us. And then, of course, ongoing cohort analysis so that we understand really the users, the traffic that kind of led them to convert, and then how to maintain it so that they remain sticky users and subscribers for us and continue to up their subscription, year after year. All right, so that's a bit about our GNI journey. Thanks for listening and please do check us out.

Ludovic Blecher Innovation definitely goes with iteration. And thanks a lot, Maria. Again, seeing all those numbers, those figures, what you learn, how you devoted along this journey is really, really interesting. So thanks for being that transparent and sharing that much. Changing regions again. We now go to Israel and Innbal Menashri, data product lead at Haaretz. We'll speak about personalization and a big question for everyone, how to find the right mix between automation and human curation when it goes to personalization?

Innbal Menashri Thank you for the introduction. I'm happy to share our process on how we combined machine learning algorithms with editorial work at Haaretz. OK, so before we begin, a few facts about Haaretz. Haaretz is one of the four major national daily print newspapers with a long history of independent journalism. The first edition on the web was aired in 1997 and paid subscription plans were introduced nine years ago. Our content is published on three digital brands. Haaretz in Hebrew, Haaretz International Edition in English, which you are welcome to visit, and an economics and finance brand in Hebrew called the Marker. We service 11 million unique users per month and reach over 1.5 million followers on social media.

Our project direct goal was to keep our users on the site. We wanted to ensure there was always a link to an interesting article on each page. The idea was that genuine curiosity would lead users to return to the site, that quality journalism would attract new readers to subscribe, and that subscribers would know there was always plenty to read. We also understood what we didn't want. We did not want to affect our agenda by writing an algorithm, amplify or hide content according to users' tastes, and this was also echoed by users we interviewed. So this is what our article page looks like on desktop and on mobile, and we decided to use the list of upcoming articles as seen here on the left as our central tool.

We noticed that the articles we were offering on the articles pages had two setbacks. One, interesting to me may not be interesting to others, and editing the site for a collection of interests wasn't always effective. The articles didn't change often enough, and users were offered the same articles again and again. Once they read the ones they wanted to read, they were left with the ones they weren't interested in, and for them it was a dead end. So our first step was removing articles a user had read and remove articles a user was offered more than once but did not choose to read. We then assume that once a reader chose an article, they might want to read similar articles as well. We added an NLP model that matched the most similar article and suggested it to the user. But then we met some difficulties. Many articles were too similar. Consider weather forecast at one end, but also

politics in a year with three election campaigns or health news during a pandemic. So we created a set of black lists and white lists to make sure all recommended articles were relevant in context and time.

Lately we added a second machine learning algorithm that recommends an additional article based on the reader's personal interests and past visits. We now show two articles chosen by our editors, one similar article, and one article based on a user's reading history. So did it work? Well, the impact on users was immediate. And from the start, we saw a distinct and constant preference for the similar article. What we can see here is that the click through rate for similar articles was 4.75, and only 3.15 for articles recommended by editors. The user history algorithm, added a few months later, shows a milder increase in preference. When looking at this data on each platform separately, we see that the impact of the algorithms varies with the platform, but that the preference is consistent. Interestingly, the impact of recommendations differed according to the article's topics. Blogs, books, weekend, sports, family, and science were most affected. That is to show that on news, opinion, culture and health users prefer the content handpicked by professional editors. Thank you very much and enjoy the rest of the workshop.

Ludovic Blecher Styli, Maria, John-Allan, Tai, Innbal, thank you so, so much. It was massively inspiring. It was that case for me, and I'm sure it was also very inspiring for the audience. And for sure, many people in the room have questions for us. We'll go directly into the Q&A session. Please, everyone, continue putting questions in the chat. And now, I'm going to use those questions to kick start the conversation with our panelists. Thank you so much once again.

Thank you so much for those presentation, and to be clear for the audience, it was prerecorded. So sorry for some editing issues. That's going to be fixed, and that's part of the complexity of the work from home situation. Now, we are fully live. Thank you so much for asking that many questions. I will not be able to take everything, but I try to cover most and to answer the most pressing questions so far. So first of all, everyone asks for you to provide a bit more information, all the speakers, more information about your operation, like the type of organization, who you are, what you do exactly. So when you answer, don't hesitate to provide a bit of additional context about what you do and the type of coverage and publication.

First, I will ask you a very specific question about some ideas of platforms, tools or instrument that help you in your daily work? We'll go through the table, and you have the opportunity to give only one tool, one platform or one instrument that you are using. No more. And we start with you, Innbal.

Innbal Menashri OK, thank you. I think the most interesting tool that we started working with is Looker, which is a dashboard tool that helped us look at the data every day and see the changes that were made. That was very helpful. It's very easy to visualize data and on Looker.

Ludovic Blecher John-Allan?

John-Allan Namu Well, we're using a range of tools because we do a lot of investigative work to do lots of network analysis, some from some of our partners like the Organized Corruption and Crime Reporting Project. So it's mainly for mapping investigative projects that we use on a daily basis.

Ludovic Blecher Styli?

Styli Charalambous Yeah, well, look, I'm more on the business side of things, so I don't really use a lot of the editorial tools. So for me, there's just so many, and this red engine project for us has been the thing that's bringing it all together. So for me, it's how do we consolidate and make sense of all this information? So I'm going to go with the project that we've been working on for the last year.

Ludovic Blecher Maria?

Maria Li For us is Tableau, so, I mean, we have Tableau licenses for everyone, and everybody uses it, from our data team, to our different journalists, to everybody in the business and operation side. It's our single source of truth within the company.

Ludovic Blecher Tai?

Tai Nalon Well, from our side, Radar is our main tool, but it's also very important for us to crowdsource this information is our chatbot at WhatsApp and Messenger, and we also have a different version for Twitter.

Ludovic Blecher So next question will be for both Tai and Styli, and it says a lot about the interest of everyone in the audience had for your presentation, because the question is for you, Tai. Is the technology you use available for the public, or is it exclusive for you and to Aos Fatos? And, Styli, one of the questions and comments here is that what you are doing is amazing, and it's a dream for a lot of newsrooms around the world. So question is, is that possible that Daily Maverick offers this as a service for other news outlets? So, in other words, can others use the tools you've created through your project for the GNI innovation challenge? Tai?

Tai Nalon So Aos Fatos is not an open source technology, but we have the practice of opening all the data that we gather through Radar's algorithm. So basically we send weekly to our newsletter subscribers the set of data that we have monitored, and gathered, and treated, and structured each week by theme. So you just need to subscribe to Radar's newsletters in order to receive that. And of course, this is a Brazil-centered project, and because of linguistic patterns, it is difficult for you to translate to other countries. We have this language barrier that is troublesome for us to scale.

Ludovic Blecher Styli?

Styli Charalambous Yeah, we would love to make it available to other publishers around the world to use it in some format. We're not going to be going down the road of open sourcing and supporting it because we're just not able to do that, but because so many of the tools and the systems rely on WordPress or Woo Commerce that we've used to do, we're going to pick the most successful of the features and then reach out to the WordPress team and the Newspack team to see if we can build some tools with them that they can then make available through WordPress or the Newspack program.

Ludovic Blecher And mostly because we have you here now, another follow-up question for you. How do you transform data into actionable insight for the editorial team?

Styli Charalambous That really starts with having a strategy and knowing what your measure of success is, what you're trying to achieve. Is it engagement with a certain

audience segment? Is it reach, for example? What is the most important thing? And I think it starts with having to set that strategy with the editorial team. How does it align with the organization's vision, and then working from there. I think only once you've done that hard work of aligning vision, strategy, and goal setting, can you then look to get insights from the data.

Ludovic Blecher Any comment here, Innbal, as you worked a lot also on that data analysis?

Innbal Menashri Can you repeat the question?

Ludovic Blecher So the question was, how do you transform data into actionable insights for the editorial team?

Innbal Menashri Well, we have different tools that we that we use. One of them is to see what articles are being blocked by our paywall and then people buy subscriptions, and then they kind of recommend these articles in different ways. And that's really showed a lot of impact.

Ludovic Blecher Thank you. Talking about paywall, a question for you, Maria. And the question is about how did you implement the paywall system at Tech in Asia, and how was the analysis you've done to determine which content had more chances to be featured as premium content in the beginning? Basically, how did you start out? How do you tackle the challenge of setting up the paywall system?

Maria Li So there's definitely a discovery process. So for us, we have a multi-tiered paywall system. So we do have a series of news briefs and I think general content that is metered, and so all users get up to five of those a month. And then we also have a series of premium content that is hard paywall, which means that without a subscription, you cannot access at all. And so we kind of separate that out. And what we have found over time is actually that we were kind of under investing in our newsroom for a bit because they're very short write ups. We're sourcing from other publications, and of course, crediting them. But actually over time we found that the news were drawing in as many subscribers as well as our premium content. What we counted as premium content and hard locked behind the paywall from the very beginning were things like your traditional long-form investigative journalism. And so that was an editorial decision, which was like, "OK, we've invested a lot of time and effort, and this is a story that's unique to us. And so we're going to hard paywall it." And then over time. I think you just have to see what that conversion looks like. How many subscribers are coming through on an individual piece in order to try and calibrate your sense of, like for your users, what actually counts as paywall content versus what should be more on the metered side.

Ludovic Blecher And as a follow-up question. How did it impact your editorial line? And did you focus more on what readers want, or what they need, according to you? So what has been the impact of a premium paywall model to the editorial line?

Maria Li Yeah, it's definitely made our editor in chief's life a lot more complicated because he now has to walk the balance between the two. We now have a much better sense of what readers want, and we're doing a much better job of catering to their specific interest. But at the same time, it's like looking for the data like right exactly under the spotlight, if you will. Right? So he also has a constant feed of other ideas, other topics, other formats even, that we're experimenting with and slowly feeding into the machine. So we're

constantly running sprints, like basically product sprints, content sprints, in order to test new concepts to make sure that we're not missing anything or leaving any value left behind on the table.

Ludovic Blecher So next question, still about a paid-for model, subscription offers, and let's say a readers' revenue strategy. And I would like to ask this question to you, John-Allan. So the question is, in your experience in thinking in the Global South reality, when is it too soon or too late to start a membership or subscription program? So this concept of the Global South is absolutely broad, and we can see through this panel how it's distributed around the globe. But let's speak about your region, John-Allan. Do you think it's the right time to launch a reader's revenue offer, and is the market ready for that?

John-Allan Namu Well, yeah, I mean, if you look at it in terms of how our markets are segmented, then, yes, to an extent for a small number of people comparative to the entire size of the market, then the market is ready. And in fact, there are people who are starting to monetize their audiences by providing with the revenue models. However, with our approach, what we're most focused on in terms of public interest is getting people into the conversation first. And that, I think, down the line will be a means through which reader revenue models for people in the lower tier and demographics can be developed, by understanding what their needs are and by understanding what, for instance, the price points that they'd be willing to subscribe are. Then we'll be able to develop something that's more tailored. But like the World Bank is saying, we'd need \$100-billion dollars across Africa to be able to grant access to a majority of the people in sub-Saharan Africa. So for a large segment, I'd say about 40 to 60 percent of the market in East Africa, for an example, it's not yet quite time to start to think about those models. However, given the way the market is segmented, there is a small percentage of people that can underwrite those kinds of costs for newsrooms across East Africa.

Ludovic Blecher So I have one last question for you all, and this one is coming from me. I would like you all to answer very quickly. I hear a lot that innovation is all about the idea, and I tend to answer that innovation is actually all about the implementation of the idea. What do you think about that, and where would you put the focus? What has been the more important, according to you, in terms of process of innovation? And we can start with you, John-Allan?

John-Allan Namu Well, innovation is the idea and the implementation. The only way that you'll be able to get as close as possible to an advanced solution that's acceptable for everybody is by testing the idea, by iterating as you go, and ensuring that some of the the wild and wide-eyed ideas that you had at the beginning work or don't work. So it's kind of both for me.

Ludovic Blecher Maria?

Maria Li I think a lot of innovation is in the execution of it. I think poorly executed innovation doesn't get you very far, and well-executed innovation is what ends up changing the world. So I'm biased.

Ludovic Blecher Tai?

Tai Nalon I agree that the execution is everything. Because, well, you can have a groundbreaking idea, but if you don't execute that, it's not applicable. It's not measurable. It doesn't have an impact. So even though sometimes you fail and you have to do it again, if

you have the project at the end, it is about the innovation. The innovation is the product at the end also.

Ludovic Blecher Styli?

Styli Charalambous Yeah, I would add the motivation for the innovation is also important. A lot of times innovation is pursued in chasing profits and not necessarily obsessing about the consumer or the reader. And I think if the motivation is right, that generates the good idea. And then if the execution is right, then you've got real innovation on your hands.

Ludovic Blecher Innbal?

Innbal Menashri Now, I think I agree with all that was said. I think that the opportunity we had to research, and iterate, and find solutions to the problem that we found on the way is what brought us success at the end. Even with changes in the product and a lot of problems on the way, it was what made it happen at the end.

Ludovic Blecher Thank you so much. Thank you, everyone. It was truly inspiring, and it was a real journey of innovation around the world. So thanks so much for being here with us. And it was especially late in Asia, so, Maria, a special, special thank you to you. I'm giving back the floor to Mallary for the conclusion. Thank you so much.

Mallary Tenore Great, thank you so much, Ludo, and thank you to each of you for all of the wonderful insights that you shared. I know personally, I learned a lot of lessons from hearing you speak, and I'm sure our audience was able to glean a lot of helpful insights and best practices from your presentation. So thank you so, so much for being here with us.

To everyone in the audience, we're so glad that you're here with us today, and we hope that you will stay tuned for the rest of the day. We have two other panels coming up this afternoon. And now since we're all meeting virtually, we can't help but miss the in-person conversations and networking opportunities that have traditionally been a cornerstone of the in-person ISOJ. To help mimic the in-person networking opportunities, we're offering up a platform called Wonder, which you can use to have private conversations or group conversations with other ISOJ'ers and speakers. So we'll be dropping a link to the Wonder room in the chat throughout the day, so you can access it as many times as you would like in between sessions. And speaking of sessions, our next panel is going to be taking place in about 30 minutes at 1 p.m. Central, and it's titled Collaborative Journalism Networks: The Lone Wolf Investigative Reporter Joins Regional and Global Packs. So we hope that you will be there. It's sure to be a strong session, and we look forward to seeing you again soon. Thank you.