Interview with Uli Köppen | Module 1

[00:00:12] **Aimee** Welcome back. This conversation is part of Module 1, AI Basics and how it might help newsrooms. I'm joined today by Uli Köppen, who leads the AI and automation lab, and co-leads the BR Data team at the German public broadcaster. She'll share with us her newsroom's unique approach to AI and innovation and how to gain newsroom buy-in for new tools and workflows. Uli, glad you could join us.

[00:00:35] **Uli** Thanks for having me Aimee.

[00:00:36] **Aimee** Of course. So I've been struck by how you've structured your team. You have a unique blend of product and newsroom. Can you explain the roles that your team has and how you came about landing on those particular roles to make the team you have?

[00:00:55] **Uli** Sure. That is also a great question because it goes back to the history we are having as a team. We started off as a data team about eight or nine years ago, and then after a certain time we were blended with the investigative team and we were doing more and more investigative stories then. Then we thought it would be a good idea to use the mindset and skill set we've built up in the data team also for product.

[00:01:22] **Uli** So that was the idea I was leaving with when I had the chance to do a Neiman Fellowship. I left the newsroom for one year and learned a lot about automation. I went to business school, I learned the business side and different industries about automation, and also to MIT, where I could dive deep into all those technologies behind it.

[00:01:45] **Uli** And coming back, I had the chance to really use that knowledge and to build up another team. And the great chance was to do that on top of the data team because we already had this very unique blend of journalistic and technology mindset there, and we could integrate people with a deep knowledge of machine learning, AI, people with another perspective who could dive into the journalism part.

[00:02:12] **Uli** And in the data team, we had already people who did this development for themselves and who knew how hard it was to to get into journalism. So that really helped those people with another background, and it also helped us to form this team. And this is also the reason for our twofold mission we're having. It's investigative journalism with algorithms and automation, and it's also the product part.

[00:02:40] **Uli** So as you can imagine, there are always upsides and downsides to combining two different missions within one team or more or less three teams we're working with. I'm sharing the upsides first, because I always look on the bright side of life. So what we are doing is we're having ad hoc teams and this is a term we stole at the Washington Post. And I really love this concept because you can have different teams of specialists.

[00:03:09] **Uli** In our case, it's a data team, it's an investigative team, and it's our AI and automation lab. And from those three teams, we're combining people for certain projects and products. They're sticking together for those projects, but they always stay as part of their specialists teams so they can hone a certain expertise there. They have their peers. We can talk about certain technologies or methods, so we can ping pong ideas. That is great to have, and at the same time we can combine those skillsets for for certain projects and products.
[00:03:48] **Aimee** And also a lot of these people have the same skills, right? I mean, and so they might be on different teams, but very similar skill sets. So it'd be silly to kind of isolate them.

[00:03:57] **Uli** Right. Right. And it makes work easier because you can talk about it. Everyone knows that this is important and you have questions you don't want to solve only yourself. So going back to those people, the other people, is a great upside we were having. And also it makes the job interesting for everyone because you can jump between investigation and product.

[00:04:20] **Uli** And this has also been a great argument to win over people from the tech industry who do have different backgrounds and who of course accept well, not the same pay as in technology and in tech industry. So those are the upsides. Do you also want to know the downsides?

[00:04:39] **Aimee** Of course.

[00:04:44] **Uli** Should we not talk about that? Well, there are two different pieces because investigations, they are really hard to plan. As everyone knows, they can be slow, they can be fast, and you can't plan for the stressful phases. And product, on the other hand, is very predictable. You can plan for it and you have people that are with one leg in an investigation and the other leg in a products project. And then it is hard if they are sucked into an investigation, then the whole team has to wait for them.

[00:05:16] **Uli** And this is really hard to manage. And we tried different methods on how to do that. And you always can manage that, but you can't eliminate that because you have those different paces. So that's the downside. But I think the upsides still outweigh the downsides because we can use the insights we are having from our technical work, also for the investigative part and also the fun. The job is much more interesting.

[00:05:46] **Aimee** I bet. And to be able to, like you said, to attract and retain talent who might not have otherwise been in traditional journalism in the past. I'm also struck by you said that you had a Nieman Fellowship which provides journalists kind of a one year I don't want to call it a break, because some people do like what you did, which is really dive into something and specialize. Do you think it's possible to think about innovation in a newsroom without that space of a fellowship?

[00:06:13] **Uli** Absolutely. I mean, a fellowship is a great way, just as you said, to get out and make your head clear and think about something completely different. But you can always learn on the job, and this is also what we did in our data team. I am a journalist, I don't have a technical background, but I learned on the top. I learned by working with other people with different skillsets. So I'd always say, look for people with a different skillset, try to partner and try to work together and then you'll learn you're doing the work. And I guess that's always the best thing. And you can absolutely innovate without the fellowship, without one year break. Nevertheless, I always recommend that.

[00:06:55] **Aimee** Yeah, it's nice. It's just nice to have the distance. I think if you're working in a daily news grind, it's really hard to pull up and be like, What else? How else could this workflow be? Or how else could we approach this? And I, yeah, I'm just amazed by how you've put your team together because I can't think of another newsroom that has, has
taken that leap of combining those skill sets to really power the newsroom forward. So it's great.

[00:07:23] Uli It's also a great chance to work with those people because they're crazily talented and learning every day. So this is what I learn on the job as well.

[00:07:31] Aimee Yeah. Do you have a project that you're working on right now that you're really excited about? Like something that might adjust the workflows or how you produce news?

[00:07:42] Uli So many projects I'm excited about, but I'll pick out just one for you. We are doing a lot of experimentation with language models right now, and what we are trying to do is we are building up a flexible infrastructure to do language services for journalists, for example, headline generation, for example, summaries. And we tested a user comment filter and this user comment filter was really a fast little project.

[00:08:09] Uli And it happened because the newsroom showed up and said, you know, we're having so many data we have to sift through. We want to get into a deeper conversation with our users. We want to be alerted to certain comments. And this is when our natural language generation experts said, okay, we can use a language model for that to sift through a large amount of content you're getting from the users. And he built it as part of the experimentation in a very fast and agile way. And then we had the challenge to integrate that in the newsroom. And, you know, the integration is always a big pain because you have legacy systems, you have APIs, you have to build, this is really cost intensive.

[00:08:52] Uli And we thought about a workaround and we integrated the output of the language model into our teams channel. Teams is our communication tool we're using in our broadcaster. So the newsroom is alerted in a tool they're already using, they're getting a link, and then they are referred to our CMS. And this is how we prevented that we had to touch our CMS. And of course, this is a little small project, but there are so many learnings that are falling out in the end, and that was really great.

[00:09:24] Aimee So when you say fast, how fast was it spun up?

[00:09:28] Uli A few weeks, but we had the experimentation with the language model already done, and the integration was really fast because we just had to build an integration into our team's channel. And then of course, we had a beta testing phase with the newsroom, but we had a much better acceptance of our technology because it solved the pain points. That was the first thing. The newsroom was coming to us and we were not coming to them with a technology, that is always better to really solve an existing problem.

[00:10:02] Uli And we used a tool that they were already using that didn’t have to get up another browser tab. They didn't have to get another log in. So it was within their reach and it was easy to use. And those are learnings we can use for all the different bigger projects we're on. And it was not planned. It was kind of a side win, but it was great.

[00:10:24] Aimee Yeah, because you don't have to train them how to use teams they already know they're already in. That's really smart. I'm wondering how big your team is. It sounds like you have 100 developers.
[00:10:35] **Uli** No, unfortunately not. We're working with three teams. Most of them work in the investigative team. Then we're having about eight people in the data team and another six seven people in the AI lab. So we are 25 people all in all, but most of them work in the investigative part. And also some are working as part of the data team and as part of the automation lab. So it makes it always hard to say how many people.

[00:11:05] **Aimee** And when you mentioned language model, are you talking large language models, things that power tools like ChatGPT, or are you talking about a smaller language because it's maybe in German?

[00:11:17] **Uli** We're trying to use more or less everything that is on market. So we're of course, interested in the large language models because they're trained in a very sophisticated way. But we are also looking into things we can host ourselves, open source models, because we are also working with sensible data as an investigative team and we don't want to upload that on foreign servers. So we want to be in control about what we are doing, especially when it's about sensible data. So this is these are the two areas we're looking at right now.

[00:11:50] **Aimee** And is it German language?

[00:11:52] **Uli** It's German language, but they're getting more and more multilingual. So the distinction between the languages are getting hopefully less and less important.

[00:12:02] **Aimee** And for people who are watching this video, newsroom buy-in is a hard thing to do sometimes. And you said that you kind of stumbled into it with your most recent project, that you're happy about the commenting where the comments go into teams, a tool they're already using. So there's no training involved, there's no log in, there's no tab, there's nothing to download. So what other ways do you think it's important to work with newsrooms as you develop products?

[00:12:31] **Uli** Well, what we are using is a methodology we are describing in our framework as data driven publishing. You can Google that and we're describing in depth how we're working there. But one of the tools we are using, we are trying to do so-called unicorn projects or trojan unicorns, we're calling them because they are always solving a bigger challenge for us. They're not only one project or one product. They are also solving a bigger challenge behind it.

[00:13:03] **Uli** And that can be a technical challenge, such as building an API, building a CMS feature, but oftentimes they are cultural challenges like acceptance, as you said, how new workflows are accepted, if tools are liked or not, is very decisive for the success of a project. And those unicorn projects, one of those learnings was if it's us coming to the newsroom and not the newsroom coming to us, then it's better if we are coming with a prototype. It's not only an idea or something scribbled down, it's something people can really touch and use and then they can see if it is worth doing a new workflow or using a new technology.

[00:13:48] **Uli** And I'll give you an example for that. We are working on a prototype, it's called Remix Regional. It's a prototype for personalized audio, so people are getting the audio and news that happened around a certain place. And what we are doing there is we are using an algorithm to segment the linear audio we're getting from the radio. Then we are using another algorithm to tag that and we are storing that in the cloud. And this
storage in the cloud is for us the future of personalization because down the road, if we are managing to do that, we can personalize anyway we want.

[00:14:28] **Uli** But for that we need the newsroom to work with us because in the beginning we need a standardized metadata workflow. And as soon as everyone is doing that in a standardized way, we can also train an algorithm to do that, but beforehand we need a hybrid workflow. And to persuade journalists to type in metadata is really hard work. No one likes that. And people, of course, are focused on their product. They're not focused on the metadata. But if you can show what comes out when you do that, when you type in the metadata, and what the win for them is, reaching more users, having a digital way to distribute audio, having a new way of distributing audio, then it makes it much easier to persuade people to do new workflows and work that is on top on their stressful jobs. So that is always a great idea.

[00:15:24] **Aimee** Have you thought of automating the metadata just to rule out inconsistencies of people's, you know, capitalization or spacing?

[00:15:31] **Uli** Yeah, Yeah. You're putting the finger on a very big problem. If you're using people for metadata, it's always flawed. But yes, we want to do that, but it takes us more steps to do so. In the beginning, we are putting up a hybrid workflow and then we are hoping to train an algorithm to do that for us. And we are also testing, for example, metadata extraction, location data. But for that we also need the location and the audio. So we need a certain standard that people are accepting now.

[00:16:07] **Aimee** So for someone who's watching this video, what might you give them for advice in terms of like, let's say they have a very traditional newsroom set up and the data team is working as a data team and kind of separate from the newsroom, the newsroom investigations are separate and then the development teams are separate. What's the first step to getting more of a blend of those teams?

[00:16:32] **Uli** It always depends on the person. So if you're the person who is interested in doing interdisciplinary work, just start it. Start talking to the developers if you're a journalist, if you're a developer, start talking to the journalists and try to set up some more projects. It's always great to start small, of course, but as soon as you can show something like the prototype you're doing. You can also persuade other people to jump on because people can see the worth of those products. Those products always are getting better if people with different perspectives are working on them. And this is a great means to persuade management, but also to persuade other people to support you in doing so.

[00:17:11] **Aimee** Yeah, because this wasn't taught to us in journalism school. No one learned how to work cross-departmentally. And you see that now that the structures sometimes are so intense, the larger the newsroom, the bigger the structure. And sometimes the teams just haven't worked together. So I think it's really unique and I appreciate your time today explaining it to us.

[00:17:32] **Uli** Thanks for having me Aimee.

[00:17:33] **Aimee** Thank you Uli. Take care.

[00:17:35] **Uli** Thanks, everyone.