

ISOJ 2022: Day 1

Panel: Hype or not, how and when will web3 (blockchain/NFTs) and metaverse (AR/VR/XR) impact journalism?

Chair: [Emily Bell](#), professor & director, **Tow Center for Digital Journalism, Columbia Journalism School**

- [Maria Bustillos](#), editor-in-chief, **Popula.com**
 - [Jarno M. Koponen](#), head of AI & Personalization, **Yle News Lab** (Finland)
 - [Ray Soto](#), senior director, emerging tech, **Gannett, USA Today Network**
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Emily Bell Welcome to our panel on Web3, Blockchain, Crypto, Metaverse. I was just thinking I'm so old now that I remember chairing these panels when I was younger and more in demand to talk about what impact will the internet have on journalism? What impact will social media have on journalism? What impact will mobile telephony have on journalism? But I also chaired panels about what impacts will, apologies to Richard Gingras, Google Wave have on journalism. So, you know, this is a great forum where we discuss what is the moving body of water that's really, really going to change everything and not just for us in journalism, but for everybody. And what are the kind of things that we can pretty safely ignore until it's actually proven that a real-time social app for people dancing in their pajamas is, in fact, the future of news. And we kind of missed that one two years ago, and we have to catch up. I've got such a great panel to discuss this with. First thing to say is that, sadly, Ian Bogost is not with us. I was hoping he was going to be distributed on the blockchain because we wanted to represent that, but he's actually done something even more fashionable and caught COVID. So he's not with us because he's actually really not very well, and he's so sorry that he can't be here. It puts a lot of pressure on me because Ian is such a smart thinker about that. So I'm not going to try and pretend to be him, but I'm going to try and channel some of his kind of smart questions about this. I'm going to briefly introduce the panel. But what I want them to do is give fuller introductions to themselves, because I think that captures more about how they're interested, why they're interested in this field, and what their expertise and experiences are so far. So to my far left, we have Ray Soto. Then we have my good friend, Maria Bustillos. So nice to see you. And Jarno Koponen, and we're going to start with Jarno with trying really kind of difficult things here like using slides. I don't know if you've heard of that technology. And Jarno has kind of bravely volunteered to go first, so off you go.

Jarno M. Koponen First of all, it's great to be here in person. It's my first time ever in Austin. Wow. My name is Jarno Koponen, and I've just traveled from Finland, from Helsinki, so I'm jetlagged. So if I don't make sense, it's not because of the topic, but it's because of the jetlag. So, okay, what do I do in my work? What does someone in personalization do? I try to combine journalism, data science, and design in order to create better tools for journalists in news investigations, but also in reporting, in telling the stories to people. Some concrete things. So what my team has been doing. So for example, we created a game, an educational game, about information operations. It's called Troll Factory, fake news, hate speech. What are these? You can explain everything firsthand in that game, so you can still play it. Second, news assistant Voitto. My team created this first-ever AI-powered news assistant that learns directly on your mobile screen. I think the

last one, and this is something that I've been doing now, I've been building and leading the operations of the first-ever AI and machine learning team, a journalistic machine learning at Yle News. So that's me, to give you a bit of a more concrete view on what I'm doing and what we are trying to achieve.

So what does this have to do with Web3 and metaverse? I just wrote an article. This is more a way to test my ideas. So I wrote an article about the possibilities of these new emerging platforms. I don't give concrete answers, but some successes. It's on TechCrunch. You can go and read it, if you will. But one thing or two things, important things, related to this. It seems that established news media doesn't make big bets on innovation at the moment. No new products for these emerging platforms. Okay. And what Emily said previously, hey, are we missing something if we are not taking an active part in developing for these new platforms? And I think that this is a moment of opportunity to use these new platforms, Web3 and all it can entail or metaverse or VR or AR, in order to rethink what journalism can be, what it should be.

And I have some success stories in my article related to how could we rethink content, how could we retain distribution, how could we potentially rethink monetization of business models? But it's not about technology. I want to be crystal clear. This is not something like a guaranteed bet that it's going to work. No, of course not. But again, it gives us tools in order to explore what might come next. So it's about journalism. We cannot say that these things are not happening. What truly is happening? Blockchains and cryptocurrencies, they are happening. They are already having an impact on our reality. So we, as journalists, as news media, need to be able to recognize that and potentially become more active in shaping what those emerging platforms and environments can mean to us, and to people, to our customers, and the users of news media.

So I have three questions that I'm thinking in relation to these new platforms. First, how do you build the journalistic organization for the future, for the next kind of state of internet? VR, metaverse. Transparent, decentralized sharing of information, creating of information. Second question, there's a war in Ukraine. I'm from Finland. We have 1,300 kilometers separately with Russia, so it's been in my mind. At the same time, we need to think that. What's our process as a journalistic organization to tell what's happening in the war in Ukraine, when you can just open your TikTok and be there in the front line. How do we process when you go to a new site, we're already behind. So how to create a futureproof news organization. This is my last big question that I have in my mind today. Obviously, I don't know the answers. I'm hoping to discuss with this great banner and with all of you today, like what does it mean? But what's the next interface to information? You are not going to carry a rectangular thing in there and fake it when you like awkwardly as some kind of a virtual thing. Avatar. No. Same time, real time information feeds. Personalization. How could you do personalization in a journalism-first way? How could these new emerging technologies where agency is now, for example, related to your data, the agency is moved from the company, from the organization to people? So I don't know the answers to all of these questions, but I think, and this is something that I'm concretely doing, is to combine journalism, data science, and design in development and development teams. But I also think that it's crucial to make it happen also in the leadership teams, that people understand this multidisciplinary way of seeing the world and its opportunities that happen. So that's me. It's great to be here, and I'm really looking forward to discuss about this topic with all of you today. Thank you so much.

Emily Bell Thank you very much. That was great. And don't forget, post questions on the hashtag, and through the magic of this amazing technology called a Google Document,

they will appear on my phone because you're not allowed to apparently put your hands up anymore. That's another thing that's happening in this technical revolution. So Maria, Maria Bustillos, who has so many kind of facets to her amazing career as a journalist, but also a great thinker and experimenter on this, as well as a commentator. And even though I know her biography incredibly well, she will be the perfect person to explain how she's ended up being a go-to expert, I would say, on experimentation in some of these distributed technologies. And she's also going to tell us what she thinks. Because much to my surprise, Maria is a real fan. We usually agree about most things. I'm not sure that we agree about this. So, Maria, take it away.

Maria Bustillos Okay. Hi, everybody. I'm Maria Bustillos. I'm a journalist and editor and an information activist who has been interested in these questions for a really long time. The first piece I ever wrote about Bitcoin was on this very day, April Fools Day, of 2013 in The New Yorker. I had been interested in the technology and my then editor, Matt Buchanan, at The New Yorker asked me, "Well, like it's all technology. We're going to do this technology vertical. It's called elements. So do you want to write about?" And I'm like, "Bitcoin." He's like, "What? Really?" You know, and I'm like, "It's really interesting. It's like the money part of it isn't the interesting thing." Like, from the first minute that I started reading about blockchain technology, it struck me that the important aspect of it was the record keeping aspect of it. The money part of it didn't really interest me from the beginning, but I was fortunate enough to get to talk with Gavin Andresen, who was the chief technology guy at Bitcoin early on, and asked him a lot of questions. I mean, as a journalist and a person whose work had been disappearing from the internet at like a remarkable rate, you know, as outlets are acquired or they just rot. You know, people stop keeping up. The databases disappear. Machines break. And in the earlier days of the internet, this was happening at an incredible rate. You know, so much of the early internet disappeared. If it had not been for Brewster Kahle, I don't even know what would have happened to the early internet. Like this one guy's vision kind of created a future for digital archiving, and this is also a topic of interest for me. So I have always been thinking about blockchain technology and what it can do for journalism, first and foremost, as an archival sort of system. And it just so happens that I was invited to participate in this thing called Civil, which was a blockchain-based publishing platform that was founded in 2017 by ConsenSys, basically, which is like the guys who founded Ethereum put up some money to do this. And, I don't know if you ever heard the saying like, you know, "the first pancake is for the dogs." And we were the first pancake of journalism on the blockchain, and there were all kinds of regulatory problems. And \$5 million kind of went down the tubes, but we learned a lot. And I haven't really changed my mind about a single thing that I went into that project thinking about what blockchain technology can do for a persistence of publishing, what it can do for creating ways for readers and users to participate in the journalism economy, for journalists to be able to strengthen one another's work, and to create communities that are meaningful and long lasting. And I've been working on this stuff ever since.

Most recently, I started a cooperative called The Brick House Cooperative, which is kind of the successor organization to Civil. A bunch of the people who were publishing through Civil had created publications. Nine of us got together, and we're kind of doing this novel form of ownership that's cooperative. We were given a grant from Grant For The Web that was really exciting for us. And we're participating in an experiment over there to do with Coil. I urge anybody interested in this subject to look up Interledger and Coil. They're doing some really interesting things. And what we did was an experiment during MozFest that was to do with microtipping. This is an area of huge interest for us. And basically what it amounts to, one of the things that crypto tokens can do is to move very small amounts of

value frictionlessly. Earlier attempts to do microtipping in the early web, like Beans, some of you may remember that kind of stuff? Okay. We should talk about this later.

Emily Bell I'm sure I chaired a panel, which was what do Beans mean for journalism?

Maria Bustillos Yeah, I loved Beans. Anyway, that's what I've been up to, and we'll talk more.

Emily Bell Fantastic. And just as I say, there's a pattern. We've really thought about this panel very carefully. So, you know, we have European public media. We have genuinely independent media. And we also, I'm sorry, Ray, we have American corporate media and Gannett, where he's the head of emerging technologies. That does not mean that he's the person who comes and installs the fax machine back in that office. Sorry that's a bad joke. But actually Gannett has been leaders in newsroom technology, which is a little known fact. But, Ray, if you want to take it away and take to the podium, we've successfully gone through one set of slides. I'm sure we can manage another.

Ray Soto We'll make this work. So, you know, as a way to introduce myself, I thought it'd be funny to share a little story. Seven years ago, ISOJ had invited me to talk about VR storytelling at USA Today and full transparency, I had never done any public speaking engagement ever. I don't think I had even touched a PowerPoint, Deck, Presentation that software. I was so nervous that I scripted out my entire speech and memorized it word for word, which is the worst thing anyone could ever do, especially when my manager at the time threw a curveball and asked me to talk about something else. So for those of you who had watched my first presentation, thank you for being so patient with me and I'm excited to share with all of you what we've been up to in the past seven years. So my name is Ray Soto, and I'm the senior director of Emerging Tech. My background is pretty interesting. It's not a traditional journalism background, but I'm a former video game developer. I was an art director. And I've worked with on several different, you know, amazing IPS. But essentially what gravitated me towards journalism is that opportunity to tell stories, stories with a purpose. And I think that is a great kind of thing to highlight as we had learned earlier.

So what I want to do is I want to start off by asking you a question, and I want us to be honest. So this is a little bit of a class participation. I brought a prop, and I think you all have the same prop. If you can, please raise your mobile phone. So Jarno had propose this question: What comes next? I hate to break it to all of you, but this is not the future of interface design, and we need to be thinking about journalism and interacting with content beyond the screen. But when you consider that this device here has not essentially changed in the past, you know, almost 15 years. Yes, we have larger screens. Yes, it's faster. You can do more with it. But there's a piece of technology embedded in there that's essentially telling us that things are changing, and it's almost a breadcrumb of what we can expect next. And I'm talking about LiDAR. But how are we leveraging LiDAR? I think what's really important for us to share is a little bit about our focus at USA Today and as part of the emerging tech team. I'm very, very fortunate to lead a small but mighty team of innovators, passionate storytellers. We love the challenges and kind of seeing where we can take this technology, not just as it applies to storytelling. And I know that's kind of a theme throughout here, but how can we better prepare ourselves to ensure that we are a step ahead and at the same time evolve with the technology as it becomes more mainstream? So my team and I, as I mentioned, I am a former game developer, but so are they. We come from places like EA, and Sea Soft, and even Disney Animation Studios,

and we are also very, very fortunate to have a strong working relationship with traditional journalists to tell these stories through these formats.

So creating impact. For every story that we tackle, we want to make sure that we move beyond the gimmick. We understand that sometimes these one-off projects, it's an opportunity to learn. But over the past seven years, starting off with a virtual reality, interactive, immersive headset driven to 360 degree video and now augmented reality, there's a seamless path of understanding spatial awareness, how a user understands and kind of drives that story forward. But there are four things that we ended up learning over the past few years. These are our four tenets, essentially, that for every story that we tackle, we want to make sure that we hit all four of these. Obviously, visuals are very important. We want to ensure that folks understand what they're seeing, but at the same time find value in what they're seeing. The second one for us is all about interactivity. You know, as former game developers, we know that interactive experiences help drive engagement, but at the same time provides an opportunity for attention. What I mean by that is an opportunity for folks to explore and discover stories for themselves through interactivity. The third one, sound. Sound is so important, and I'm almost disappointed that we don't talk about it enough. When you consider that it's almost the other half, and with spatial audio kind of refining and adding some of those audio elements, especially when there's a bit of feedback when a user interacts with something to help drive that story. And lastly, pacing. Pacing is really, really important for the types of stories that we develop in AR. What we learned in VR, as I mentioned, can be applied, but we can't create these long, interactive AR experiences that go on for 10 minutes. Our sweet spot has been about three minutes, and we try to adhere to that very, very strongly, especially when you consider all four of these pillars.

So how do we do all that? For us, we evaluated several different platforms and several different technologies. But for us, the Unity Game Development Platform is what gets us to where we want to be. And, you know, taking a look at those four tenets, we want to make sure that we can display different types of medium, not just 3D, but also 2D. Can we surface interactive photos and videos, content annotations? It's very, very important for us to be able to use all of that, to be able to leverage the power of AR through those types of experiences. User interaction. We want to ensure that what we end up creating, since it is a mobile device, that folks understand that there's almost this kind of interaction kind of dictionary that folks can already understand. It's one of the things that we want to ensure that folks already know what's happening and are familiar with what it is that we're providing through that screen interaction in the interface. But lastly, accessibility is really, really important for us. What we want to do is we want to move beyond just that one hit gimmick, but also being able to distribute this content from local to national across all of our local markets to reach all of our communities with stories that matter to them. So as I mentioned, we do have that integrated across all of our native apps, and it provides us that opportunity to distribute this content and reach them where they are at.

So a challenging pivot. We're all talking about the pandemic. For us, it was really interesting how we were, you know, working within the same room. We love brainstorming. We love whiteboarding. But once the pandemic hit, we had to shift over to a full remote kind of work environment. So kind of evaluating our processes and what's available to us. What we ended up doing is focusing on COVID-related content. What we ended up noticing is something very, very interesting when you think about audience engagement and trends, that our first two projects in the pandemic, which were COVID related, worked, and they stuck. Specifically, when you look at some of these engagement numbers, which completely surprised us. I think what's most impressive is that 7.6 million impressions.

Now we consider those the two projects that were showcased before, developed within five days, kind of top of mind. You know, folks were really interested in learning more about the CDC guidelines in an interactive game experience, but at the same time, some of the visuals, that told us that, you know, we're onto something. We can make this work. But through all that, we also noticed that there was an opportunity to kind of enhance the user experience. We noticed that there was a steep drop off from the impressions to actual folks engaging and interacting with the story, so we did a user test. This was actually last summer. What we ended up learning was fascinating. I think it's something that we could all learn from. And I'd say about 80% of our users who had tested our existing augmented reality experiences, which are on the far left side, they had never heard of the term augmented reality. They understood what the technology is. They could talk about it based on filters. So we found an opportunity to make things a bit more conversational when it comes to the user experience design. And what we ended up creating is what you'll see on the left here. Folks are able to immediately understand why is it that we're asking for camera access? Where are you going to project these stories? How do I interact with it? And it provided a steep, steep increase when it came to user engagement, average time spent. We saw around 120 seconds average time spent per user is now above 3 minutes. We've seen as high as five, and even in some cases 10 minutes depending on the story. And that's been phenomenal for us.

So I wanted to share this particular story, and this is the one that I'm most proud of. And it was the last one that we published last year. Seven Days of 1961: A Dangerous Ride on the Road to Freedom is a story in which users can step up to the Greyhound bus that the Freedom Riders had ridden to Anniston, Alabama, and in which their bus was attacked. But if you look at all those different pillars that I mentioned before, interactivity, pacing and sound, you'll see each of those carried out throughout this. I don't think audio's playing, but essentially I'm encouraging folks to check it out. You can find it within the USA Today app. Next slide, please. So what have you learned? Quite a bit in the past seven years. You know, we provide value. We're reaching a broad audience, and we're driving repeat visits. Our audiences are understanding what this technology is. They find value in this. And it's fantastic to see that they are seeking this type of content. So our advice to you: Build across divisional workflow. This is very, very important. As former game developers and technologists, early on we were learning how to tell better stories through this platform, but working very closely with traditional reporters. You know, understanding the story, being transparent, updating often, I think is one of the biggest things, where you have to be comfortable with experimenting, but also being transparent in the sense of this is not working, we should shift from there. And the last one, you have to evolve with the technology and the audience. So going back to the question, I proposed. What does come next? The future of journalism is immersive, interactive and 3-D. So please think about that as we continue this conversation, and I'm excited to share some of those details with you all later. Thank you.

Emily Bell Thanks so much, Ray. So I wanted to start on that last point, Ray, where you say the future of journalism is interactive, immersive. You know, you're looking at it from a user experience point of view. So before I worked at Columbia University for ten years, I ran the web operations at The Guardian, where we introduced lots, and lots, and lots of new things. And we did it because, I mean, sometimes because we genuinely thought podcasting is the future of journalism. And we thought that in 2005, and for six months it was. And then for ten years, it wasn't. And we had this sort of thing where we would say, you know, there is a curve of enthusiasm and ignorance. And at the top of that curve, you know, news organizations, to be brutally honest about it, can make money. And actually, one thing that always struck me, which is some of this is also about how newsrooms adopt

technologies and what they see that role as being. Like, is this about our societal impact? Is it about our business model? Is it about some kind of civic mission? So it feels like a big question to start off with. But when you say the future of journalism, is XYZ. You think maybe in a commercial sort of sphere, and should we be tying the future of journalism to those kinds of technologies, to that kind of interaction? Because you've just talked about it, I'm going to come to you first. But I'm also going to ask Maria what you think, because, again, you've covered this. Like, what does this tell us about how newsrooms adopt these technologies, and what the history of our adoption sort of tells us about this present moment?

Maria Bustillos I think when people say Web3, they mean a lot of different things, and they should mean a lot of different things. It's like when we say the Internet, right? There's the internet of Brewster Kahle and Wikimedia, and then there's the internet of Google, you know, and these like really exploitive platforms. And what these Web3 technologies are going to enable for journalism is similarly a double-edged sword. Like, you know, people ask me, "Is this a good thing or bad?" And I always say, "Is a knife bad or good?" Yes, definitely. And very bad and very good depending. Right. And we're facing the situation where these things are so poorly understood, what it can do, and it's this sort of nascent explosion of possibilities that it's hard to answer that question in one way. I think one thing that's going to happen is these technologies are going to be used to exploit people. We're already seeing that. But like what I've been trying to do for the last five years is to make the good part of the knife happen. And so what that means to me is newsrooms can adopt the idea of ownership. You know, what NFTs are, for example, is a way of giving people a stake, personal stake, in something that's happening. One thing that you can do is get people to contribute to funding a story, or buying a camera, or like here is a foreign correspondent, you know, that you can participate in that person's career, you can comment, you can give money. And I think these things are very fruitful. They have a very, very positive feedback that we've gotten so far with it, but instantiating it is another thing.

Jarno M. Koponen I totally agree. And one thing that comes to my mind is what I also already mentioned is that if journalists and news media are not defining the use cases and business cases, you know, then like I said, what is internet? We know how it can be used. Or what is Web3 like? It has a lot of issues. But then again, we need to see it as an opportunity to kind of reflect what we want the world to look like from that journalistic mission point of view. And at the same time, it's also a business, like you said, monetization business, hard, hard topics. But that goes back to what Ray just presented. How are you going to have a sustainable business if you cannot engage anymore with people? You go creating, trying to figure out what are the use cases and business cases. But on top of that, you need to use design and user research in order to know how people truly want to experience journalism and journalistic content. I don't know. Right?

Ray Soto Yeah, I completely agree with you. And, you know, one of the things that we need to consider is what are their expectations as well? You know, we're talking about different platforms now, whether it's TikTok. You know, we think about Instagram filters. I'm specifically talking about AR at this point. What are some of those expectations when they come to our platform? So let's say, as an example, they come to download the USA Today app and interact with it. You know, we hope to surprise them that we do have AR content, but it goes beyond that. You know, with some of the different technologies that we're talking about, whether it's NFT, the Web3, and the future of the metaverse, we have to start thinking about, well, how do we go to where these audiences are going to be? And at the same time, how do we create our interactive experiences, but at the same time create a platform that is part of the future of the metaverse? There are a lot of things that

we are looking at, but it's really going to be guided not just by the technology. And I quickly highlighted, but I ran out of time. But we have to evolve with the technology and more importantly, with the audience and their expectations.

Emily Bell There's a question, actually, about how does accessibility play into that? And actually that kind of snags a question that was really in my mind as well. So I don't know who's had time to read the 14,000-words piece by Kevin Roose that came out in The New York Times, I think about a week ago, ten days ago, which was about, you know, kind of the beginner's guide to crypto. It got posted on Twitter this morning that you should read that and maybe also read the Molly White blog post where she's got skeptics to annotate, which is called the "edited beginner's guide to crypto." There was a slight kind of like chill when I saw that. If anyone has had time to read the 14,000-words article in The New York Times, just reminds me of an old adage of mine who said, "nobody ever got fired for printing a fewer words." But in that the debate there is this one about accessibility. It's about like, one of the mistakes we make? Kevin Roose said nobody asks the hard questions about Facebook in 2009, which is just completely untrue. There were lots of people asking the hard questions about what is the impact of this going to be? What is your lack of regulation around this technology really going to mean to people? But they were just ignored because the tidal bore of the money coming into the creation of these technologies weighed very much against it. And I think that's how a question about accessibility goes to a much wider question about inclusion, and adoption of technologies, and sort of how should we think about that right at the beginning of this, or halfway through it, given that it started in 2013 as opposed to waiting till it's too late?

Maria Bustillos We talked about inclusion a lot when we were in the Civil project.

Emily Bell Which I was also briefly part of the dog-bound pancake.

Maria Bustillos Yes. Oh, my God. People were forced to jump through so many hoops to get a Coinbase account.

Emily Bell Right.

Maria Bustillos It was just impossible, and the regulations, the sort of regulatory atmosphere, became more and more restrictive as the project sort of moved forward. Because largely, there are entrenched interests that are opposed to these technologies moving forward and their power being diminished. So we have a big problem with that. And the other problem is there's a tidal wave of money, but it's not coming from people who are really interested in journalism or interested in creating a healthy information economy. Where there's so much instantaneous wealth up for grabs, it has kind of warped the way that this whole thing is proceeding. But at the same time, the technology is there to be used to improve our industry, and we can just do that. And so that's what some of us are trying to do.

Jarno M. Koponen Yeah. Maybe, maybe one thing to add on this is that when you mentioned Facebook, for example, and social media, did we truly understand the dynamics that would emerge in these new platforms and environments? Like I would say that, no, we didn't. You know that the idea of Facebook really like connecting with people, friends. Great. So again, now with the VR, with the metaverse, with the Web3, are we going to be able to understand as a news media, the dynamics that are going to be shaping not just the future of the internet and our digital realities, but the physical reality as well. Because, you know, how can you tell them apart? So that's what I'm thinking, that we

are not there, experimenting and trying to shape these new environments, but we are kind of left out when these new dynamics emerge. And of course, no one can truly predict what they might be. I'd say that no one could truly predict what social media would do, for example, like fake news. It was discussed earlier today, a word used for certain kind of content, but now actually becoming a tool that you can use against democracy, against free journalism, against critical voices. So who could have predicted that?

Emily Bell Well, quite a lot of people did so. But you see, that is a great question, which is lots of people who are experts in this area, lots of academics, mostly academics and journalists actually, who were not financially incentivized to see other things were like, if you introduce this technology without thinking about civil society impacts, you will end up exactly where we've ended up. And actually we've probably ended up in a far worse place than many people predicted even back then. So,, sorry, I'm not challenging that. I'm just saying are there things that we need to learn, particularly about our role as journalists who want civic impacts about the process of that adoption? I'm going to come back to Ray in a minute, but Maria?

Maria Bustillos We've got to be a lot louder, a lot, a lot louder, with the public and tell them there are risks, and there are rewards, and you have to listen. It's subtle. It's not like NFTs are dumb. No. NFTs is a whole world of ways where people can connect with the sources of their information and participate in that. And we just have to demonstrate and be very noisy.

Emily Bell Yeah. So it's it raises a question for Ray about how you introduce these technologies, and how you talk about them. We've all seen the nonfungible token that you could participate in buying part of an Op-Ed in the New York Times. I mean, why would you want to do that? I don't know. The AP have actually kind of rolled it out. And again, you know, I spent a lot of my career thinking about the application of technologies into journalism. I was like, "Oh, you can participate in the photo kind of archive of the AP." But I don't get like a lovely print for my wall. It's like what is it that I've got? So I'm just wondering, like, when you're introducing these technologies, how does your department think about those questions of accessibility? You know, yes, we have to monetize it, but also, if this has an impact in the world, what do we want it to be beyond the kind of engagement metrics, if you like?

Ray Soto Yeah, it's a great question. You know, one of the things that I want to kind of take a step back and echo what's been shared already is we have to be transparent. And what I mean by that is being transparent in the sense of, no, we don't know where exactly this is going. We can make some predictions, but our audiences value that. When we're saying, look, we're figuring this out, we're working with you. And at the same time, we just have to be a part of those conversations with big tech and some of these other technology tools and platforms to help build that up. But when it goes to accessibility, we look at it from several different aspects. One of the things very early on that we've done is we want to make sure that folks who might have some hearing disabilities, we have closed captions in every interactive story that we create. At the same time, knowing that augmented reality is a location-based experience. We also want to make sure that folks who might have some mobility issues and are from there, that they can still access this and don't feel as if they have to stand up and walk away across the room to be able to interact with the story. So from that aspect, you know, we are very cognizant of the fact that we want this to be accessible to as many people as possible. But at the same time, it's really important for us to make the entire user experience as seamless as possible. We don't want folks to feel as if they have to jump through hoops to be able to access something. And as soon as they

fire it up, they don't know what to expect, and they're almost lost. So we're almost building this with them in a sense where we can, you know, experiment with something small, be transparent with some of the results. Our team, we're very transparent with what's worked and what hasn't worked. But at the same time, though, it becomes one of those things where we have to ensure that we are growing with them. And it just goes back to what I had said before. Evolve with the technology and evolve with the audience and their expectations. I think that's really, really important.

Maria Bustillos I have something to add about this. Everybody is more familiar with it than they think. Like in an earlier life, I was an antiquarian bookseller and sold a lot of first editions, and people will pay a lot. You know, you can get a copy of Ulysses for a dollar in a thrift shop, or if you get a first edition, even if it's not signed, it's worth a lot more money. It's the same words in the same order. The people want a sense of participation in the thing, and that's really like the NFT side of this thing that has to do with collecting art and things like that. Or to me it's sort of like ticket stubs. You know, I've got like a big collection of ticket stubs from rock shows that I went to when I was a kid. And they're just little torn pieces of paper, but they have a significance that is very powerful to the people who are interested in that. And that's kind of what the whole NFT thing is about. And I think it will be possible to own participation in journalism.

Emily Bell But is it is it phony participation? So that again, is something that sort of I think about, without wanting to go Art in the Age of Mechanical Reproduction about it, that sort of idea that Walter Benjamin had of, you know, kind of like you disrupt the aura of a painting in, you know, the Musee d'Orsay or wherever, because it can hang on everybody's wall. And actually what happened was you just increased the aura and the value of the physical thing.

Maria Bustillos This is the same.

Emily Bell But it's not a physical thing. You're asking people to participate in something which is illegible to them on a fundamental level, I think.

Maria Bustillos So two things. It's possible to connect these things to physical objects. It's possible to have an NFT that's connected to a thing. But the second thing is it's almost more permanent and more significant than an original painting, because anybody in the world can go and look at the records of a publicly distributed blockchain and see what happened. It's like there's an immutable, unchangeable record that you made this happen. You are the participant. You're the person. That's to me, that's better than something you can put on the wall. I don't collect NFTs, and I'm not a cheerleader for this. But I understand it for sure.

Jarno M. Koponen Yep. I'm getting philosophical here, maybe, because these are such inspiring thoughts and insights. And the question that comes to my mind now is that like are we taking the value of journalism sometimes for credit? That we think that, you know, we create something so important that it has to have a place in people's lives. And, of course, a bit to this social media thing that we discussed earlier, like what is the place of truthful information in people's lives? And if you think about social media today, journalism today, it's not just that facts are against the facts, but facts against any explanation that gets enough attention. And in that game, I'd say that journalism hasn't been proactive when we've seen certain patterns leading to an information ecosystem where facts and fictions are treated comparably, like this apples and oranges. So we live in this reality, and then what you just mentioned, this transparency that you can quote in a decentralized

system to see what's happening with the information. So I'm thinking that isn't that offering kind of a laboratory also for seeing if these new possibilities could bring again?

Maria Bustillos Exactly. Yeah. To contextualize, you know, we so often are the slaves of the 24-hour sort of news cycle. This has the opportunity. It offers opportunities for change for that. When you can like mark, this existed then, this is what was said. It is immutably said. You can go back and look. And what does that mean now that we know all these other new things?

Emily Bell And I mean, this question, which really gets to a much better articulated way to the thing that I was kind of probing at before. She says, you know, if we know that the growing local news audience of people of color is usually not included or considered in the adoption of tech, how we ensuring that Web3 etc. actually serves this audience? And given the lack of representation in those creation teams, you know, how could we ensure that we just aren't replicating, you know, exclusion, anti-Blackness, etc. in our reporting in these spaces? And so this to me seems like the absolutely fundamental question for us, which is for way too long, innovation in newsrooms was focused only on product and technology in one dimension. And we got it so wrong, and I think there are all still people who get it wrong when they go, "Newsrooms aren't fast enough. They're not enough like tech companies." It's not the point. We missed it. So sorry, Ray. I'm going to come back to you on that. So how is that something? Because I think, you know, the games industry has been through exactly these debates. And, it's interesting to see diversity sort of, you know, kind of in some ways, the game space is a really great example, both of the good part of the knife and the bad part of the knife. So just how do you do that? You have local outlets. You're addressing communities that have been excluded by different types of corporate media in the past.

Ray Soto Yeah, I think what you had shared with the games industry having been through this, they are still going through it. And it's one of those things where our team and the way that we evaluate these technologies, and what it is that we're looking to build, can learn what not to do. And at the same time, it is really, really important for us to be able to include diverse voices in all of our projects. If you were to look at our catalog of content, you'll see it's pretty diverse. You know, a really great example. The team over at the Courier Journal reached out to us and said, "We want to do a story on Breonna Taylor." We interviewed several different women throughout the community, and they submitted audio recordings of how her death has impacted them. So we created a story about not working very closely with folks of color and in the Louisville, Kentucky area. So essentially for us, with these different types of stories, we want to ensure that we're working with the right people to include those voices, and at the same time to ensure that these stories, which are going to these communities, resonate with them, so they don't feel as if it's just us telling or presenting something. It's more along the lines of like, "Look, you're a part of this."

Emily Bell But also it has to be the creation level, right, as well? It's interesting. To what extent is it actually completely beyond our control already? You know, that actually the fundamental underlying technologies are already co-opted by a corporate world, so much as we talk about decentralization, not really decentralized at all. I'm just kind of wondering whether we have to kind of, if you'd like, sort of bring that in at story level, or if there is more we can do around shaping the technologies? And that's one for Jarno, as well, because you have a public mission in this, too? I think so.

Ray Soto You know, just from a very high level. Yeah, absolutely. This needs to go beyond just the stories. We have to have these conversations with these different companies, and these different tools, and platforms. You know, when you consider the USA Today network as a whole, very, very diverse. We've got the local to national side of things, and I know it's not just unique to us. So as we're having these conversations with these different, you know, with big tech as an example, we ask those very important questions. How can not only we be a part of this, but our audiences can be a part of this, and especially with the reporting we have as well?

Maria Bustillos We can create technologies that bring readers in more. And like, when I think about comments and like, how did the progress that has been made on diversity even happen? It continues to happen more and more as readers. The pressure comes from readers. Like when you go to the New York Times and they've got the most amazing comment system, they've developed it over time. There's reader picks, and then there's the editor's picks. And so you get a broad range of responses from diverse audiences who demand inclusion, and we can make Web3 enhance that by about a million.

Emily Bell I mean, that's a really interesting example with commenting, right? So we were the first to implement commenting on news articles at The Guardian way back when, when we thought it was going to be the future of journalism. And we were really committed to it because we don't have to make profit in the same way that other organizations do because we saw it as part of our social mission. But even then we went with six apart. And then as we were developing our own comment systems, you know, you're talking about New York Times, the number of organizations that have actually stuck to that and understood that moderation and inclusion is actually not cheap, it's costly, and have had the ability to build those tools in their own newsrooms is really small. And everything else has been outsourced. Anyone who's kept comments has outsourced it to Facebook, which has been, to my mind, a complete disaster. But that's just because it's not the right kind of inclusion.

Maria Bustillos But Blockchain solves this. Like just boom, like that. It solves scalping. You can create smart contracts that forbid exploitation of the kind that you're talking about. For instance, by charging a tiny, tiny, tiny bit of money to make a comment, it then becomes very difficult to make bots. And if you can tip comments, you can like empower people that are writing. We're just barely scratching the surface of this, so it's possible to improve.

Jarno M. Koponen Yeah, maybe add on the methodology, for example, which was discussed earlier about multidisciplinary approach, and I think that's needed for inclusion. Like design methods, some of the design methods that you can use actually take that stance. Like they help you to understand what you're actually serving, and what you are not serving. And the same applies to data science and data. If you can combine journalism, data science and design as a methodology in order to approach this very hard question. Like these big tech companies, they are not doing very good work even though then kind of resources they have. We all know. So then we need to be very wise in trying to understand what are the points. That way we can have an impact and bear the right set of tools, the right set of methodologies. It can help to recognize these things that we can do better in the future.

Emily Bell There's a bunch of questions here, which are broadly all groups around the idea of veracity. There's several in here, which is, actually some fact checkers have been ahead of the curve. They've already been selling NFTs and kind of fact checks, etc.. But

people don't want to buy. Like there's that lag again. Like, you can get everything right, and if the market is not ready, it kind of doesn't matter. You know, it's like, so you can be right ahead of time, and how long, and what do we think that timeline is? And then something else about, you know, kind about that veracity, and how you establish veracity of news in technology journalism, and how much more of a challenge that is? And I think, you know, I have so many feelings about truth, fact checking, what's real, veracity, how we represent that, and how we kind of make that central to our mission when perhaps, you know, yes, of course is central to our mission, but perhaps the way we're going about it is not quite the right way. So I don't know who wants to tackle those really sort of practical, good questions, but also the more kind of philosophical question, which is how is this going to change that? Because it's not the Blockchain, right? Because you can authenticate something on the Blockchain, but you can authenticate anything. It doesn't have to be true. You know what I mean? Which is like people can put shit on the Blockchain, as well as they can put shit on the internet.

Maria Bustillos Yeah, but you know that they did it.

Emily Bell Right.

Maria Bustillos And they can't undo it. There's this one thing about it, that you cannot unstir the jam out of the porridge.

Emily Bell But they do that anyway. And so like everybody is owning. Like the big lie is owned and it's out there, and it's not kind of masking, sort of anonymity. You know, that's my thoughts about it.

Maria Bustillos Remember, there was a big scandal when they found Barack Obama's birth notice in the state library in Honolulu. It was on a microfiche. And if that thing had not been there, it would have been much, much easier for the birther movement to do their thing. It was very difficult or impossible to falsify that piece of plastic, and that's what this is. It can be used intelligently or not, you know, and this is what we're here to hope that it is used intelligently. But all that it does is keeps inalterable records, and what we are to make of that remains to be seen. I agree, like, you know, we've made a mistake trying to tell the public that truth is a thing that can be known. You know, that objectivity is a thing that can happen. Instead of telling people that truth evolves, you know, that like people learn things, and this is a great tool for that, if we do it right.

Jarno M. Koponen Then also, you know, what's the future of fact checking? Like I just mentioned, that fact and fiction are all the same. But I go back to Ray and I think that kind fact checking be fun? You know, can it be something that is actually in some future environment that you can do it just by like almost by doing nothing? I don't know what it means truly, like to be honest. But an engaging way to interact with the information that also includes some kind of a mechanism for verification. Like if there's some maturity or recognized parties verifying something like almost magically. Okay, I used the word "magic." Just sorry about that. But what about something like that? Like engaging experience, and making sure that the information or the reality that we share is something that we actually share.

Ray Soto Yeah. You know, it's one of those things where I feel like audiences are looking forward to being able to interact with this type of content in a new way, especially when it's verified. And I think there's obviously several different themes that we're covering here, but we do have to kind of think ahead as far as how do we create those types of experiences

in which when folks interact with it, they know it is trusted, it is verified. And at the same time, you know, one of the things that we have to consider is we don't want to take that opportunity for granted either, which is why we're having this conversation. You know, you've been working in this since 2013, which is amazing. What can we learn and adapt, you know, moving forward? And at the same time, as we're talking about the methodology of design that absolutely needs to change. It is so, so important. How do we communicate what these technologies are? I mean, you could tell that we're coming at this from different perspectives, but there's still that common thread across all of them. So what can we do, let's say after this conversation here, to be able to continue to build up and grow, especially in our industry, but as the audiences are going to start seeking this type of content. You know, one of the things that does excite me from the NFT side of things, that verification. When we're talking about also providing value, the utility as well. I forgot someone had mentioned. Emily, I think you had mentioned who would want to own a fact check of an NFT?

Emily Bell No, no, no. It was who would want to own part of an Op-Ed of the New York Times? Very different. But yes, principally, same thing.

Ray Soto But we need to start thinking about what is the utility there? You know, how can we treat folks who are willing to fund journalism not as subscribers, but almost as members at the same time, to have them be not just part of the conversation, but feeling as if, yes, I trust this source. I was a part of this. I'm helping fund this, and I'm excited to see what might be coming up next.

Emily Bell Again, another question. Just introducing into markets and communities that actually don't have access to these kinds of tools. I remember doing a conference where we were talking about ad blockers, and it was to a general audience in a local town from where I come from in the U.K., which is a really like not wealthy part of the country, and the people who I was on the panel with were really amazed that so many people in the audience, and these were like journalists, had ad blockers on their phones. And I was like, it's because the data plan is so expensive if you don't put an ad blocker. And I think that that again, sort of we come from this position of introducing technologies into communities that might use them in very different ways because they're coming from very different positions, but also might just not have the economic, educational empowerment at the moment to make use of those. You know, what are our thoughts about that? Is that sort of something where it doesn't matter if we introduce technologies which are not generally available to absolutely everybody?

Maria Bustillos What happened the first time you heard you're going to have a computer in your pocket? You were just like, "No, not going to happen." But when it became a thing when my mom could get pictures of her grandchildren on Instagram, dude was unstoppable. She was getting that. No learning curve was too steep.

Emily Bell Right.

Maria Bustillos And so I think this is the same.

Emily Bell Right. But that's a use case that we did not come up with in journalism. So, again, like we have to think of these use cases, much more carefully.

Maria Bustillos I think you're wrong about who wants to own the New York Times thing because, like, I recorded myself when Me Too happened. The first person to write about it

was Tom Scocca at Gawker. By this weird chance, he was writing about the Woody Allen scandal. And he had pointed out that Bill Cosby was a similarly loved personality whose sexual peccadilloes or whatever had been buried in, like, 2012, or something like that. And it was from there that the thing snowballed, and his role in sort of bringing this up disappeared. So the first time I had a chance to archive something on the Blockchain, I chose that. He's a colleague, and I made a permanent record of it.

Emily Bell I'm totally making a qualitative judgment about what I know of the New York Times Op-Ed page. And just think I wouldn't necessarily want to own some of that. Just saying. No reflection on the principles, just on the actual application process. It is very cruel. I'm sorry. Do you know what, The New York Times Op-Ed page can look after themselves. Yeah, we're getting the minutes sign, and we've got some great questions. There's one here that goes back to kind of where we started in a way, and so I'm just going to kind of ask this. And if you can just sum up your thoughts about this. It says technology can be used for good by newsrooms and communities, good part of the knife, bad part of the knife, but can those interpretations prevail when the power of implementation lies with multibillion dollar corporations driven only by profit motives? And I know that's where we started, but I think it's such a big question that it's really worth going back to. I'm going to start with you, Jarno, because you're in, if you like, a competing system to that, which is public media. We don't know so much about that in the United States. But just it would be interesting to hear your thoughts on whether it is a lost cause already?

Jarno M. Koponen Yeah, maybe if I understood it correctly, the question. But I think what we've discussed here generally is the agency. Who has the agency to affect these technologies or new interfaces or experiences? And I think there is a seed of opportunity with both Web3 and with the metaverse that if done in the right way, if done with the right values, the agency shifts from big corporations, to citizens, to people. And I'd like to see that happen. But, you know, we are on a journey here.

Emily Bell Maria, I know you're not a fan of the billion dollar corporation.

Maria Bustillos Well, no. But yes, we live in a really corrupt world, more corrupt than I give it credit for. And being part of this industry has been an education. But like, at the same time, independent voices are not being stifled. And it can only get better. I think the tools are improving, and we have to keep fighting. And it's going to get better, I think.

Emily Bell Ray, speaking of somebody from a multi-billion corporation that is Gannett news, how do you see your role in this?

Ray Soto What really excites us is when I look at the landscape of the promise of Web3 and the metaverse as decentralized, and interoperability, and I think that that's key, we recognize that it's really important for us to not only have a relationship to understand where some of these technologies might go, but also look forward in the sense of how can we create content and experiences that can reach everyone. You know, when you think about Web AR as an example, and the advancements that are happening as part of Web3 and on from there, we are going to be learning from our audiences and how they're engaging. So the example of ad blockers, you know, communities in which they might not have access to these thousands of dollars worth of devices and on from there, where how are they interacting with technology now? They are the ones are going to guide the future of Web3 and the metaverse, and we have to be able to follow them and leverage them to inform us in the direction that we should be thinking.

Emily Bell That's great now on which to end. I could honestly stay here and talk about it all day, but apparently we're not allowed to. Thank you so much to the brilliant panel, Ray, Maria, and Jarno. Do catch up with any of the panelists because I'm sure that, particularly Maria, would like to talk to you if you're interested in the whole kind of cooperative media startups. And thank you very much indeed for the amazing questions. That's great. And working technology. Thank you.