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THE FUTURE OF AI: A DISCUSSION WITH AI EXPERTS

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PANEL DISCUSSION:

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KERRY: Welcome, everybody, online and on site. I'm Cameron Kerry. I'm the Andrew Tisch Distinguished Visiting Fellow here at Brookings in the governance studies program. Actually today is my first time in this room for a public program in more than three years. So you are very welcome here. Our topic today on AI is one that we have seen explode into the mainstream in the last few months as generative AI and particularly ChatGPT moving, you know, to record adoption for a consumer application, you know, in a matter of weeks and, you know, that has really made the broad public raise a lot of questions about what the potential is, the limitations and the impacts of artificial intelligence. And I, you know, just an indicator of that level of interest and the amount that people are thinking of it, I have never seen as many questions come in online for a public program at Brookings as we received for this one. I am, you know, literally hundreds of questions and extremely thoughtful and informed questions. People are really thinking about it. And our panelists today have done a lot of thinking about this issue. They are experts in the field and they've brought that expertise to the National Al Advisory Committee. The NAIAC, as we'll call it, was created by statute and tasked to look at America's competitiveness in Al. and, you know, the other issues involved. And they met yesterday, and today they have released a draft report. This would be the first public opportunity to discuss that outside their meetings. And they are here to speak as experts not for the NAIAC and the final report on this draft will be released and maybe we'll hear about that.

So I'm going to go down the row here and just very briefly introduce our panelists and they'll say a little bit more about themselves. But to my left is Miriam Vogel, she is the president and CEO of EqualAI, it's a nonprofit that focuses on responsible and equitable AI. Next to her is Swami Sivasubramanian, who is a data scientist who's VP for data and machine learning at AWS. And I should acknowledge that Amazon is a generous supporter of the Brookings Governance Studies Program and that support helps make possible the work that we do. I also want to underscore Brookings' independence and commitment to that and that the views today, whether it's the speakers or the moderators, are people's own. So after Swami we have Susan Gonzales. She is the founder and CEO of AlandYou, a nonprofit that engages and educates marginalized communities on AI and emerging technologies. And then Reggie Townsend, the VP for Data Ethics and Practice at SAS Institute, the largest privately owned software company in America. And the other end of the stage is my Brookings colleague, Jessica Brandt, who is a senior fellow in the Foreign Policy program and director of the Artificial Intelligence and Emerging Technologies program at Brookings. So together, we will explore the issues raised by AI and addressed in the NAIAC's work. There'll be an opportunity for Q&A both from the audience present here and online. People can use the hashtag that's on the board there, #NationalAI, to send in questions. And so as we move into the discussion, I want to invite you, Miriam, to just give us a little bit of an overview of the NAIAC and its work and the issues addressed in your draft report.

VOGEL: Thank you very much, Cam, for the opportunity to talk about our report and also to clarify that we are all here in our own capacity, speaking from our individual experiences, and that's how we serve on NAIAC, really. So there's 26 of us, and each of us work in organizations related to this field, but really appointed each in our individual capacity. And so it's a privilege to be able to have this conversation currently and over the past year. So as Cam mentioned, we were created by Congressional mandate, the National Defense Authorization Act of 2020. We were formed officially last April and convened for the first time. May 4th of last year in a lovely event in your former home at the Department of Commerce, where Secretary Raimondo launched us with Dr. Laurie Locascio, I believe it was her first public engagement, it's been a lifetime since then for her, I'm sure, with all that NIST has done in the last year. And we had representatives from the White House, Dr. Alondra Nelson, Dr. Lynne Parker. We also had Deputy Secretary Graves who launched us with clarity on our marching orders. And that, again, by congressional mandate, was to advise the president and the White House National Al Initiative Office on Al Policy. And the mandate is both narrow and broad. It's narrow in our audience. You know, a clear reading, a strict reading as we've done, is to the president in the White House and on Al policy, but within that, they mentioned several specific areas. And so for our first year, we wanted to make sure to address those areas specifically, because it's a three year term. And so we started with that focus and immediately organized ourselves into five working groups. And those were trustworthy AI, research and development, workforce, international collaboration and competitiveness. And competitiveness

was focused on, several times within the statute, they talk about the National AI Initiative Office. It's set up its mandate and really alignment across the executive branch to ensure competitiveness for the U.S. on AI policy. There was also a note of a specifically mandated subcommittee on law enforcement. And so we followed our mandate and called for that within our first meeting. And the secretary has now signed off on those members, and so that will be launched in the near term and we'll look forward to working with them on this, on that really important specific issue. And we're glad there's a full subcommittee just expressly looking at that issue.

While in the meantime, we've had the privilege of looking at these five areas again, both narrow and broad, depending on, once you delve in, you see all the people you're touching, all the ways that AI is revolutionizing the world, both within the government, how the government regulates and has clear lines of authority, and thinking about the people impacted by AI as well, and the way that government can and should impact, protect and optimize who's able to benefit from Al while making sure that people are not harmed or discriminated against Al. And so it's a privilege for us to be having this conversation throughout the last year. It's just, process wise, we've met four times. We had our second meeting in Palo Alto. At that meeting, we were fortunate to hear from Cam and several others because each working group invited experts on areas where we intended to focus within our first year and it's online, our discussions and panels are online. I highly recommend that for anyone who wants to learn more about the specific areas we convened because each panelist and each panel was really insightful, really thought provoking and really educational. And we then, in our next meeting in North Carolina, started talking about the proposals we wanted to focus on for our first year report, which can mentioned is still in draft form. I brought a copy to you in case I needed to reference it for any points, you know, being a lawyer, I didn't want to get off the points here. So you have these for reference, it's posted online on Al.gov/NAIAC. And so you can see the draft report there. We, as Cam mentioned, had our public discussion on this report yesterday, again at the Department of Commerce. And so you could there see everyone's insights and input on the committee and what went into the objectives and the action items within this first year's draft report.

BRANDT: That's great. Thanks again for that important context. You mentioned each of you comes to this committee, you know, from, you know, doing important work in your own right, and I'd just love to draw you out on what brought you to this work and a year in, like, what are the, what's the one sort of most important takeaway you want policymakers to draw from your work so far?

GONZALES: Well, I'll start. I actually started and I became interested in A.I. when I was at Facebook about eight years ago. And this new technology, at the time, I thought was really cool because it was allowing the disabled community to access the platform. And my personal interest and passion has always been marginalized communities and women, people of color, disabled and others LGBTQ. So at that point, I just started following AI and learning a lot from the engineers, and I found myself often saying, oh, so what you mean is-- and I realized soon thereafter, after I left the company to do my own thing, I focused on AI and it became very clear very quickly that the All ecosystem, particularly in Silicon Valley, was just talking to itself. We have a lot of problems. And this was back when, you know, facial recognition was getting pulled back and it was just a mess. But then I realized the rest of the world is over here. And these are particularly marginalized communities, and there was no connection. And that's when I decided to launch a nonprofit to focus specifically on that, to focus on educating communities about the fundamentals of Al. I mean, in so much as an algorithm is like a recipe for cupcakes. It's a recipe that makes the Internet work and it makes AI work. So that's where my interest is, and I'm super privileged to have this position to be able to ensure, and that we are as a working group and as a committee itself, inclusive, inclusive in voices that typically are not included in this type of conversation and so that's, and fortunately with Miriam's leadership and the rest of the crew, we're definitely doing that, and so I'm looking forward to particularly year two to really dive into that and to engage other stakeholders and get feedback accordingly.

TOWNSEND: I'll jump in on that. So at SAS, we provide AI tools, a platform, if you will. And so as a consequence, I get a chance to meet a number of colleagues, you know, brilliant folks. And

while I'd always had some casual interest in AI and gone and done some self-learning, I had, I think like many of us often do in this space kind of had an oh crap moment, and for me it was after talking with some colleagues and getting kind of introduced to some of the issues associated with bias and what have you, then spending a little more time looking at documentaries and these sorts of things, and I had that moment and I decided it made more sense to be a part of the solution rather than sitting on the sidelines and just watching to see what happened. You know, for me, coming to this as an African-American man, I thought about it as, wow, here's an opportunity for Jim Crow 3.0, and I don't like the way that looks and feels. And so, you know, a few, many months later, let the development of what we now have as a data ethics practice at SAS and I was, you know, nominated to participate in this work. What I've learned, though, and what I think people really need to understand is that we all have those moments that there's a lot of potential risk and harm, and that's all very true. But at the same time, there are a lot of upside, there's a lot of potential rewards, and there are a lot of us in this space who are invested in both sides of that equation. And so I would encourage folks to get a little more involved and informed about the space. And maybe, just maybe, it might ease up some of the feelings that you get when you have that "oh crap moment".

KERRY: Yeah. So, Swami, I'm dying to hear what you have to say because both Susan and Reggie were at tech companies and what Reggie politely describes as an "oh crap moment" dealing with engineers, "okay, wait a second, there's a blind spot here". You are an engineer, a scientist. And so how does this look from your end?

SIVASUBRAMANIAN: So just jumping in. I'm an engineer by training. I still write code, although not so much on a daily basis nowadays. I joined Amazon before AWS existed. I don't know, for folks who don't know, AWS is like a cloud computing division, which essentially started with the notion of making all the IT resources accessible without having to raise huge amount of capital. That drove a whole wave of how startups actually now get going. So to me, so having built some of the initial datasets and as an intern and as an engineer, and then I've been with AWS since the early days, in a literal way, I kind of had an "oh crap moment" where, literally, I was on a paternity leave changing diapers for my daughter and playing at the deep learning systems. I got excited on the possibilities of how amazing these technologies are. And as a background, my Ph.D. is not in machine learning. It is in a different field of computer science and large scale distributed systems. So during my paternity leave, in between my downtime and whatnot, so I was teaching myself deep learning. And then when I came back from paternity leave, I kind of told my leadership team, hey, now I know what you need to do and AWS has to make machine learning accessible for everyone, not just people who have a Ph.D. in machine learning, which is effectively what it used to be 6 to 8 years ago, which led to all the tools we built in eight years. And I kind of feel like now we are, and at that time, I thought we were having a transformation and turned as an industry. But now that transformation in machine learning is accelerating even more. And so this is the rate of transformation, and technology has never been this rapid ever since, like probably the advent of Internet. And that is kind of, like, wild when you think about the age where we are living in and so much of things are going to actually change. And that is very exciting and it is important to be part of that community that enables this transformation, but also actually helps shape in terms of how we actually put this to work, and that's what I'm excited, professionally, but also excited to work with such incredible, smart people as I was publicly stating it yesterday, I'd never been in a policy committee. These people are too nice to accommodate a geek to be part of this proud staff. But anyway, it's a privilege.

VOGEL: The takeaway is, you know, I think all of us saw that there's the flip side of the positive and the negative. I think each of us, it's fair to say, was really excited about the innovation opportunities here, about the ways that AI currently fuels our life. I mean, it's hard to imagine what the pandemic would have been like if we didn't have Zoom and other mechanisms that made our life still interconnected and feasible. So on a daily basis, I don't drive anywhere without using a GPS system. I don't finish half of my sentences, Gmail sometimes gets them wrong, but when it gets it right, it's so nice to quickly finish. From small ways like that to the important ways that we can use AI in education, that we can use it in life saving advances. But we also realize that we're at a critical crossroads because this tool can also be a weapon. And what's so important about this

weapon is not just that it can be misused, but that it can be scaling discrimination, that lines of code and iterations of code can undo decades of progress and the perpetrator may not know it. And so I think one thing we all recognize is also the power of this moment. And I think it's been very encouraging to see how many people, both in industry, in academia, civil society and in the government, are savvy to the power of this moment and that we have this opportunity to correct past wrongs and do better.

KERRY: So a critical crossroads, and that's certainly, I think, the case as people see the ways, or start to consider the ways that AI may transform the way that everybody works. And, you know, traditionally, you know, there's the sort of higher level thinking and intuitive thinking job categories have been considered out of that. Now it's everybody. You know, we are thinking here at Brookings about, you know, what the implications of of generative AI are for our work. I know workforce was a big issue for the committee. And certainly looking over the questions that we've got, it was probably the most salient issue there. So, you know, Reggie, Susan, you were both members of the workforce working group, you know, I'd love to hear about the role that you foresee for AI or the future of work and the impact of that and that sectors or job categories that would be the most affected. And then, it's a two parter, sort of a follow up on what we do about that.

GONZALES: Okay, well, I'll get started. What I find interesting is, well, first of all, with ChatGPT, I would venture to say most of our families, and a lot of people think AI's here, not understanding that, actually, the minute you picked up your device this morning, you were using AI, and that started years ago. So it's interesting, which has sped everything up, right? And then when it comes to the workforce, if you notice, now that I mention it, you might notice, but today's narrative, if you think about a ladder, the lower third, you know, a lot of conversation about Kthrough-12, and a lot of investment there, and there needs to be. And then the top third, a lot of investment into grad students to encourage them to get PhDs in AI. But the missing piece in the narrative are our workers and maybe one of the good things that's come out of ChatGPT is to your point, Cam, is that, you know, I've read and seen things, well, now, you know, administrative workers are going to be affected and all kinds of more mid-level workers, and so I'll let Reggie talk to more about what we did, or what the committee did, but from my perspective, that's the missing piece, right now is it's not just about, the conversation used to be about "we need to get everybody to get an education in STEM and get a Ph.D., and we need more computer science people and we need--" true, but again, this is, it's real. And so who's the voice, right? Who's the voice of the workers when it comes to AI, who's educating the workers about what it is? I heard from a a teacher who was representing a teachers union in Baltimore, and she said, "yeah, I get a lot of these companies come to me and say, I have the AI tool that is going to change your life". And her response was, I don't even know what AI is, so how can I embrace this tool? I have no idea. So I think we, the big we, are overlooking that about giving workers fundamental information to make decisions.

TOWNSEND: Yeah, so, look, Susan's right. You know, AI has been with us for quite some time, but I think it's fair to say this is a watershed moment. I like to say, you know, back when we started seeing the benefit of large language models last November, you know, now everyone knows how to spell AI. So that's a good thing. That's a net good. But we have to be honest about this as well, which is to say there will be displacement. If anybody has gone to your local convenience store, you can see that there has been displacement in the retail sector. People who used to be your clerks checking you out have been substituted with, you know, machines. Banking, we've seen it with ATMs. But that was long ago, we got used to that. You know, when the Internet first started, we were like, I am not paying anything over this computer, and now it's kind of commonplace as I'll just paint these parallels to say that there is progression that occurs with this stuff. And over time we come to accept and acquiesce, we refine it, etc. That's been our path so far. This watershed moment feels a little bit different though, and I think it feels different because of the urgency attached to it and the rapid nature at which it came, right? We got, and we keep referring to ChatGPT, but I mean, there are other large language models, but we'll just use that one for sake of the conversation. They dropped that in November and then all of a sudden you got the next version of it like four months later, that was, you know, exponentially better. And so I think

that quickness creates a level of urgency that we feel. And I think that's a natural feeling. So I think it is important for us to be wide eyed about possibilities of displacement, and people in more vulnerable situations need to understand what skills might be necessary to, you know, upskill or shift left or right, and all of that's fair game. I think what we owe and what we've attempted to put in the, the big we, and again, we're here not speaking on behalf the NAIAC, go check out the draft report and all this sort of stuff that the attorney says we have to say. If you take a look at the material, what you'll see is that what we've attempted to do early on is provide some kind of some tactical things that government can do to begin to assess the landscape, right? Where our skills today, where those skills need to be tomorrow. And how does the government provide industry and others with the tools and the elements that they'll need to start to make some decisions out in the marketplace? And so that was the first step. And then hopefully we'll be able to be a little more precise with some other things in the future, but that had to be a necessary first step, right? Make no mistake about it, this is a moment and those who might be impacted, you're talking about folks at kind of the service level economy or people who are knowledge workers. Yeah, this technology can come for all of us, but it doesn't have to substitute as, and oftentimes what we're seeing today anyway, is that it's either augmenting in certain spaces, you know, I know Swami does a lot with developers, and so you see a lot of developers who typically would do very rudimentary things like testing, now you can farm some of that out to a copilot, and then they can use their artistry, if you will, on some of the other development related activities. So I think over time we will start to kind of weave this in or integrated with our lives, much like we have with the ATM and others. But this moment requires us to be intentional about it, and I think that's kind of what we're feeling.

KERRY: So I know your focus, Miriam told us, is, you know, under your charters, basically what does the government need to do? What is the president and other agencies need to do? But from your standpoint, how do businesses and individuals prepare for this future? And, you know, how do we ensure that that the teachers who have to deal with AI in the classroom have the ability to do that?

GONZALES: Well, I can just share from the work that I do that what's interesting about this topic is, for the most part, people don't know what they need, that they even need to know this. I think people still think of AI as, you know, The Matrix or Star Wars and now, now it's ChatGPT and that's what AI is. And so that that is an incredibly challenging piece of this work, is helping people understand why they should know, why they need to know, you know, to know that when you apply for a loan on your phone, that the AI tool will track how many mistakes you make or on any application, and you're probably going to make more mistakes on your phone and you might get declined for a loan because of that. I mean, these are like fundamental points regarding, you know, AI tools that people are interacting with every day. So that that is the greatest challenge, I think, how do we prepare, as I think we have the conversation in some of the work we're going to be doing together in this coming year is just that, about education and awareness about AI. And again, it's not about getting people to get CS degrees, computer science degrees, it's about what are the fundamentals, so people can understand what they're actually touching every single day.

TOWNSEND: Yeah, so I want to echo that. And we said it in public comment yesterday so and so now. So we'll have a focus on awareness and education so we can start to answer that question a little more explicitly, Cam. But I think the fundamental is we've got to kind of raise our baseline as a society. There's a baseline of understanding that we all have to have. You know, I use the analogy of electricity, like I'm assuming no one in this room probably went to school to be an electrician or maybe, you know, a nuclear physicist or something, but everyone knows something about electricity and you probably didn't go to school to learn it. And so we've got to raise our level of common understanding about AI, similar to the way we all know not to put a fork in the in the sockets in this room. So that'll be the kind of thing that we focus on because I think it's important to Susan's point that we don't turn this conversation into "how can we turn everyone into a computer scientist", like not everybody, I'm not a computer, I don't want to be a freaking computer scientist, right? Alright? So how can we make sure that the artists and the teachers and the mechanics and the baristas understand the impact of AI in their lives? And so I gave a speech a couple of weeks ago talking to an audience, and I said, you know, start from where you are, just whatever it is you do, whatever your hobbies are, just think about, first go get some familiarity with

it. Just go out on the Internet and Google AI, you know, fundamentals or AI for Dummies or whatever. There's no shortage of information about this stuff, but then start from where you are and figure out how it might apply to your life, right? So the good thing, if I might, about some of the stuff that's coming out with the, you know, the the fake Drake, right? The whole, you know, Drake and being the deep fakes in the wake, yeah, with The Weeknd of the deep fakes. So the good thing is that's creating public conversation, right? I think that's a net good. Now, certainly we have to deal with issues of copyright and IP and all this stuff is very real, especially to artists, very, very real, so we can't overlook that. But at least it's creating an opportunity for us to see that, wow, this, this affects me. Even if I'm just a consumer of music. How do I feel about consuming music that was generated by AI as opposed to by a human artist? Am I feeling that or not? Alright, so just again, start from where you are and then start to figure out how AI might be to your benefit or potential risk to your well-being.

SIVASUBRAMANIAN: I'll probably just add, you know, computer engineers had to learn AI. Right now, internally, like we have our AI coding companion tool called Code Whisperer, that when developers turn that on, they are able to do things 57% faster. And so it's, and even many times they are resistant to turn it on because people are always hesitant to pick up new ways of doing things, it's just human nature. So the biggest takeaway for [inaudible], AI has a potential to impact every industry, and almost all of us have to read to ourselves on what kind of tools am I going to do in the future to use my job? It'll make us more productive and do things differently, but it'll will also improve our end goal in the future as well. So this is true for developers as well. But the key thing is to expose people that the art of possible and what these tools will be there so that they know instead of treating it as an abstract thing that will come 10, 15 years later.

VOGEL: And I think a theme here is demystifying AI, we're not all going to be computer programmers, nor do we all want to be. But we each have a really important role to play in engaging with AI. Because we do so, we have to understand what it is that is fueling our economy and our lives. And not only is it important as an individual to understand what it is that that AI is fueling so many important functions, but our country depends on it. If we don't have more people participating in the process with a broad array of perspectives, our Al will suffer. There are study after study that show that the broader diversity in who is developing and comprising, who is building your AI, the better your AI system will be. And again, that doesn't mean everyone needs to be a computer scientist, but think about throughout the Al lifecycle. Each human touchpoint is an opportunity for bias and other harms, cyber intrusions, etc. to embed. Each is also an opportunity for us to identify and remediate that discrimination. But what that requires is that the people at each touch point, starting from the beginning of creating an Al solution. Right now, those who have been to date enabled to create an AI solution are very privileged that they have access to that opportunity. Well, these large language models have changed that because now the language of coding is English or whatever language you speak. And now you can use these large language models and other emerging technology to fuel you to engage yourself in using AI to support you. So is it fair that we expect teachers to all of a sudden teach this new language? Probably not. But if we demystify how ChatGPT doesn't take over their job, but rather can help support them. When I've used it with my daughter, I opened the veil and I showed her when she was trying to write an essay. You know, here's what a good framed response looks like. And I regenerated a few times on ChatGPT to show her there's a several good answers, not one good answer. And then I challenged her to find the flaws. Because you can't rely on it, you can't copy and paste. So it can support us in so many ways, but requires engaging with it and demystifying it in a way that we all now have access to.

BRANDT: That's great. I want to move for a second towards competitiveness, which I know is a focus of your work, and I think both of you are on the Competitiveness Working Group. It seems like a key recommendation of the report was the need for increased investment in AI R&D, and I'm curious, how can we achieve that and what are the potential benefits?

SIVASUBRAMANIAN: I'm happy to speak in general, not on behalf of committee, but I mean, Al just do, in a sense, the algorithms and we are as a country, so much of R&D does happen from US based academia and institutes. And we are still ahead on that front in so many

level. But the key aspect we have to remember in the future, as these models get bigger and bigger, it is becoming, three things are going to become very important. One is talent, second is compute and third one is how much data do you feed them to build these models. And this is where we had to actually think through first compute to some extent, you can say, Hey, America's the number one, the biggest economic superpower. So they probably have the budget if they want to build the best large language model in the world or invest in foundation model research in a big way. We have to make that investment. But more importantly, the talent war is something we should really think about because right now there are very few people who are actually investing in this research in a big, meaningful way. And you have to invest in education, especially at the university level and also in the future for supporting some of these key research. And that's where I suspect still as much as computer engineers are not going to be doing what they do in the future, but there are enough people who need to know how to train these Al's systems and some part of it. I think we all would agree, too. And that is an area that I really hope we continue to double down on, ensuring that there is enough investment going into education and R&D at the university. And I speak purely from an intellectual capacity as well on that front. But I think these are some of the key things. Otherwise, I'm less worried that there is some other country that will take over in that vein. But we do have to pay attention on investments in R&D and education for us to continue to lead in this one.

VOGEL: And it is such a crucial area. So thank you for speaking so well on why. And just to give you a glimpse into some of the challenges, on each of our working groups, we had one chair to lead that effort, for R&D we had two, because on the one hand, we have a tremendous academic, we have many, but Dr. Ayanna Howard from Ohio, who is an expert in this field. On the other hand, it would have been more aspirational than a reflection of reality if we only had an academic lead on that, we had to have an industry companion. And so she co-chaired that with Ashley Llorens, who is a former academic from Johns Hopkins, but currently at Microsoft, because that's the reality that so much of this technological development in AI is happening on the industry side. And thank goodness for that, because we're all benefiting from it. But we need to make sure that there is government support for many reasons, to make sure that that our country is competitive, to make sure that there is democratization of access and inputs. And so as a result, you'll see, if you want the cheatsheet in our report on the draft on page 12 and 13, we just list out the summary of what our objectives and action items are, and you'll see that three that we aligned on in year one.

And I should take a side note. So year one of a three year committee, we realize you don't always see a report. You don't often see recommendations. We understood there was so much urgency in this space that we wanted to do whatever we could to hurry up to the action items. And so year one is just a glimpse into the broad array of areas where we hope to weigh in and provide guidance and insight. But these were a few that we thought had to be said this year, in this budget cycle, at this point of AI development, and one piece that we wanted to take the opportunity to flag is that when we're talking about AI, we need to be talking about a multi-stakeholder process and we need to be thinking of it from the technical side as we have, but the socio societal impacts as well. And so this field of socio technical research really needs to be developed and the government is in a prime position to be fueling that work. So we leaned in full scale on on that objective. And vou'll also see support for innovations are underway, we didn't want to recreate the wheel, and we are fortunate that our work came about in a time when there's a few significant developments in this space that we took note of. One was the significant work underway at NIST with the risk management framework that was released in January, aligning for us, best practices across industry, law agnostic and user friendly in so many ways. Likewise, we had the benefit of just around the same time of the NAR Report, the National Al Research Resource Task Force, which had some really luminary Al thinkers and research leaders who presented a report on the path forward on how to make sure that we lead in research and development and do so in an inclusive, responsible way. And so that was one action item that we really had no problem in fully endorsing with our broad, cross perspective views.

KERRY: So, you all know, Miriam, you mentioned, I spoke with the committee and in Palo Alto that I co-lead a project at Brookings, called the Forum for Cooperation on AI, it's multinational

expert roundtables. I am so I'm curious to hear about the work on international cooperation. And you know, what you think is the potential in that area, and, you know, what are the the barriers, the potential for fragmentation internationally on AI, such as we've seen in privacy and data protection? And, you know, how does the US overcome those. Swami, I think you are part of that working group, right?

SIVASUBRAMANIAN: Yeah, I'm happy to, I can't be precise on page numbers like Miriam, but I would say, first of all, there are a lot of, actually, countries who want to partner with us and they share similar values in terms of what are the technologies we should build and what are the necessary guardrails in which areas and so forth, and how can we actually also double down together on R&D and so forth. So I think it totally makes sense from purely moving the field forward and also especially when we share the same values to also invest together on actually, like, common research in terms of cooperation are also enabled, like, and multilateral AI diplomacy. So there are specific recommendations, maybe fire writers that don't like page 13 probably Miriam you can do-- 14, I got one wrong, sorry. But I do think the precise recommendations that are in the report are just a reflection of where we are. But there are specific things we can do in terms of even, like establishing joint R&D efforts and so forth. But these are the things I suspect we will unpack more and more in the future, but it would be very interesting. Miriam, you want to add anything specific on this?

VOGEL: Yeah, I think we're all mindful as individuals, as NAIAC members, as within our organizations and, you know, love to turn the question back to you, Cam, considering how much you talk and think about this. But we realize that we're talking about a technology that doesn't have borders. And so we have to be mindful that when we're talking about what the right regulations mandate safeguards should be, that we're talking about a technology that's going to be used in hands across the globe at the same time. And so for many reasons, it's imperative that we think about alignment, that we think about making it easier for those creating AI to be in compliance, to be clear on what the expectations are so that it can be built to our expectations and safeguards and to allow this dialog to happen so that that there can be partnership. AI creation is expensive, it's time consuming, it requires significant resources. So to the extent that, you know, as with space journeys, you know, this is an area where we've gotten beyond thinking beyond our own province to understand that this is a moment to collaborate and likewise with AI, we recognize we're in a similar space.

TOWNSEND: Yeah, if I could, I'd like to comment on that as well. I wasn't on that workgroup, but it might be additive to this part of the conversation. So I had the great fortune last year, literally traveling around the world talking about AI in a lot of countries around the world and a couple of things I noticed, right? So I use the electricity analogy earlier, you know, when you go to different nations, sometimes you need a different converter, right, in order to be able to get the electricity out of their walls. And there are different types of converters all over the world, and it's a standard. But what's important is that no matter how they generate their electricity, at some point, you still need to get access to your email, right? And you've got to tap into the wall. And so what comes to mind is, as Miriam pointed out, AI is without borders. However, it still needs a set of at least loosely coupled standards, much like we have with electricity. And so while we might have some different converters, if you will, on AI some point or some equivalent, we do need to have some sort of standardization around this. And so we can allow kind of the marketplace to do that or governments can jump in and at least try to cooperate. So I just want to make sure people understand the "why" behind this, like why it's so important. The other thing to point out is that a lot of nations are seeing AI as part of, kind of the next version of industrialization, like a lot of younger nations especially missed out on being able to build vibrant economies based on industrialization, and so they see Al now as this promise. Now, there are some limitations in terms of footprint for data centers and all sorts of things, but, you know, they see it as strategically important for the vibrancy of their nations. And they're also looking to see what steps the US is taking. So this international collaboration piece is so very important. And, you know, as has been said out loud, a few times, not necessarily just with like minded nations, right? But maybe this creates an opportunity for extension of olive branches to those with whom we don't, you know, completely share 100% of our values.

BRANDT: I love that electricity metaphor. Let's maybe spend a second on trustworthy AI, and talk about themes related to transparency and privacy. Why is transparency important? How can it be achieved? What about privacy in AI systems? Who needs to do what to make sure that data is used in a way that's ethical?

GONZALES: Okay, what I will say is, I find it ironic, and literally in the last couple of weeks, respectfully, where leaders of certain companies are coming out and they're communicating their commitment to trustworthy and responsible AI, but then, meanwhile, the week before, they decimated their ethical AI departments. So anyway, I just find that fascinating that, you know, did you not know that this has happened in your company, and these are the CEO's.

BRANDT: But I'm assuming that he's not responsible for this?

GONZALES: No, no, no.

TOWNSEND: It is not my fault.

GONZALES: No, it's not, it wasn't Reggie, and it wasn't his company. But anyway, so that's just my take is first of all, what exactly is trustworthy, responsible AI? TBD, I guess. And then also, what is the commitment? I saw a big company's commitment to AI and, or, trustworthy AI, and it honestly it was as if they took a saltshaker and their words were "aspire to", "strive to", "aim to", and that was painful. That was painful to read.

VOGEL: Obviously, in our individual comments.

TOWNSEND: Right.

VOGEL: Exactly.

TOWNSEND: Exactly. Yeah. So in my Individual capacity. I can talk a little bit about a couple of things. So first, you know, there are attempts at defining what trustworthy actually means so we can put some some real actionable, potentially even legal frameworks around that. But importantly, what that does is it gives guidance and signals to companies like ours to know what to build and what not to build and that, so that is vitally important. But in the absence of that explicit guidance, you know, we have some here in the US from NIST with the risk management framework as an example, because it outlines some of that. But a lot of companies have taken it upon themselves. I know I like to speak for SAS, at least when we talk about trustworthiness. You know, we've got a collection of six principles, the kind of the preeminent one being one around human centricity to make sure that everything we do is aligned with human agency equity, etc.. And so what we attempt to do is ensure that our principles are reflected in all that we do. Our people, our products, our services and, you know, that's my day job, right, outside of doing the NAIAC thing. And so there is some attempt in that almost as a stopgap as we wait for governments and all, because all this stuff is very complicated, guys. I mean, we shouldn't, you know, think that it should happen with the snap of a finger. It's all very complicated and it requires a lot of thought that goes into making sure that governments put these these necessary guardrails in place.

SIVASUBRAMANIAN: So, I say this often, so if you ever heard me talk, the number one thing we all need to say, I mean, remember, is machine learning systems make predictions. They don't make decisions. And many times people translate them making predictions to machine learning systems that make predictions on what should I watch on Netflix, I really don't mind, but whether I should, whether it predicts saying like, okay, is there something wrong in my CT scan, so I have cancer or not? I probably want a radiologist, I shouldn't say probably, I want a radiologist to check. So you have to actually first know how to factor application of AI where you need explicit human judgment. that's a mandatory thing and that is very, very important, so just as a general frame. Then even in the case as far as humans are, AI assistants are just helping humans to even weed out all the data and say no, then you have to actually say like, how do they know these

machine learning predictions are actually interpretable, are not. How do they know how they came to that conclusion or this prediction? That is a very important problem. And technically that problem is only well understood in very simple form of machine learning algorithms which are called like linear or gradient boosting algorithms and whatnot. The deep learning, we were just starting to figure that out. But Transformer based these large language models, I don't think even people who built that can explain to you why it generated that response. That's the reason why. And you asked the same question twice to these chat bots, it generates a different response. So we had to be really cognizant of then are we going to use, let's say, a chatbot to generate like an international policy? God, I hope not. But but nevertheless, we got to actually understand the limitations of these things. But we are investing significantly in academia, industry, even within Amazon, like we power our own tool that can actually inform why a machine learning prediction was made, let's say, for like well-understood algorithms based on what data set was fact. So anybody who is building a tool, let's say using our tools like Sage Maker, we have a tool called Clarified that will help for that. But that works for new for some kind of algorithms, transformer, neural nets, it's like a whole different class. So we had to actually really unpack purely at us engineering and scientific level what things we can measure. But as a cutting part of it, you got to actually really separate which areas we are really aiming to really apply it in terms of high risk and really require that those really need human judgment. And these are just informing potentially what things needs to be there as well. That's how we start trusting these systems that they're just going to, I don't know, ever come a day where these systems automatically become radiologists. I highly doubt it forever as well. And that is where we start. I mean, not believing these systems and I think we got to actually learn to segment these use cases to.

VOGEL: Our where two separate hats at different times. For my answer on the one hand through Nayak and thinking about trustworthy Al. So first of all, we all decided in our first meeting very quickly that when we were talking about AI, our definition was that it's artificial, that is trustworthy, effective, responsible, inclusive. And so it informed all of our work to a person and to a committee, to a working group. That was our commitment. But we wanted to, for our first year to have one working group specifically focused on it because we thought it was so important and because it was a novel discussion. We were fortunate that we, all of us, we've all been invited to NIST's process in building their A.I. risk management framework. Their deliberations are online, their panels are very informative, instructive online, and each step of the way they published their draft for public comment and we can see all the public comments. So as a result, there was deep trust in supporting the this framework. And we're so fortunate that they, first of all, define trustworthy AI in a very thoughtful way, and they've done so much multi-stakeholder outreach to make sure that the various perspectives are involved in their framework so that if you follow the framework, you can identify socio technical risks. Who could you be harming? For whom could this fail? And that leads me to my other hat. My equally I had when we're talking with companies, we have to remind them you think you might be doing products and services and historically, maybe generations, that's what you've been, but you're probably now an AI company because you're probably using AI in pivotal ways. And if you don't think so, just talk to your H.R. department or any other department. And they're probably using AI in some very impactful ways that will decide who is on your workforce and how they're how people in your space are functioning, let alone other consequential decisions. And so when we try to get them interested in trustworthy AI, in responsible AI, we explain there's four main reasons why you need to care about this. One is your employees don't want to be a part of artificial intelligence that is harmful, that is not responsible, and your employee base is pretty important. And so in order to retain and keep them happy and on board, you need to be thinking about that. Second of all, you need to be thinking about litigation. There is risk that has started to occur. We've started to see litigation. We've seen several regulatory bodies talk about the fact that there is going to be more regulation, more litigation in the space, a joint statement, joint statement between the EEOC and the DOJ last year around this time, Department of Labor, CFP and so on. All the alphabet soup of the U.S., we talk about the fact that it's a broader consumer base. The more people who they include in their use cases, the more people who can use their A.I.. But the bottom line is it's trust, it's brand integrity. You need to build trustworthy AI in order for people to trust it, because otherwise they won't buy it. So it's really deeply embedded within the nature. Of the technology, that there's a mandate that it needs to be trusted or we won't we won't use it.

BRANDT: I have so many questions. But I'm also. Just aware of the time and, oh, how many questions we have online. So maybe if it works for you, we could take some questions from the room. And we have a colleague here who's monitoring what's happening online, be great to get you in the conversation here.

AUDIENCE MEMBER: [Inauidble].

BRANDT: Easier. I think there's a mike coming.

KERRY: And if you could just identify yourself too, and any affiliation.

AUDIENCE MEMBER: Hi. Yes, my name is Jill Shugar. I've been in government mostly in foreign policy through the years that I've also worked at the OECD. And now I'm working with you, NASCO. And particularly in this area, I've had the opportunity to speak to the chair of this group and also had the opportunity yesterday to listen to your open forum, open hearing as well as here the Secretary of Commerce, who made it quite clear that she wants more product and more quickly that this the genie is out of the bottle and it needs to. You are I think she called you the advisory group to the U.S. government. So my question really is a simple one first, which is when does the draft become a permanent report and accepted by the president since you are there to advise the president. But also there are a number of national plans that you nasco has been working on. And unesco's passed the first global recommendation on ethics. And i two years ago, you know that the eu has been extremely busy as well on this. So going back to what you hope NIAC will be doing in the second year, what is it and how quickly and what is the focus? I know you're speaking in your individual capacities, but you're also a member of a committee that's reporting to the President. I'd like to know what that committee is going to put forward, particularly on ethics. Thank you.

VOGEL: Well, what we can say on behalf of NAIAC in terms of the timing, where I report or become final, there are some copy edits underway. We the process is it's submitted to the secretary and then and then submitted to the president. So the timing on that, as you can imagine, is well outside of our control. But I don't think that will be a lengthy process. But that is in our charter. What the process is, a copy is also sent to various committees of Congress. So that, I think, is the process. QUESTION On the other question, what are we going to be doing? It's fair to say there are a few lines of effort that we have committed to. How quickly and in what form is under, you know, review. We certainly want to be helpful and understand that we cannot wait for a second year report in order to provide more. The nature of this policy will not and this technology requires us to be more nimble and to speak more frequently. So we've heard that and we're trying to be responsive. We have committed, as Reggie mentioned, we will be focused on education and we will be focused on international collaboration. We will be focused on inclusivity. We will be focused on workforce, workforce and and human rights. And we will be focused on generative A.I. and and that will take a few different forms. So I we will share with you as the public, you know more when we are when we know more. But we have committed and aligned to those priorities and hope to do those as well as others.

KERRY: So a question on the right rear here and then we'll take a question online and come back to the the room.

AUDIENCE MEMBER: Thank you. My name is Brian Holland, I'm a student of data science at Georgetown, and I'm going from here to my data ethics class, so the timing is wonderful. And I did actually study electricity. So the fork in the socket analogy is just primo. I can tell you that from experience, But that seems like a self-enforcing rule. And what I've heard you talk a lot about the collaboration and competition and the global global scope and scale. What I haven't really heard you talk about is enforcement, how how are we going to keep more, just to put it bluntly, Facebook genocides from happening. How do we how do we do that beyond just lawsuits and litigation? Because it seems that AI is just math. So you can't really say just don't do that math. You know, like how how do you how do you, whatever rules and boundaries are set up, there's going to be

violators. There's going to be encroachment. How do you enforce those boundaries wherever they end up?

KERRY: Who wants to take that, right?

VOGEL: Fair point.

KERRY: You're the lawyer.

VOGEL: The lawyer's on the way out now. Yeah. You know, I think within our report, in our draft report, you'll see there are various mechanisms that we've recommended. First of all, supporting parts of government that are in charge of that enforcement, making sure that they're sufficiently resourced that the leadership positions within this area are filled and appropriately resourced. So I do think that a first step in that direction. And, you know, I know there's not too much else we can say at this point, because that's as much as we aligned on for the first year.

AUDIENCE MEMBER: If I could follow up on that. [Inaudible] Thank you. There's a lot of proceed at your own risk going on right now and the people using these systems are aware of that. And usually can critically analyze what it's spitting out. But as it filters down to more and more users, they will accept what's being said as face value. So who is responsible for possible disinformation? Whether willing or unwilling that comes from these labs is the responsibility on the provider or on the person to critically analyze what they're being told? And do you have any plans to suggest policy in either direction?

KERRY: Yeah, I'm sorry. I you know, that's an issue the EU is struggling with in terms of how to allocate responsibilities, you know, up and down the value chain. Do you address that in the report in terms of how government should proceed with looking at the value chains?

TOWNSEND: Yeah. Well, so I think the explicit answer is, is it in the report? The answer would be no, explicitly. However, I think the framing of the question is really important. One of the things that I learned, this is my first time doing government stuff, right? One of the things that I learned that I think is important is that there are a lot of laws that exist already. And while this is new technology, the harms incurred are kind of the same harms potentially. And it's really important to evaluate the current legal structure and see how that applies before you create a lot of net new. Now that stuff take time, and I've inquired like how how do you how does that even happen? Like people deal with the mechanics, you know, say, yeah, that's possible, but here's like the 50 million things that you got to do. Like, and again, I'm not the DC guy, so I step away, It's okay. But I think it's important. That's an important step now to proceed at your own cost. And I think it's real, which is in part why I think the work that we are planning around awareness and education becomes really important because, you know, there's a proceed at your own risk with sockets around here as well. Right. To your point. So we we have to make sure that we raise the level of understanding about this stuff so that people can proceed in ways that will not be unintentionally harmful to themselves. Right. So I think it's a both and yeah, enforcement is going to play a part at some point. But first you got to start with rules, right? And so I think all of that stuff is underway and and while it feels like it's really ambiguous, that's because it is. But there are a lot of folks around the world, literally, who are trying to figure this this stuff out the first time, folks. Right. In human existence that we're dealing with this sort of stuff. So we do have to extend a little bit of grace as we try to figure some of this stuff out so that we don't put structures in place that have unintended consequences that are every bit as harmful as those that we're attempting to avoid.

BRANDT: I agree with that wholeheartedly. Do we want to try to bring some of the folks from the virtual conversation into the room?

AUDIENCE MEMBER: All right. We have one question from Brenda Cabeca from Health IQ Consulting, who is asking about the risks associated with international cooperation, especially as you were mentioning, already specifically deploying AI tools that are imported from high income

countries and may thus contain biases from those countries to countries that are lower middle income. What risks do you foresee with that approach and what advice do you have for mitigating those risks?

VOGEL: In our report, again, we leaned in on the risk management framework and talked about in our international space that that's something that we think should be a point of international collaboration. Our framework is intended to identify these harms. It's intended to be looking out for the end user, their small business, and to be applied by by organizations large and small. And so again, I think we're really benefited by the timing that in January we got this very substantive, thoughtful, comprehensive answer that can be applied in so many different ways and should be internationally and others.

SIVASUBRAMANIAN: I'll just give a practical example for how these HoloLens, large language models can get applied in a way you can say these large language models get these properties because of the amount of data that they are being fed and all of them are trained based on, let's say, the sprawl that exists and whatnot. But imagine if they are trained and many of them just primarily speak English. Now they can take on more and whatnot. But if there is a country that wants to take on, let's say, historic literature for their specific literature and then train them specifically on it, many of them can take some of these open source elements and fine tune and so forth. So the thing we got to be cognizant of is that it's not like. I don't believe there is going to be a world. There will be like one air, one GP tomorrow that will rule the world. There are going to be actually multiple models, each for a specific purpose that people are going to build and there are going to be multiple companies and multiple nations building for different uses. So you have to be very cognizant of how do we enable them to build them in a safe and secure manner. And then they do have the ability to customize it in an easy way to a purely speaking, from an pure individual capacity, not on my day job or not, but I do expect this to evolve in the same way, like many other technologies actually in the past are done, and so this will hopefully go in that fast. Long as they pay attention on how these things get trained.

KERRY: Yes. The woman in the middle on the in the white sweater.

AUDIENCE MEMBER: So it's this this is a policy discussion. I wanted to ask you guys if you had discussed the idea of repealing Section 230 of the Communications Decency Act and allowing existing liability laws to take force, because the point that you made that that, you know, a lot of the counter air is causing are not new. There is an entire legal structure that exists to enforce if harms that are done by systems that's being blocked right now by section two thirds of the Communications Decency Act. And I know that this keeps coming up and I know that it keeps getting knocked down. I don't know why, but since you're a policy discussion group and you're going to be making policy recommendations, I was wondering if maybe you could weigh in on why you are for or against that.

VOGEL: I don't know if people want to in their own individual capacity, but to answer your question as to did the committee discuss it, because our audience is the president in the White House, and what you're talking about is legislative. That's not something that we saw within our mandate or took on.

BRANDT: I'm going to start taking two at a time. So maybe right here we have a green jacket. Pink jacket.

AUDIENCE MEMBER: Hi. Thank you so much. My name is Alecia. I work for Congresswoman Lisa Blunt, Rochester from Delaware, and she leads a caucus called the Future of Work Caucus, which has a lot of things under its purview. But we're looking at Al as part of that. And I'm interested in some of the stuff you were mentioning about workforce, particularly K through 12 and then college and grad school as being an intervention point that does need attention, but but also is not the most direct way to access the current workforce. So I'm wondering if you have recommendations about how to access the current workforce who are in jobs, who may not be

going to your community colleges or back to school. How do we reach them with information about these systems and what they need to know? And yeah.

GONZALES: Yeah, thank you for that question. I don't know if anybody saw this piece. I was few weeks ago, maybe a month ago, about chat bots that are A.I., They are augmented jobs now. So these customer service folks that it was about the telecom industry, the industry had engaged. Now these new chat pots that were actually grading every word that these customer service reps spoke. And and it was interesting, we were talking about how I can increase efficiencies for a business. And yes, that is true, but I thought it was fascinating in this piece that it was talking about how in some cases that this AI chat bot was causing so much stress that the people were quitting, that they were just leaving their jobs. And so to answer your question from from my perspective personally, it's a matter of asking the question, so what what are employers doing? Because the ARC the article did also note how much more efficient, you know, the numbers were in customer service. But but nobody seemed to be actually asking the question. So what are you doing Company X to help your workers adapt to augmented jobs? Because a lot of people will say, no, we don't replace jobs, we augment them. And so then my question is, so how so? And so when an AI provider with a tool goes in and trains these workers and then they leave, then what? And those are the questions, you know, to employers. So what exactly are you doing to not only prepare your employees and potentially upskill them, but also on the backend to ensure that people are not leaving these jobs simply because it's just frankly just dressing them out because they're just not familiar with that type of work.

KERRY: So let's take a--

TOWNSEND: Just think the crux of that question has to do with engagement. How do you actually get people. Excited or invoked. Right. And my personal experience is you have to show them what's in it for them. And it'd be great if we had kind of an ABCs for A.I. that spoke to individuals from, again, from where they are in whatever paths they they've chosen. But I think the channels through which we communicate with those folks then becomes really important. Like, how do you actually talk to them? Becomes a necessary step in. You know, it's still trying to figure something out in terms of what levers this government has in order to do that. I'm just I'm a fan of the idea that air is not a single entity issue. This is a full ecosystem matter of concern. And so we've got to think about this in terms of what government can do, what employers can do, what schools can do, what individuals can do. And so I think, if any, this is an opportunity for us to have an all hands on deck sort of moment. And so I don't want to get on a soapbox, but point is engagement and finding the channels through which to engage, I think becomes the the the path to answering that.

KERRY: So let's take a couple of final questions together and then we're going to have to wrap it up. So starting with the gentleman with the on the aisle there with the striped socks.

AUDIENCE MEMBER: Although I would like to defer to the pink. Oh. Did did you get your question?

BRANDT: We haven't gotten your question in, so why don't you ask your question, and then we can ask the pink jacket.

AUDIENCE MEMBER: Okay. All right. I'll ask.

KERRY: We'll take those two questions. All right.

AUDIENCE MEMBER: Thank you. I'm Alan Raul from the law firm of Sidley Austin. I'd like to come back to the question of Harms and, Ms. Vogel, you mentioned that your framework includes a element to identify. Harms. Is there is your group, is NIAC or some other government entity or NGO actually looking. To identify concrete harms from, you know, I would suppose maybe general purpose artificial. Intelligence rather than specific purpose? If you think that's a relevant distinction to identify harms. But for example, we know that hallucination giving inaccurate results,

that would be a harm because people will be deceived. Same with deep fakes. Are there other actual concrete harms that are being identified and is somebody responsible for consolidating those and and reporting on them? Because otherwise, how do you establish effective and appropriate rules if you don't really know what the harms are?

KERRY: On the aisle over here? Oh, I thought you had a question.

BRANDT: We're going to take two at a time. Please go ahead.

AUDIENCE MEMBER: Is this on? All right. Great conversation. My name is Gretchen Stewart. I work for Intel Corporation. So we've been talking about the software. I have to tell you, I, of course, want to talk about the hardware. I'm the chief data scientist for our public sector, and my questions are really around security and sustainability. So I'm curious because those large language models use a tremendous amount of energy. If you all have talked about that, and if that's part of what your suggestion or potential suggestions are, and then also you're talking about privacy, but data security's really important. So I'm curious from the perspective of both of those. So thank you.

VOGEL: To answer the question, have we talked about it? We've thought about it. We're deeply concerned about it. And it's something we've we're planning to take on. So thank you for raising the important point of when we're thinking about the impacts of artificial intelligence. It's society, it's underserved communities, it's the users, it's the employees, it's the environment. So we really need to have the broadest aperture of our thinking about who's being impacted by this revolutionary technology and who can benefit. I mean, each of those perspectives I just mentioned could also benefit from from artificial intelligence. If we're mindful and intentional about how we operate at this moment. Which leads to your question, you know, from a non I don't have a nick answer for you with my equally I hat I mean, one thing I think is so important to think about as we're thinking about what the risks are. As Reggie mentioned before, this is not wholly new territory. So much of this is addressed or should be or could be addressed by laws on the books because, you know, the laws were intended to draft. You know, it's intentional, intentional that laws are supposed to impact innovations and new questions as they go. And there are so many of those here. So one thing that I think is really important, again, this is not my Nayak and this is my it's something we think about all the time and equally is what are the harms and opportunities here that are handled by traditional fora and laws? Where are the product liability questions here? What are the contract? Right. You know, when is it a material breach that your artificial intelligence has has failed in some way? When is there are there constitutional issues and and so forth? You know, the EEOC and DOJ, as I mentioned, have talked about the fact that their civil rights laws apply in this setting. When you're using ai in your h.r. And employee functions. The american americans with disabilities act, the ada is applicable whether it's a ai based determination or a human like. Either way, the law is will equally apply. So i think one thing that's helpful is for us to parse out which of these questions. Do current laws on the books, current regulations, current norms and standards already apply? Let's make sure that there's clarity and move forward on those and then look at the new questions where we need new for new regulations, etc.

BRANDT: Okay. Lightning Round. I would love to hear from each of you one thing that you learned in the course of this work in the last year that surprised you?

SIVASUBRAMANIAN: That's not much of a light thing.

GONZALES: Okay, I'll. I'll start. The enormity of opportunity for improvement.

SIVASUBRAMANIAN: I guess I had to. I'm very optimistic, you know. The biggest thing I learned. Again, I interact. I come from purely an interesting background, the diversity of such an amazing group and and the approach at which this group took to actually problem solved. They didn't come it like it's all going to be Matrix or Terminator doomsday scenario. We are in this to go figure out how to make this technology and how to shape that is really refreshing for someone who is

participating in this policy group style setting. For the first time ever, I thought that was very refreshing and really looking forward to contributing more in year two.

TOWNSEND: Yeah, I didn't know what to expect when we started, and I think it's safe to say that I'm I'm heartened that that they are really. Smart is probably not the right label, but good hearted people attempting to figure some of these things out. Yeah, there are 26 members, but there's a whole lot of people that are supporting us. But you know, in government and there's some overlapping activities as well that I guess I didn't appreciate when I first started that are also kind of tapped into this, just this thread of a And so just the there's, there's kind of an enormity to it. To Susan's point, there's certainly room for improvement. There are certainly gaps in government and and efficiencies and all that good stuff. But there are some some really good people working on this and we're trying to get it right. So.

VOGEL: Yeah. So I mean, Reggie took my answer. I'm I'm so heartened by the intentionality and the deep commitment, the passion of every single person on our committee. You always assume, you always see in D.C. and elsewhere that people stand where they sit. And I've seen people go well beyond where they sit, currently bringing their whole life experience, thinking about their children, thinking about the future and what they want it to look like. And I've really been just so honored to work with people who have deep expertise and passion to make sure that we take this opportunity to get this right. And likewise, you know, government policymakers have had a bad rap and not being tech savvy. And, you know, whether it's policymakers we've talked with in the U.S. or abroad, I think it's fair to say that there is a real sophistication emerging, both understanding the importance of addressing this issue, but also in understanding the nuance and making sure that they're navigating this moment appropriately.

KERRY: All right. Well, I want to thank our our audience online as well as in the room. I'm and thank Jessica. And thank you, panelists. We are we will look forward to the final report whenever it comes out. And to the work in year two and year three. So please. Thank you.