Deborah B.:   … world are health issues, and the impact they have on communities, on societies, on counties, on governments, and the global world because of our perception, and our concern about those health threats. I'm going to talk about the intersection of health with security, opportunity. That's a positive piece and evolving demographics. But let me just pick up a minute from the brilliant debaters last night, because when we talk about things that are fraying there are things that we do together as a global community that have knit the U.S., and Europe, and Japan together in a unique way, and that is our investment in the Global Fund, and against these three incredible pandemics: HIV, TB, and malaria.

Deborah B.:   And we are making progress because we join together as bilaterals in a multilateral space. So when we often talk about things fraying around those things are hundreds of cables that are so much stronger than some of the things we perceive to be happening. If you went to Africa or you went to Asia, they recognize the work that you do through these multilateral and bilateral organizations. 80% of the global response to HIV, TB, and malaria is from Europe, the United States, and Japan. And that's the power of resources invested together for impact, and that's what we've been able to do. What does it force us to do? Obviously, the United States is the largest bilateral donor. We're about 60% of the HIV response around the world.

Deborah B.:   But for us to be successful, we not have to only work with host governments, but we have to work with the Global Fund, a multilateral organization. And although it's complicated and difficult at times, together we are so strong, and we see the impact. So at the same time, and I want to recognize because we have bipartisan people here from the United States, PEPFAR which is the President's Emergency Plan for AIDS Relief, which has gone through three administrations. It's begun with President Bush, gone through President Obama with support, now in president Trump with support. Nine congresses.

Deborah B.:   We were just reauthorized in October by a huge bipartisan vote. So there are pieces that remain that are structural elements that unite us in our response to a global need. So what am I going to talk about? Obviously, there's a lot of global health threats. You don't have to look at the names, you just have to see there's a lot happening. What's happening? Well, there's microbial resistance. What does that mean? Malaria, that's becoming resistance to everything that we're doing. HIV, becoming resistance to the drugs that were utilizing. TB, multi-drug resistance, extreme drug resistance, a very deadly disease.

Deborah B.:   TB XDR, extreme drug resistance is difficult to cure. HIV, there's only been two people in the world that have been cured. There's no cure for HIV. It's 100% lethal without the drugs that we have today. So these are lethal diseases also on this map emerging diseases, Ebola, HIV, zoonotic events, animal-to-human transfers happening all the time. Now, those of you who have pets, you're having human animal transfer all the time. Cat scratch fever. Now, it's not deadly. But there are deadly viruses, there are deadly bacteria that are in

animals that can be either transformed within the animal itself, and then infect humans.

Deborah B.: HIV was what we call a simian immunodeficiency virus that was in sub-Saharan Africa for decades. But through multiple replications, it became adaptable to humans, and before we knew it millions of people were infected. Because unlike Ebola, 14 to 21-day incubation period, HIV are healthy for eight years.

Deborah B.: So you can be passing the virus to others for eight years. So in order to have an effective response, you have to be able to reach people who perceive themselves to be well. That has been very difficult with young people, and men. Men always think they're well, until they're not. So this has been very difficult for us, and I'll go through some of that.

Deborah B.: Now, where does the insecurity and instability come in? As the instability and insecurity begins to move through sub-Saharan Africa, into lower sub-Saharan Africa that is when you hit Ebola, that is where you hit HIV. We're up to a quarter of the adult population is already impacted and infected by HIV. Can you imagine, and the reason our Ebola response currently in the DRC has been slow is because of the insecurity in the region.

Deborah B.: Now, fortunately, it's in a fairly less populated region of the DRC, but it's very close to borders that lead into very cosmopolitan areas in Rwanda and in Uganda. So this is a threat that is persistent, and I'll go through some of that data. Sometimes we get glib within the health system, and we'll say or the health response that if we just had more money or if we had better systems or the Holy Grail universal health coverage that certainly we would do better, and countries would do better.

Deborah B.: So I'm going to show you some maps. You don't look at that need to know the names of the countries that's meant to be particularly small. So you don't identify all the countries. But this is very telling. Countries with the most inefficient health system ranked by WHO have some of the greatest, and most impactful responses to HIV, and the most people on treatment. Now, what does it mean to have the most people on treatment? That means you have to be effective in rural areas. You have to be effective with men. You have to be effective in reaching young people. You have to be able to get to every mommy who's having a baby. That's what an effective HIV response is.

Deborah B.: So some of the weakest health system countries have the most incredible response. Sometimes people say to us, "Well, maybe it's how rich a country is." Now, the telling thing about this, and this is where all of you come in, countries over here, the poorest countries have made the best and the most remarkable response, and that's where resources can have an impact. So in countries that have a lower GNI, we've been able to bring resources to the table as a collective community, and have an impact. Countries that have the money themselves, Thailand, Botswana, Namibia, Eswatini, previously Swaziland. Those countries are funding more than 70% of the response.

Deborah B.:   So this is the exciting piece about it. Every day we get to see those countries stepping up, investing in their own citizenry, and responding to the epidemic, and where countries need us, we've been there as an equity-based response. And what is it equity-based response? It means that we're focused on the people who actually need our support and our foreign assistance. The exciting piece about PEPFAR is it shows that foreign assistance can have a beginning, middle, and should have an end because we will have controlled the pandemic. And countries will be able to maintain that control.

Deborah B.:   So universal health coverage has gotten a lot of play, lately, but you can see the countries that have the lowest universal health coverage index where HIV is the greatest that I just shown you on the previous slide. They've been able to diagnose, and treat 90% of their citizens. 90% of their citizens. Now, how is this possible? And I want to leave you with the concept that's very much about the world that you work in. Policies make a difference.

Deborah B.:   So in countries have the health policies, and the ability to create that environment that makes our money work whether it comes from the EU through the Global Fund or any one of the bilateral programs, it is the policies that allow us to be effective. Not policies that are on a shelf where many, many, very many policies reside, but policies that become circulars down to the site. Circulars in our case that go to the health clinics, but in other cases should be going to the schools or going to the places of business.

Deborah B.:   So this is what's possible that you can overcome what many people would perceive as on relenting structural barriers. It can be addressed when resources come together with an enabling policy environment, where we've removed structural barriers to access. So I knew you'd want to hear about the latest Ebola outbreak. So this is where we are today. We continue to have new infections in this area of the DRC. The last outbreak, remember was in three countries. It cost us $53 billion. Now, imagine if we had had that $53 billion. Obviously, as a global community we can mobilize resources, because we mobilized, the Europeans, the Japanese, the United States mobilized $53 billion to combat the last epidemic.

Deborah B.:   But that is money then that we didn't have for education or for women's empowerment, or other health issues. So this is where it is geographically just to give you a highlight. It's in that far corner over here in the DRC. This is Rwanda, Burundi, Uganda. A river and lake system, very porous borders. Now, imagine if your Uganda or Rwanda. You are worried, and they've done an extraordinary job across the border is to ensure that they're screening people. But remember I said 14 to 21 days asymptomatic. Imagine that you were exposed, and now you're at [inaudible 00:10:46] at day 14. That is a disruptor. That is what we're working to contain, and to really… This is highly infectious. The virus is in 100% of your secretion. when you're in the active phase. But remember you're asymptomatic 14 to 21 days you can be exposed, and go anywhere. You will not show up that you have a fever.

Deborah B.:	So these are the things that the global health community is working on collectively. This is HIV, and I wanted you to see where the burden of disease is. This is a cartogram that is by burden of disease. The darkness of the color is the prevalence of HIV. In many of these countries, the darkest countries up to 25 to 30% of every adult in the country. In Swaziland 50% of every woman over 30 is already HIV-positive. So obviously this is a huge disrupter. But through our collective work, we've been able to get 90% of all the women on treatment, and they're thriving, and they're not transmitting the virus to others.
Deborah B.:	But the majority of the burden of the disease, 75% resides in sub-Saharan Africa. So PEPFAR invests 95% of its resources into sub-Saharan Africa. And here's my last point, the continent of Africa is getting younger every day. These are the top 10 countries with the lowest median age. All of them are in Africa. Niger is number one followed by Somalia. This is the rest of the globe. Some of us are older including in this room, median age, 18 in sub-Saharan Africa.
Deborah B.:	So I think as a global community, as we're thinking about foreign policy, as we're thinking about these issues, are we thinking about the next generation in sub-Saharan Africa? Yes, they will be healthy because of already the investments that we are making together to achieve control of HIV, TB, and malaria by 2030. But will they be educated? Will they be employed? And I think this is our question as a global community of whether we're making the investment to ensure that there's a global dividend from this incredible group in sub-Saharan Africa, brilliant now healthy, but are they educated? Are they employed?
Deborah B.:	This is why we're excited about being able to work in different administrations because President Bush took on the issue of health in a global way, and collectively the European, and Japanese put in money to the Global Fund. So together we've invested about $130 billion over the last 16 years, and it's had a huge impact. But what are we investing in a global community in education? It was a call to action by Mrs. Obama in the last administration. The importance of secondary education being critical for young women in particular who are often removed from access of secondary education.
Deborah B.:	And this administration is focused on employment. What can we do for young women to empower them, to give them the educational ability to move forward, the vocational training. And what I've been really excited about Ivanka Trump's program on this global Women's Initiative for Development and Prosperity is she's focused on the structural barriers that keep women from behind where you have to have a male cosigner to get a loan for your business, where you can't have a bank account without a male. Inheritance laws that skip the women.
Deborah B.:	So in conclusion, I hope we see that it's not about how rich a country is or how effective they look on paper by these analyses, by WHO on health systems, or whether they have high universal health coverage, it's the political will of those governments to develop the policies that allow everyone to have access, whether you're a young woman seeking out information about reproductive

health, whether you're a young male who needs information about risk groups because you're part of a population that has sex with men, and you need to know that information, are they welcomed?

Deborah B.: And finally, it's how the community perceives you. Does the community, and its people view the health system as effective, and affordable? Structural barriers like fees that become both formal and informal fees keep 50% of the population mostly in poverty population away from health centers. So this is the predictor of global health security. It's whether your community believes that they're going to get services when they go to the health center, and that's very different than bricks and mortars, and human resources.

Deborah B.: So finally HIV epidemic is growing in young women, particularly in sub-Saharan Africa. Four young women are infected every year per hundred over a decade that means 40% of those young women are infected. That is what we're trying to combat. Every year they stay in school, you decrease their HIV risk. Secondary school by one-third, and if they're employed, another one-third. So that's how we intersect together, health, education, opportunity, that is the answer to a lot of these global health security threats. Thank you.

Video Presenter: Technology shapes our lives. Innovation shapes our societies. Will democratic values withstand disruption?

Announcer: Ladies and gentlemen, please welcome the co-founder of Recode, Miss Kara Swisher.

Kara S.: I was going to admit for a very long time. Okay. I'm going to set up the panel that's coming next. Can you hear me all? Okay. Great. We have a great panel coming up next about digital things, and so I'm going to sort of set the table for some thoughts I want you to have, and I want the panel to have as they're starting to talk about this. And I'm going to sit down and listen. So I'm going to talk about 10 minutes about some stuff that I'd say I write. I ran a site called Recode which is a pretty big tech site in the United States. I also wrote a weekly column for The New York Times about tech. And I've interviewed pretty much every tech leader, all of them in fact over the past 25 years covering Silicon Valley.

Kara S.: So I'm going to give you some insight, some things I think are happening now especially in the context of the more global look at things around security, around where things are going. First thing I'd like you all to keep in mind, I'm going to talk about five things that I think are critical, and the panel should debate. The first is an idea that I need you to keep in mind for the whole time that you're thinking about this whole thing, which is a thing that I say a lot. I repeat a lot. I'm hoping people will remember it a lot, which is that everything that can be digitized will be digitized. It's a really important concept.

Kara S.:   The idea that everything, jobs, people, your data, you yourself as a as a person is going to be digitized in some fashion. Almost everything can be digitized going forward. And it's a really important concept because people still think that there's a whole lot of stuff that humanity can control a lot of this digital stuff, can digitize almost every job, almost every person, almost every act, movement, everything, government. So there's a couple things that we... If you keep that in mind to start with, let's go through a couple key trends that are going on with Silicon Valley right now, which is in the midst of a techlash. That's the expression they use in Silicon Valley.

Kara S.:   It's a group of people that had long been used to being sort of... I used the expression licked up and down by fanboys. Today, they are not that way. They're in the midst of being seen as problems in the world. Especially in Europe, it started in Europe, but it's a worldwide idea that tech maybe is not so much for the good as they are for more damaging. The first thing you have to keep in mind is a lot of this, one of the key parts of it is that there's been a real split between government and tech which were very long had been much closer together than people realize. But the Snowden revelations in the United States, because most of these tech companies when you think about the global tech world except for China, most of the key tech companies are U.S.-based, are U.S. companies. They were started in the U.S. including Amazon, Microsoft, Apple, Google, Facebook. Pretty much all of them are U.S.-based, the key ones.

Kara S.:   The relationship between tech and the government was broken not irretrievably, but very badly during the Snowden revelations. So I think there had been a real lack of trust that was formed then, and I think that the discussions between and among tech and government broke down really severely during those times. And it set the table for a lot of what happened next in terms of tech relying on government, and working with government on key issues especially as tech became bigger and bigger, and scaled in a way that I think has been unprecedented in the history of the human race.

Kara S.:   I'm going to talk about that size because I think one of the things that people don't realize is how big, and how important tech is now in terms of the global economy. Years ago what used to be oil companies that were the top companies in the world, now the richest people, the absolute richest people are tech people in the top 10 list. I think they occupy seven of the 10 slots, and as of companies in terms of their valuation they are at the top, Apple, Google, Facebook all of them. The size is unprecedented. Their reach is unprecedented, and their growth is unprecedented.

Kara S.:   What's happened is we've created these companies which are largely ungovernable in the terms of size that they are. And they are also ungovernable by themselves. The scale, I think Facebook right now reaches 2.6 billion people. It's pretty much the entire globe that uses any kind of technology, and there's no reason why it doesn't reach everyone. Tech companies reach every person on this planet, so they're impossible to track, they're impossible to manage, and they're impossible to understand on where they're going. I just interviewed the

CEO of YouTube. I think it's some number that's just an astonishing number in terms of videos that are uploaded every day if you want to understand the difficulty of governing these kind of things.

Kara S.:   They've created essentially what our nation states. I tend to try to look at them as cities. I think the more cities. The problem is they run these massive cities, and they have decided to take rents from everybody, and take all the money, and suck all the money out of the system, but they declined to provide police, garbage, water, street signs, pretty much anything. And in terms of being responsible for them, and they don't think they're responsible for these things intend to offload them by saying they're benign platforms, when in fact they are running massive cities without any control.

Kara S.:   I don't know how many of you saw a movie called The Purge. It was really popular in the United States because it's an appalling movie. And that's what they're doing. It's the purge everyday on the Internet essentially. And it's been helped by the fact that there's been a lack of regulation by anybody including Europe. Even though there's GDPR, it's a really small drop in the bucket in terms of any kind of significant regulation that other industries have to endure. I'm not always a proponent of regulation. In fact not very much, but at the same time most industries do benefit from smart regulation, and smart controls, and smart citizens that are involved in the management of these large companies.

Kara S.:   But for the most part in the United States, most of these companies there's no national privacy legislation. There is one coming online from California that they're trying to water down. There's 10 other ones in states across the United States where these companies would be more significantly affected, but in general there's no privacy legislation. In fact most tech companies are protected under a law that was passed a long time ago which I covered when I was at the Washington Post called the Communications Decency Act. It's called Section 230. It gives them enormous immunity on their platforms.

Kara S.:   There's no legal recourse to deal with these companies. They cannot be sued. At the same time because of lack of regulation these companies, and the people who run these companies cannot be fired. Most people do not realize this, but there is no way to fire Mark Zuckerberg except if he fires himself, which creates a real problem of lack of accountability of him for anything. Mark spends a lot of time. He's a lovely guy. He's really earnest. He tries really hard. He spends a lot of time blaming everybody else for his problems when he himself invented the entire thing, and putting off responsibility, which is a real trend among tech executives these days. Not everyone, not Apple's Tim Cook, for example, but he they spent a lot of time taking all the benefits, and abrogating all the responsibility to someone else when they in fact created the problem.

Kara S.:   It's not to say this hasn't happened everywhere else, chemicals things like that. Every other industry, but they have no accountability and no responsibility, and there's no reason for them to be responsible. A lot of time they spend… When I write about them pretty toughly in the New York Times, I often get a call from

some of the world's most powerful and rich people telling them I'm mean to them, which is I don't care. They should call their mama if they want someone to be nice to them.

Kara S.: So anyway, I think it's a real problem because mentally they feel like they're victims even though they are the victimizers of this of world. They're not terrible people is the worst part. I think one of the things that is a problem that's going to be coming, I'll finish up here, is that it's going to get worse given the new technology they're coming, including, and the most significant ones are AI, artificial intelligence, quantum computing, robotics, and automation, self-driving, and transportation changes, smart cities, incursions into healthcare, and data. The kind of data that they can pull out around healthcare is going to be enormous.

Kara S.: The stuff that's coming is such massive compared to what's come before. Right now a lot of the stuff that's been created have been largely… I joke that they create things like dating services, and having your laundry picked up, and having things delivered to you because the people that create things in Silicon Valley are largely young white men, and San Francisco. I always call as a city that facilitates assisted living for millennials.

Kara S.: But there's a lack of competition there for a lack of innovation because I think the real important part is how big these companies have become. There's a lack of competition among them. There hasn't been a new social network since 2012 which was Snapchat which Facebook uses for its product development. Essentially Evan Spiegel is the chief product officer of Facebook at this point because they can't come up with their own fresh ideas except for disrupting the global currency system which should be an interesting thing to watch.

Kara S.: Again, the second part is the lack of diversity within the staffs of most of these companies, and including the ones that are coming. There's no way we're going to have a really important global technology atmosphere that is good, and beneficial for most people with that lack of diversity that includes gender diversity, people of color, age, diversity, economic diversity, and global diversity. And what we've turned to unfortunately is a system where the only other power that is on the other side of this is China. I think whatever you think of China it is a surveillance economy, and it is taking the technology tools that are happening, and creating them in ways that are really frightening for a Western democracies for sure.

Kara S.: And one of the arguments that these companies have is that they have to be this big in order to battle China, and in order to battle the developments in China. Mark Zuckerberg in an interview said that to me, and I called it the G or me argument meaning I have a choice between G and Mark Zuckerberg neither of which I want to pick. So I think we have to think really hard if regulators have to think, citizens have to think, reporters, and the media have to think about this because it really is an ecosystem. The fake news, disinformation, data privacy, the way the partisanship, it all fits together. And no matter what you

can say, and it's a line I used two years ago in the New York Times that they have weaponized social media. They have weaponized First Amendment. They have weaponized speech. They have weaponized civil discourse.

Kara S.: Everyone went crazy at the time, and at the time when I said it, and in fact as much as I like to be right, I really was right in that case. The most important thing I think to leave with you is the idea that if we continue on this path, we create a situation where talent does not rise very quickly, that talent is limited to a small group of people, and access is limited to a small group of people. Maybe a thousand people in Silicon Valley determine a lot of these things. Someone I interviewed recently called social media and the problems not just with social media in tech as the… Like climate change. And unlike climate change, there's only a thousand people we have to influence to change this, and we can shift these things really quickly as citizens and as legislators, and as the media.

Kara S.: But what I always think about is that there is a small girl in Syria or on the border of Mexico, a small child who has the solutions to cancer, who has the next technological breakthroughs, who has the ideas, and it's not a question of talent. There is talent all over this world. It is not limited to Silicon Valley, and the people there. That is a strange little place. I lived there for the last 25 years. You do not want them determining the fate of the human race. Trust me on this. They're very nice people, but as Donald Trump they're very good people on both sides. There aren't very good people on both sides by the way.

Kara S.: So there is a small child, a person of color in Africa. There's a girl in Syria who has the solution of cancer, who has the next space race information. She or he are hindered not by talent, by lack of opportunity. And it's critical to use these amazing tools that have been invented over the past 20 years to be able to unleash that kind of power for the very difficult issues we face including this incredible presentation around Ebola which I think is… And world health. There's all these problems, climate change, health issues, and everything else that really do need to be addressed by smart people, and smart people should be should be thinking really hard about this rather than arguing about whether a neo-Nazi should get more of an ability to spew vile hatred on global platforms. Anyway with that, come on out and we'll talk. Okay.

Announcer: Ladies and gentlemen please welcome senior fellow and director of the Digital Innovation Democracy Initiative at the German Marshall Fund, Ambassador Karen Kornbluh.

Karen K.: Thank You, Kara, and thank you for what you're doing to shape so much of the conversation in the U.S.. GMF this year created a new program, the Digital Innovation and Democracy Initiative to deal with exactly these kinds of issues. As you all have heard, technology has disrupted our societies, and it's going to do so much more disrupting in the years to come. We can't afford to be either tech utopians believing that the internet is magically going to give voice to the voiceless, and power to the powerless, nor can we be tech dystopians. What we

need are tech realists. So we're going to have a discussion today to try to pick up on some of the issues that Kara raised.

Karen K.: We're going to talk about the promise, the peril, and the policy. And we're not going to start, apologies, with the policy makers. We're going to start with Chris Schroeder. Chris is an entrepreneur. He's a GMF board member. He's dealt with the Middle East, and investments in the Middle East, an opportunity, and we're really eager to hear from you, Chris. What are the promises? What are the technologies that are exciting you, and tell us a little bit about what access to these technologies means in different parts of the world.

Chris S.: Thank you so much, Karen, and thank you for all the work that you're doing with GMF now which is phenomenal. I'm just so proud to be on the board of GMF, I can't tell you. But it's interesting, this word disruptive, and the word disruptive we've used in this conference overall really seems to signify doom. The music that we had when we talked about technology scared the hell out of me. It felt like doom was coming our way. And in my world, in the world of technology and innovation, the word disruption is actually a very positive thing. It's a good thing about hope, and it's worthy for us to remember as we think about technology in this construct, yes, there are any problems, but we also live in an age of wonder. We live in an age of wonder.

Chris S.: There's plenty I can tell you that many people will tell you is scary about AI, but we need to remember that because of AI cancer will be cured within a decade, I believe. No question whatsoever that videoconferencing will be hacked, but because of videoconferencing billions of people in the next two or three years will have access to immediate healthcare because of the visual capacity to get any information anywhere at any time over all. Genetics in technology scare me a lot. We haven't talked about CRISPR at all in gene editing. There's a lot of scary there. But at the same time we will also eradicate any kind of illness that you can think about because of it. And I think we will solve food crisis in part because what we do in genetics, and take it a step further. Because if you solve food you then can come and think about environment and global climate change in a very, very different way.

Chris S.: So it's just important for us to remember we also live in an age of wonder. Of all the wonders that fascinate me, the one that actually fascinates me most of all is not the technology itself, but the access to technology. The fact that as I speak to you right now, two-thirds of humanity, 70% are walking around with one of these in their pocket, which is as you know a supercomputer. There's more computer power in this one device than all of NASA had in 1969.

Chris S.: So let me put in to you in perspective of what that means around the world. I was just at a startup gathering, one of these large things many of you have been to. Wonderful young people building, do amazing things, very exciting. None of it would surprise you if you've been into one in Silicon Valley, or New York, or Berlin, except this one was in Cairo, Egypt, and the 5,000 young people were

Arabs from the Arab world who cared nothing about politics, but how to use technology to solve things in very interesting ways.

Chris S.: More interesting than that was 24 hours before that gathering in Cairo, I was in Beirut, Lebanon. Another group of 5,000 young people were gathered for the same purposes. Now, I assure you that if 10,000 young Arabs gathered in 48 hours to talk about the Muslim brotherhood, everyone in this room would know about it. I suspect very few people understand that this is happening not just in the Arab world, but across Southeast Asia, in Latin America, and Africa in a phenomenon that is fundamentally very bottom-up. We here are very top-down, and the top-down matters a ton to get it right, but what is being unleashed in this technology, and the environment that we're in is problem-solving from the very people with the greatest stake to want to solve those problems from the ground.

Chris S.: It's got two ramifications that does affect many ramifications, but two that really does affect the worlds that we've been talking about today. One, that for the history since World War II to make it in global technology has meant to either make it in or sell it to the west. It is our domain collectively here in this room. Now, it is being dispersed everywhere. China we've talked about, but it's not just China. Billions of dollars of wealth are being created in Indonesia, in Egypt, and Brazil, and all over the world now creating different kinds of looks at innovation, and ways to solve problems in I think very powerful ways.

Chris S.: Secondly, having said that. I am astounded particularly in the last year as I travel the world that as I go look at these young entrepreneurs, every one of them who used to ask me who do I know in Silicon Valley, now asked me who do I know in China, because China has been showing up in a way that Western investors and Western companies really have not been. And one of the things that the entrepreneurs say to me uniformly is China never tries to make us into a Western company, ever. You guys show up from Silicon Valley or whatever, and you're like you have to become us. China shows up because they've been an emerging market not long ago, and tells these innovators you innovate on your terms, and we will support you. And by the way if you're good we may even open our market to you. It's a very different interesting dynamic. So I think it's a fascinating world.

Karen K.: That's a perfect setup. Thank you so much. And Congresswoman Suzan DelBene, I want you to talk about the policy debate that's happening in Washington right now. But you represent Washington, home of Amazon, Microsoft. You yourself were a tech executive, CEO of a startup. So start out by telling us a little bit about in this spirit of opportunity as well as policy and peril. Tell us a little bit about some of the technologies that are exciting you, and then tell us a little bit about the policy environment.

Suzan D.: Well, first of all. I agree. I think there have been incredible strides. I think whenever I travel, I think of the early days when I was even working at Microsoft still having to enter in my 20 digit code to make a long-distance call,

and now it hasn't been that long that we are all carrying mobile phones around, and just the ability to communicate has changed so much greatly in a relatively short period of time. But the ability to exchange information, and for people to access information they could never access before the impact that's had in so many sectors, and I think one thing we should always remember when we're talking about technology is we talk about it as if it's separate industry than it had been traditionally.

Suzan D.: But technology is foundational. It's part of every industry. It impacts every scenario we can talk about. So I think it's important when we are looking at opportunity, we realize the impact it's had in so many different sectors. But when we're talking about policy that we also realize we need to be talking about it in so many different ways. From a policy standpoint, we have a lot of policies that were put in place based on a way the world worked decades ago. Labor policy, even tax policy, when we talk about issues today, when we talk about things, when we're talking about transportation and infrastructure, technology has had a huge impact. But policy hasn't kept up.

Suzan D.: Even in places where it's been less controversial, we haven't kept up because we haven't really been willing to make those big changes to rethink fundamentally how policy might need to change because the world works differently, and because it's hard. Policy isn't fast, it's hard and I think because there's a hesitancy from folks to make a change when one, they don't understand the issues or what the implication of issues are. I think policymakers are more conservative in that way in terms of not wanting to make change quickly, and maybe not understanding. The great opportunity here at least when I look at it from a U.S. perspective is these aren't partisan issues, these are actually issues that I think have huge opportunity for folks to come together on if we will start down that path.

Suzan D.: But the most fundamental place we need to start I think is in privacy because I do think privacy policy really sets the stage in so many areas. And we need a federal privacy policy so that people know their data is protected, and that they're in control of their data. And that is a place I put forward legislation there. That's a place where we're still behind, behind in the conversation and in moving legislation because it is like an onion. We have those core policies we need to put in place, and expand from there, and if we're not don't have those core policies in places these could be even harder for us to do that next wave, and adapt as we see new technologies and new innovations interrupt what's happening. It needs to be a priority and a big focus so that we can not only catch up, but we can be forward-looking.

Karen K.: Marietje Schaake, you're a member of the European Parliament. You have been for some time. You've been a leader in terms of thinking about tech policy, what do you think of when you hear us Americans talk about the hesitancy. You've talked about global norms. How do you see Europe's role in this debate, and where do you think the policy needs to go.

Marietje S.:	So thank you very much. I wanted to build also on what Kara said when she said that everything is going to be digitized. So if we take that as a starting point which I agree with, and if we then look back and see how digitization has almost always meant privatization, and that on the other hand, technology is not neutral, it is designed with a certain purpose in mind for example efficiency, more profits or other kinds of goals. It has not been built with democracy in mind.
Marietje S.:	So I think it is it is really important that we look at how governance of technology is already happening even if it is not done by governments. And I I'm afraid that it's not so much conservatism in policymakers that has held them back in making laws, and regulating but there's been a concerted effort, and I've spoken to as many lobbyists as Kara has interviewed CEOs I'm afraid, who have convinced lawmakers that by regulating technology they would stifle innovation or inspire the Chinese to also take measures to, for example, censor people or what not.
Marietje S.:	So to kind of equate governance in the rule of law based system in the Democratic world with governance by authoritarian regimes, which I think is a completely false equivalence, but it's been told to us a number of times, and I think it has actually worked. I think there was for a while the promise or the myth as I see it that technology could make democracy go viral, and that any intervention would actually hinder this promise. So now fast forward even Mark Zuckerberg is talking about regulation, but I think we're in a very unsophisticated kind of debate about regulation.
Marietje S.:	It's almost like do we like or dislike regulation, but as a lawmaker that doesn't mean anything. We need to get deeper into the discussion about what are we regulating for. What are the kinds of core principles that we do not want to see disrupted. And I think in Europe, also hopefully in the United States there's a couple of principles that are not that controversial. Fair competition being one of them, but also the rights of privacy, and data protection, also for security purposes, freedom of expression, non-discrimination, the presumption of innocence, and notions of redress for individuals if they've been mistreated.
Marietje S.:	So if we look at these core principles, then we have to ask ourselves do we want governments to put in place regulations through a democratic process, or do we allow the vacuum to be filled by companies themselves. And that's why I don't agree with what Kara said. I don't think technology is ungovernable or that these companies are ungovernable. I think we have a primary choice to make about who do we think should be the ones governing them. Do we think it should be done in the boardroom with the shareholders in mind? Do we think it should be an extension of agency of authoritarian regimes who are going to use technology to enhance their ability to repress and control? Or do we think that there's one fundamental thing that should not be disrupted, and that is the rule of law?

Marietje S.:	And after a lot of thinking that is where I think we need to focus. So if we see that technology is not neutral, that digitization also means privatization, and that these companies by building new technologies are essentially governing the world we live in because it is so foundational then I think we really have to indeed go back to those core principles that you also mentioned, this model of an onion, and then expand it out, but we have no time to lose. So I'll leave it there. But I'm excited about the opportunities, but let us please not be naive about the very fundamental disruption that could also go to the core of the liberties and human rights that have given our people the freedom, and the quality of life that we need to cherish.
Karen K.:	You've put a lot on the table, and I want to get back into the specifics of policy.
Kara S.:	I don't think they're ungovernable. I think they can't govern themselves. I don't think it's ungovernable. I think they can't govern themselves.
Marietje S.:	Then we fully agree.
Kara S.:	I think they're incompetent to the task, and they don't want to.
Marietje S.:	They don't want to, I think because they're drivers. Their motives are very different as well.
Kara S.:	Well, we have shareholder motives.
Marietje S.:	That's right.
Kara S.:	They're also highly uneducated about most societal things. I did a whole column about the fact that I wish Mark Zuckerberg had taken one humanities course before he left Harvard. But he didn't, and so we're stuck with that. So we have someone who has very little background in anything. And he's trying his hardest to learn, but it's the same thing with most tech leaders who are for example giving all their money away, they're deciding issues around education. They're deciding issues around whether we should go to space. This is all done by private people, and frankly I think we should just tax them, and let the government figure that out rather than having Mark Zuckerberg give us education policy. It's really-
Marietje S.:	Welcome to Europe. I think we don't disagree here. I think it's perfectly fine.
Kara S.:	You know what I mean? I mean, I think taxation and the correct taxation of these companies, correct?
Marietje S.:	Yeah.
Kara S.:	But I think it's totally governable just the way chemical companies are in Wall Street. It's difficult but it should be done, but with people with accountability.

Marietje S.:	Exactly.
Kara S.:	That's my issue.
Marietje S.:	Yeah, I agree.
Karen K.:	So while we're on this, let me just dig in for a little bit, and then I'll return to the civil society, and agree. One of the things that's on the table in Europe is the e-commerce directive, and Kara had talked about Section 230 which is the limited liability for Internet companies. There's a lot of talk that it's days are numbered in Europe. How do you see that playing out? Do you think the lobbyists when… Will there be a rich conversation?
Marietje S.:	All of the above.
Karen K.:	Talk about that a little bit.
Marietje S.:	It will no doubt be rich, but I think it is necessary to bridge that accountability gap. That is there in many areas where there's such extraordinary power of a number of these tech companies, and little to no accountability. And indeed regulation, oh irony, is actually one of the reasons why there is such an exemption of liability for companies like YouTube, Facebook, Google, eBay, and whatnot. So step by step what we see are exemptions to the exemption, which is kind of ironic, but for example in the takedown of terrorist content, in the tackling of fake news and disinformation, in dealing with issues like copyright protected material, there are constantly ad hoc responsibilities piled onto these platforms.
Marietje S.:	So they do take down content. They do demote certain kinds of hateful content that may not cross the border of the law, but that are still considered harmful even by the community standards of these platforms themselves. So de facto, even if it is not by law at the moment, these companies are doing more and more what you could consider editorial interventions of content or otherwise moderating their user's uploads. So I think it will be unsustainable not only in Europe but also in the United States that this intermediary liability exemption which is in Section 230 in the U.S., and in the e-commerce directive in Europe will sustain.
Marietje S.:	You can already see companies actually taking a sort of jump forward. They're basically saying once the e-commerce directive is going to be renegotiated, please do not do A, B, and C. So the lobbyists are already gearing up. I understand in Washington there's a massive hiring spree going on with regard to antitrust concerns. What I hope we can do, and I realize we're here at GMF, a leading organization in the transatlantic space is that we can come together on this as Europeans, and Americans, and develop a democratic model of how to deal with this because there is risk involved if you're going to start to touch speech issues by regulation. But we would be mistaken if we think that there is

no intervention in free speech now because it's done by the companies, again, without accountability.

Marietje S.: So we need to close the accountability gap taking back this intermediary liability exemption as one step, regulating against trust, and for fair competition against discriminatory practices by algorithms for example. There's a lot of things that need to be regulated, and I think it will happen indeed.

Karen K.: We're really happy to hear you say you want to see a transatlantic conversation about this, and coming together around democracy because that's exactly the hole that we hope this new program at GMF is going to help fill.

Marietje S.: And with others. I mean, let's think also about Japan, Australia. Hopefully some people in India can come on board here too. We need to have a more robust democratic governance model of technology.

Karen K.: Yeah. So I want to bring in civil society. Gry, you are on the high-level expert group that the EU has to deal with AI, and ethics. So bring ethics into the conversation, civil society into the conversation, and tell us how that can help us with some of the challenges that have been laid out.

Gry: Yeah. Well, first of all it's actually been really interesting for me because I managed to participate in the whole event this time because we were publishing the policy recommendations on AI which was part one of our deliverables in this group, Wednesday. So I went straight into this conference, and one of the things that I've kind of been seeing we've had conversations about economy, about politics about warfare, and one of the underlying conversations has always been this idea about the role of technologies.

Gry: So we've had conversations about the role of tweets and politics, the job losses in automation. All kinds of things like even cyber warfare. And of course this is an echo of this ongoing conversation that we have around in society outside these walls right now. We have this focus on amplified powers that are somehow transformed into autonomous systems in everything from in our everyday life from cars to airplanes that sometimes fall down because of them, or not. Which is not very funny. And software in criminal justice systems, and these things.

Gry: So they're somehow considered structuring forces. They're like infrastructures like buildings, and roads that are just made out of data point, and signals, but they're pointing us in certain directions right now. And of course these are risks and challenges, but there's also opportunities. So for example, we can think of using AI to reach sustainability goals. So to perform dangerous jobs instead of the ones that humans shouldn't be performing. For example save energies, make energy saving industries, more efficient industries.

Gry:
And normally these debates that we have, they are always shaped like this, and this occurred to me between the opportunities and the risks. But what I would argue is that I think that we have to remember that there's both of these enabling and disabling capacities of emerging technologies. And most of the time one technology will have both of them potentially. So I also want us to remember now when we talk about all these intelligent agents, this autonomous systems that we are surrounded by this kind of magic world, out of world experience of new technologies that actually it's human-made.

Gry:
So I want to echo what has been said here. It can actually be regulated. It can also be designed, it can be changed, and we can innovate in certain ways to govern this. First of all, just to pull out these things is that that one thing that I think that the time we are at now is that we have to be more reflective both in the states have to be more reflective, businesses have to be more reflective in how we actually do this. So we have to think of which interest we put first, the human interest or our own interests as companies or as states. Interest of control, and the effectivization or interests of profits put the human interest first.

Gry:
So right now you mentioned this idea about ethics, and the ethics discussions that are ongoing. Anyone who works in the emerging tech field, they know that there's a lot of discussions about data ethics, and AI ethics. I myself has been involved in this field in many years now. But particularly from after the GDP app was implemented or was enforced last year, it exploded the field. So one of the things that I think that we have to remember is that what is this ethics thing? It's not an excuse not to comply with law or an excuse for doing things in our own way. It's actually a way of revisiting our value systems, and our shared value systems.

Gry:
For example, things like how can we actually make these technologies into an enabling force? We have in all these guidelines that are being published right now the focus on the human centered approach, and what does that actually mean? Well, this is the foundational pillars of democracy, freedom of expression, freedom of conscience, the accountability principles, transparency, human autonomy and agencies. And these values we've in fact already formalized in our human rights system. Now it's just a question of translating them into these emerging technologies, so they actually become an enabling force in society.

Gry:
So I think it's time that we move beyond these discussions about principles, ethics guidelines, and things that we actually start to enforce our shared value systems, and we try to standardize them in tech development and innovation. And there's a lot of questions we need to answer in relation to this. I think one of the most key ones is how do these responsibilities that we all have, responsibilities of engineers, data scientists of states, of businesses, on even civil society ourselves, how do they transform in this? So I'll just leave this open to this.

Karen K.:	So we'll turn it open to questions in a minute, but I wanted to bring China back into the conversation. And congresswoman as Kara said, the tech companies are saying if you apply any ethics to us, any guardrails especially any trust, you're opening the door for Chinese tech giants to dominate. How do you think about this question, about our companies? Many any of these that are U.S. companies vis-a-vis China, and setting up guardrails?
Suzan D.:	First of all, I think you can have appropriate regulatory environment, and support innovation. I don't think it's an either/or. Clearly there are going to be folks who push, and care about their business model, and their business models succeeding, and our job as legislators is to make sure that we are putting all the right interests up front, and not necessarily trying to promote a particular business model, but promote the ability of technology, and innovation to help solve problems for there to be a thriving competitive environment, but also to make sure we're putting the interests of people upfront. And that's why I think privacy is so key because giving people control of their information is key to a lot of scenarios.
Suzan D.:	You can have innovation, but I can still understand how whether I want to participate in that or not to some degree, and that's going to be important for us to establish from a from a policy standpoint. But I actually think too when I look at folks. Some folks would like to see decisions being made, and know what the rules of the road are, so they aren't trying to make decisions, or frankly be responsible for those decisions. So when we're talking about how technologies are used I actually think there are a lot of folks from small start-up businesses to larger businesses who would like someone to establish some rules of the road so they aren't trying to make those decisions themselves. So we have that opportunity to do that in policy to balance, but we're not even really starting. I think-
Kara S.:	[inaudible 00:57:05] I think about the antitrust thing because I just did interviews with all the top people at our Code Conference, and they all don't want antitrust. But I don't know what Suzan thinks.
Suzan D.:	Shocking really.
Kara S.:	Yeah, it's shocking. Trust us is pretty much their argument. There has been no industry that has not benefited from the breakup of large companies, and the way we beat China… Look, we don't want to be in an arms race with China over facial recognition. That's not a war we want to win. Let them do that in their country if they want to do that. What we should do is put appropriate guardrails around facial recognition. Even the company that is in charge of all the things that police wear, all the video, doesn't believe in facial recognition, is asking people not to use it. I mean, the company that makes money from it doesn't understand the problem.
Kara S.:	But when you break up companies it creates… The only way we're going to be, say, a a surveillance economy like China is through competition. That's the only

way. That's how innovation happens through competition, that the minute you pull YouTube off of Google, the people at YouTube will come up with a new search engine that might be better perhaps. They might do that. People at Google might come up with a video service that doesn't lead directly to neo-Nazis or pedophiles. The kind of thing that's going to help us is breakup… Not necessarily breakup but appropriate regulation which might include breakup because that leads to competition, and that's where we will win.

Kara S.: That's the only way Western democracies can win is by intense competition. That's why most of everything was created in competitive environments, and Suzan, I don't know what you think what happened around Microsoft, I think benefited Microsoft itself, and I think it benefited the entire information economy to have that wrangling with the government in the way it did. And I think it didn't break it up but it certainly put it on notice about practices that were happening. And then secondly with what you were talking about around ethics, one of the things I like to think about is when you have a more competitive environment, you have a more diverse group of people.

Kara S.: Another thing I always try to get through to people in Silicon Valley is imagine what you're making as a group of people is an episode of Black Mirror, and if you could think of it as an episode of Black Mirror, don't make that thing. If you think about it that way, but think really hard about how your developing it before you develop it. So I think in a competitive, diverse innovative environment wonderful things happen. And I trust entrepreneurs more than anything, I don't trust large companies to make great decisions. They never do. Just they can't because these people are billionaires, and they live in these little worlds where they go from the plane to their kombucha stand, to their to their giant homes, and they are never going to understand the problems of most people in the world.

Karen K.: Can I also add that this is an international issue, so we talk about domestic policies a lot of times, and if we don't have a good position on what our domestic policies are, it's hard for us to opine on what the international standards should be. But if we're not on the table collectively looking at what those international standards are, they are going to need to be defined, and China would be another one to help to find those, and create those. So I think it's critically important that we're engaged, involved. That's why I think the policies we make, and the decisions we make in the United States are also critical for us to being an effective player internationally, and responding to China.

Karen K.: So I want to let all of you respond to this but I want to bring in some people from the audience, and you have your hand up. So please go ahead.

Kevin B.: Hi. Thank you. I'm Kevin Barron on the executive editor of Defense One. So we're a national security news site. We cover technology through the national security lens. So that's how I've been listening to the conversation. I hear a common thread is trust, and trust, and who decides the rules going forward,

and that it's time to kind of get there, but there's lots of different versions of this that I'm hearing. So it's either the company should make the rules or the companies can't be trusted, and shouldn't make the rules. Governments should make the rules or they shouldn't, or some version of the Americans, International.

Kevin B.:   In our world, going back to the China question, and 5G, in the last few months the chairman of the Joint Chiefs of Staff, General Dunford, a top U.S. military adviser has been warning as loud as he can. If any American company does business with any Chinese company and technology that technology ultimately will make it back to the PLA which is an adversary to the United States, and ultimately could be used to kill American troops, and you're part of that problem if you're part of that chain. Not a lot of people believe that outside of the military especially in technology. So they're fighting with that.

Kevin B.:   So maybe talk a little bit about the trust in the hard national security issues that are separate from profits separate from humanity, or lots of these other… The future of technology it's a very specific issue on the table right now. Who gets to make that decision because today if you're not watching your feed from the White House reporters, Japan, the president the United States just said the American companies don't want to sell technology to Huawei. Go ahead. So you've got a big… Even the government itself that Kara is saying should be in charge of these rules, can't decide the rules right now, or who's in charge of the rules.

Karen K.:   So, Chris. Not only are you investor, but you were at the State Department, and the White House. So you want to respond?

Chris S.:   Look, I'll tell you two things, and I can't speak about the national security stuff anymore the way I once might have been able to barely do so. But there are two observation. One, a lot of this conversation in my view is about hubris. This is not either/or. If it is either/or, we're toast. It's usually not either/or when reality comes. Yes, there's tremendous hubris among the wealthy of Silicon Valley. We all have our favorite stories about that stuff, but I love that some of these folks are trying to fix education in different ways to be encouraged.

Chris S.:   Maybe it will need some regulation, and maybe you'll need some pushback, but let us not forget that there's hubris in government as well. I mean, I'm from Washington DC. If you think that they the government has solved public education in Washington DC, come visit… And I'll tour you to some of the groups that I work with overall. But let's just say there's more that could be done, all right? So the hubris has to be counteracted but it leads me to the second point which I think goes a little bit into the national security as well which is, it's a co-authorship where interesting stuff happens, and to presume that it's an adversarial conversation, I think is a misstep.

Chris S.:   And let me give you two really interesting examples which I never would have thought that sort of related to security will absolutely be related to security but

is more in my worlds right now, and it is if you were to say what two countries have the most innovative laws and regulations both for protection, and allowing innovation, and financial technology, what countries would you guess? And you may be surprised to hear that they are Brazil, and Indonesia. Now, how is this possible? These are not places where I think there'd be this kind of a thing. In fact, it was a tremendous amount of co-authorship between the business community, the public community, and government because there in fact were shared interest in what they were trying to do.

Chris S.:   From the government's perspective, 60, 70% of the people in the country aren't able to access financial inclusion at all. So that's a public good for them. Secondly, FinTech allows more access to data which means they can collect taxes where they can never do it before. So what ends up happening is a very surprising coalition of folks brought innovation and surprising parts of the world not just to the innovation itself, but to think about the balance between what is done in security and what is done in terms of the efficacy of the public good, and what is done to allow innovation to happen. That has to be the answer. It's already happening now with the Pentagon, but that will have to continue. It can't be owned by one thing.

Kara S.:   Correct. I mean, the problem with Trump is he was against Huawei before he was for Huawei, and frankly can't even pronounce Huawei, I'm guessing. I don't even think he understands what's at stake. But being very clear about selling things to China should be something at the top of our administration. See, one thing I tend to agree with security, and military around, it's a very big problem to facilitate these governments to be able to use our technology against us, and I think it's critically important to think about.

Karen K.:   Do you want to respond?

Marietje S.:   I did because the way you phrased the question was very much like let's put aside all these sort of human, and rule of law type issues, and zoom in on national security for the moment. I actually believe that you cannot separate those. I think more than anything in the whole text fair trade and economic issues are tied with national security, and human rights issues are tied with security questions. So for Europe specifically because we're in a slightly different situation, at least we don't have President Trump, we also have to answer these questions, and it's very tricky because national security is a national competence of 28-member states, even though we have one single market, and we're trying very hard to be more competitive with the digital single markets.

Marietje S.:   Also, we have telecoms rules but not the joint auctioning of spectrum. So if you think about 5G, and all the new questions that leads to, this is also decided on the national level. So the whole question about national security really prompts Europe to think much more about can it operate as a geopolitical player? Can it tie these trade concerns with national security concerns as well as human rights concerns, and I think it's one of the priorities that we have to answer, and I

don't see enough sense of urgency in Europe when it comes to the challenges that are coming from China.

Marietje S.:   In fact, the opposite is because President Trump has been so destructive to the transatlantic relation with his administration, it has actually driven some people in Europe comfortably to be in the middle between the U.S. and China, or to even kind of see advantages in working more closely with China, taking more investments for example, working on a number of developments there.

Marietje S.:   So, again, here I hope we can have a comprehensive transatlantic relation because I think it's also a good way to engage more people in the discussion because some of them simply think, "Well, national security is not my thing," even though economic prosperity, human rights are their thing, and in my opinion it's in fact one of the same.

Karen K.:   That's terrific. So we have time for a few more questions we have one here.

Audience Member: [inaudible 01:07:20] high systemic level. We come back to the [inaudible 01:07:38] environments like what places, other places [inaudible 01:07:41] and so on. That's better. And it's a an approach known as a statutory duty of care where the government says that at the highest possible level, in this case companies who share, discover, or generate, or provide user-generated content should have a general duty to ensure that people… To take reasonable steps to ensure that people do not come to reasonably foreseeable harms as a result of the operation of that network. And to our surprise the U.K. government has adopted this as a policy proposal and subject…And this is a big subject to Boris Johnson being Prime Minister. We expect laws to come forward to bring this into effect next year.

Audience Member: To our surprise a month ago, we saw in a specialist report to the French government adopts an almost identical approach to bring forward a French version of a statutory duty of care. Who knows this may yet come in to the complete rewriting of the e-commerce directive that's almost bound to happen with the new commission. But it's an approach based in British law. It comes out of common law, it becomes statutory law, and I'd be very happy to discuss that in detail with anyone else after this meeting. But we feel it would tackle the systemic level the harms that arise from these companies' behaviors.

Karen K.:   Can we bring in a couple of other questions? Yeah, back here.

Roland F.:   Thanks a lot. I'm Roland Freudenstein from the Wilfried Martens Center for European studies which is a think-tank of the European People's Party. So here's a political science question. We all know the old good old left-right paradigm, and that's allegedly totally outdated. We have in the last 10 years seen the open versus closed paradigm. The global versus the local order, the Liberals versus the national populace. People from anywhere, the people from somewhere. When we look at these questions of the digital world, competition, freedom of

	expression, presumption of innocence, privacy and to strike the right balance between them.
Roland F.:	Do we need completely new paradigms? Does this fit into either the left-right or the open-closed? When I listen to Kara's eloquent [inaudible 01:09:52] against Silicon Valley, I couldn't even place this on the open versus closed scale that we've developed over the last 10 years. So here's to whom it may concern. I mean, which kind of paradigms do we have to use in the future?
Karen K.:	Very philosophical.
Kara S.:	Entirely new ones, entirely new ones because this whole left/right thing in the United States the idea that these companies are attacking conservatives, I mean that's a Ted Cruz fever dream with a little Anthony Scaramucci nuttiness mixed in. It's just not true. They don't have politics. I don't know if Chris or Suzan, they are less political than you think. They have almost no politics. I'd say their politics are libertarian light which is because they never studied the libertarian in college. Also, they don't even understand it.
Kara S.:	So if you think they have political events, that's not what it is at all. It is so haphazard, and so ill-thought-out, and so uninteresting to them that I think that we need entirely new ways to look at it because as Suzan said, I think quite correctly, we're operating on laws that existed before cellphones. Every time I talk to some legislators, and believe me there's tons of smarts ones like Suzan in the United States, the only reason I focus on the United States is because these are U.S. companies that are doing most the damage is because literally when I meet with some legislators, I'm like you know the internet, the kids love it. It's astonishing how much we're being governed by old rules versus new ones. So we have to be creative in how we think about them, how we think about this stuff going forward or else we're going to create a giant mess, and do all the wrong regulations, and hinder innovation, and allow the rise of authoritarian regimes running these things.
Suzan D.:	And that's also why it's an opportunity because the opportunity is that it's not a political left versus right issue. I think we have a huge educational burden. I think that is part of my responsibility as a legislature is to help my colleagues at least be able to think about these issues more deeply understand them because I think a big challenge that we have in moving forward is people just don't want to do anything when they don't understand it, because you feel like, "Gosh, I can't take a position because I don't get it. So I'll just kind of stand in the background, and wait." And we've been waiting a long time.
Suzan D.:	So that is an opportunity because in some ways we have a lot of gridlock just because of political issues. This is one where we shouldn't necessarily… That's not the first challenge. And I just wanted to address yours a little bit. I think one of the challenges that we have when we start thinking about kind of what are the responsibilities for folks for example in keeping data, et cetera, how do you

	as a consumer or someone who's participating in a venue or things like that, how do that people are living up to that standard.
Suzan D.:	When you buy a car now, lots of people still would go look at a car, and look at the color or the interior features, but they don't necessarily think about, "Gosh, I wonder if the data that my car might be giving to someone is being handled well." And how would you even know that? What are the standards you would look at? So I think part of what we need to look at too as we talk about this more is how do people know how to judge whether someone is doing all the things they should be doing or is leaving the doors wide open in terms of data being hacked, or not being responsible how do we define that in a world where things are changing every day?
Suzan D.:	So you might have been up-to-date yesterday, but you're not up-to-date today. And how is that information available so people can use that in judging the types of products they buy, the types of services they use. Even the types of venues they may interact, how do we provide that guidance, and I think that's another important responsibility to figure out.
Chris S.:	Assuming they will use it, right? 99% of humanity never reads the privacy statements that they click instantly on.
Suzan D.:	Because you can't understand them. When I did my privacy bill, it's about making sure it's plain clear language, but that also has to be enforced, and someone has to define are you really doing a good job of providing plain clear language, or is it your own determination that you did a great job of it? And those are things where enforcement is a key part of this, and I even think we talked about the financial world, we talked about auditing, but we don't necessarily think about that. That's another thing we have to think about I think with technology, is someone actually providing the right security that they said they would, and how do we know that they are. Is someone following the privacy policy because it is changing so frequently we've got to make sure their standards in some way-
Karen K.:	Let me let the two of you come in, but I just think the auditing issue is so interesting because what you have there is you have expert agency, the SEC, but then you also have ethics. You also have rules, and standards, and ethical guidelines for how accountants have to behave, and how your chief financial officer has to behave. So far that a lot of that has been it's been lacking. I saw you wanted to get back in, and also I want to bring ethics back into the conversation because if policy is going to take a long time, I think one of the questions is what can we train these engineers, these entrepreneurs? Are theirs rules they can follow on a day-to-day basis that make anything better?
Gry:	No. I just want to address this whole idea about politics, and how we talk about politics, and what kind of decisions should we make, and how do we govern this because I think that we have to remember that one thing we tend to forget about when we're talking about emerging technologies is that it's not like this

big new disruptive moment in history. It actually comes out of a long technological development of societal development where there's different actors that are shaping the development.

Gry: One thing is politics. One thing is regulations. We have some really good ones, some good human rights legal frameworks that we have to adopt. Another thing as you say is the engineers that have to have new skills. They also need to have recognized their responsibilities that they are actually responsible of some of the things they build. Like I talked to engineers very often, they think of nice solutions they would built but very often they don't have the humanist perspective or the ethics perspective. And there's also us as users. You were mentioning how do we know things, and maybe we don't know too much because we don't have that education, but I am very confident that we will build up this system around based on ethical principles.

Marietje S.:   So I actually think to suggest a whole new conceptual framework or something. It's not even necessary. In fact, I think it can distract. So oftentimes ethics are mentioned as a solution, a new way to deal with technology, but we talked about China here today. We talked about Europe, talked about the United States. Pretty sure you get three, if not three million different interpretations of what ethics are. So I think a discussion on ethics can be a bridge to regulation in a good scenario. It can also be a wall against regulation by companies who don't want to be regulated.

Marietje S.:   So I actually think we need to empower regulators, and lawmakers to build on the laws that we have, and be more principled driven. So let's say free speech, fair competition non-discrimination, presumption of innocence like some of these anchor points that really translate to multiple sectors, and think much harder about how we're going to regulate this. So for example give more power to regulators. In Europe when there's an antitrust case, the responsible authorities can actually demand a lot of information from companies. I can't as a lawmaker, the police can't, but specifically designated regulator can.

Marietje S.:   So the framework is fair competition, but whether it is a Russian oil company or an American tech company, or a farmers association that violates the rules. There's one non-political authority that can intervene. So I think this is the way to think about how we need to extend the laws that we have, the rule of law that we have into the digital world. And if that would require a whole new frame, then I'm afraid policymakers are going to be even more discouraged than they may already be.

Karen K.:   Yeah, and that's why we started out by saying we need tech realists. We need people who are going to… Like you all who are going to roll up your sleeves, and really think in a in a granular fashion. We have one more question back here.

Jan T.:   Yes. Thanks, Karen. My name is Jan Techau. I'm with the GMF in the Berlin office. I have a question to Kara Swisher. You made a very strong case in favor of more regulation of the industry, and then a bit later you said competition is the

only way that we can survive. How to strike the balance between the two? It's an old ideological question in the old traditional economy. How does it play out in the new economy?

Kara S.: It's both. When I say regulation, there isn't any. There's zero regulation in the United States on tech companies right now. Chris, can you think of a regulation? There's no regulation. I would like a little regulation. I also like enforcement by the FTC which has been I think sleeping for the past 10 years. If they had done their job seven years ago when they had the consent decree with Facebook, we wouldn't be in this mess that we were with the Russians using the platform the way they did. I And the only person who doesn't believe it is obviously the president of the United States. But the issues around these things we certainly have the enforcement people in the United States available to do things.

Kara S.: They passed on prosecuting Google. They passed on prosecuting Facebook correctly. Right now, they're deciding a thing that I think they're going to decide very soon what to fine Facebook. And I think the number is $5 billion. It's being pushed around, and I was like add a zero to that, and then we can get started. You fine them $50 billion, they're going to start to think really hard about their decision-making, and how they run these companies. I think competition is always the way to do it, compared to most things because when you create more competition you create more innovation.

Kara S.: The reason Google exists is because of the Microsoft antitrust. Not exactly a straight line, but it's certainly a pretty straight line that the more you freak… The AT&T breakup is probably the better thing. The reason you all have cellphones today is because of the AT&T breakup eventually. So that's what I'm talking about with competition. That's where new innovation comes out. That's the more new opportunity, and it has to be combined with an interest in diversity and globalization of venture capital. It shouldn't be a bunch old white guys in Silicon Valley making these decisions, it has to be a global idea around capitalizing people across the globe because talent resides everywhere, opportunity does not.

Kara S.: And if you're going to hinder people because of opportunity, you're going to miss enormous inventions that will help us. And I'll just end on this, I'm not an anti-tech person. I've been covering tech for 25 years. I'd have to hate myself a lot to be thinking this. You don't want to be the person on the… I say this all the time on the beach in Kitty Hawk saying as the Wright Brothers are taking off with their first airplane saying, "Ugh, it only rose two feet. I mean, they said four. Oh my god the wingspan is wrong." They flew. That was an astonishing and amazing thing, and I think we all… Despite issues with airplanes, and jet fuel, and carbon, and everything else, we are benefited because of that.

Kara S.: And you can't look at the tech is on the whole good but, but you have to think of it in a much smarter way, and we're at that cusp right now with technology. They aren't the smartest kids in the room anymore. That doesn't mean they're dumb. So we have to think really hard, and work with them, and take

responsibility ourselves. At the same time call them to account. These are the richest, and most powerful people in the world. They're not victims. They can take it, and the innovative people will always come forward. That's my feeling always. The innovative entrepreneurs is what's going to save this planet, and we have to let them go, and continue to do that because that's what's going to change everything.

Karen K.: That seems like a cue for Chris to close this out. I would love for us to spend more time, but we're getting the hook, but I think talking about entrepreneurialism, innovation. We've had a lot of talk about the need to regulate. I just want to make sure that you give us a caution about what we want to make sure we don't squeeze out when we move to the regulation.

Chris S.: If I'm giving the last word I'll quote the Book of Micah, "You should all walk humbly with our God." It's fun to poke fun at Trump, and that kind of stuff, and I get all that, but we'd be having almost the same conversation at the essence of these core issues that are coming at us so rapidly under any circumstance. And I'm not in a position to know whether our institutions should be updated or changed, but I am in a position to judge from my own weakness that hubris is going to be a disaster in this, and our ability to walk humbly, and have co-authorship, and to listen, and not just try to jam this into previous regimes, but think about what is the public good we're trying to do in terms of the new thing, to me is really the essence of the hope to unleash the very things that Kara talked about which I couldn't agree more with.

Karen K.: Great. Thank you so much to this amazing panel. This is just the beginning of the conversation. We hope you'll join us as we try to grapple some more with all of these really important issues. Thank you.

Gry: Thank you.