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ITU AI FOR GOOD GLOBAL SUMMIT  
POPOV ROOM  
PLENARY 7  
"BREAKTHROUGH" PROPOSALS ON COMMON GOOD AND SUSTAINABLE LIVING

GENEVA, SWITZERLAND  
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>> AMIR BANIFATEMI: Hello, everyone. We are going to start  
the last session of the day. If you can take your seats?  
(Pause.)

>> AMIR BANIFATEMI: Good evening, everyone. My name is  
Amir Banifatemi, with XPRIZE Foundation, the IBM Watson prize.  
At XPRIZE, we are happy to have IBM as a partner. We have been  
working on this a year and a half and we have many times  
competing to show how humans and machines collaborate. You have  
seven teams that have been joining us to show case what you do.  
Maybe you have seen some of them in the corridors. If you have  
not, take a minute to see what they have done between today and  
tomorrow. They have very interesting approaches to show their  
take on human machine collaboration.

I wanted to share with you that at the Media Lab when we  
talked about the Summit with the ITU proposed to run an

interesting challenge which was, as we talk about AI For Good, is there a way to show case visually what AI For Good can mean? They reached out to a few hundred designers from the computer society, illustrators, asked them to visualize this future of AI for good. I think more than 100 competed just for a short three-weeks challenge. Three of them won. I am going to invite representatives from the multimedia lab to show you the three winners, the third, the second, and the first, very quickly.

I'm going to click. Hopefully the click works.

Can we have the next slide? Okay. So I will let you explain this. There was a jury. I was part the jury.

>> As we have spent, you know, time and effort to come here to think about how does the future of AI look like and how does it impact different societies, people who are not present in this conference have spent a lot of time helping us to visualize what does it mean to have this kind of advanced technologies and what are the solutions that can help us to apply these technologies. So we put a panel of judges, Jesse, the creative strategies and Matthi from Blizzard Entertainment, who makes the World of Warcraft. Big in the industry. Myself from MIT and Amir was the judges.

Here are the winners. First place is Angoli Chandreshkar and her cooperator Adi Sidapar from Chennai, India. They made a chat bot which was for support for victims of sexual assault. Give a round of applause.

Next winner, also at the third place, if you go to the next slide. With the tie score is Francis Goeltner from Regensburg Germany, ending hunger with AI controlled farming. His concept explains semi-autonomous farming that can be used for the good of outcasts of society. Give a big round of applause for an amazing designer from Germany.

Winner in the second place is Rodrigo Galdina from Irvine, USA, with seed AI self-sustaining hubs. Rodrigo imagined a beautiful vision of the hubs that can be dropped from the sky but actually have a self-sustaining mechanism, and produce or bring up the water from under the ground and make a small farm around them, provide Internet access. As crazy as this idea sounds, as kind of sci fi as this idea sounds, if you think about the amount of money that people spend on making bombs to drop on other places I don't think such concept would be more expensive than those kind of bombs. You can think of this as a bomb of prosperity, a bomb of access for those remote areas.

Round of applause for Rodrigo Galdino. Thank you so much.

Finally, the winner, first place is George van Welbergen from Rome, Italy, with the idea of smart disaster research systems, drones that work together that cooperate in disaster

research applications. Give a round of applause for George as well. Take a look at the posters.

>> AMIR BANIFATEMI: The big posters are showcased in the hall.

Now back to Reinhard to talk about what we did together. Thank you so much for spending the time for this important exercise of coming together and trying to identify future guidelines or future thinking of thoughts about how we can collaborate on certain topics. Over to you.

>> REINHARD SCHOLL: Thank you, Amir. Before we hear the results from the feedback from the breakthrough groups, one announcement. We are going to repeat what we did yesterday. We are trying to repeat that. So yesterday we had a reception followed by a formal dinner. We made the formal dinner open to everyone. So we are doing the same tonight. We have a reception at the United Nations. That's 200 meters from here. And it is a nice bar, nice area. It is on the ground floor, a very nice scenery.

So we have about perhaps 60, 70 places available. So we are going to open it up to everyone. We will, because we have a limit of 150, we have food for 150, drinks for 150. We will do the following. For those of you who have a gray badge, if you are at the reception area, that is where you picked up your badge when you registered, if you are there around 7-ish and just express your interest that you would like to join it. We will give you a ticket with a number. Once we have like a 50 or 60, then we will stop that.

So those with gray badges are invited. We cannot have 100 of you, but if you are invited, please come around 7 to the reception area.

The whole group will go from this reception area in one block to the United Nations. You will not be able to get into it if you arrive just on your own. We will have security guards accompanying you to the United Nations. You go through the gate and they will lead you to the reception.

So it is about a walk, if it is just without any stop, if you were to walk from here to the reception area it is maybe a ten-minute walk. So we would start leaving the reception area in the Mont Blanc building at 7:10-ish.

Those who would like to like to join the reception with a gray badge, come to the reception area at 7. You will get a number and you can join the reception.

Good. So before we have the results presented from the rapporteurs of the breakthrough groups, let me just perhaps clarify the process and the standards of these so-called proposals that we are using. Because we have some concerns expressed about what is the status of these proposals. So I

would like to emphasize that what we are doing does not have any official standing. It is just ideas, food for thought that has been elaborated in these breakthrough groups. It is not something that is going to move forward to the conference tomorrow for approval or endorsement. We understand the breakthrough groups are meeting for the first time physically. They are all of different opinions. It is hard, impossible to get a consensus on what a proposal should look like. But maybe there is something in it that may give you, the participants, or other people ideas on how to take us further.

Everything that is happening here is available to the public. The webcast that you see is being posted on the website. Everyone can watch it. The captioning records are going to be published, so there is nothing that is being hidden. Everyone can see and follow the process. The webcasting and the captioning of the breakthrough sessions are publicly available. There is nothing that is hidden anywhere.

And if you voice your opinion, you see the app. It is completely nonscientific. Those who care and who wish to think that they could give feedback now, that's fine. That does not have any official standing. It is completely nonscientific. I hope that with this verification we can invite the four brave people of the breakthrough groups who will report on the results. And on the slides we also changed the word proposal to food for thought.

So we have only two brave gentlemen. Two missing? Okay. All right, two more.

So if we go to the next slide, first AI for prosperity. So Jose, okay -- Sean? You again, yes.

>> SEAN MCGREGOR: There we go. So this is in contrast to the last panel, I was the rapporteur for. It wasn't so much about finding ways of getting away from the negative aspects of the app but trying to figure out things that we could do that are good for the world and promoting sustainability directly.

The first one is a little bit of a cheat, it covers two different areas but they are thematically related. The label we adopted was data stewardship and good faith fellowship. The idea is to create an NGO or government funded engineering team or teams that collaboratively develop AI solutions within the deployment context. I'll get to the next part in a moment.

The key part of this one is wanting to understand the communities that we would be deploying a lot of these AI solutions to and understand the best way to deploy them and also be able to investigate as AI practitioners what opportunities exist in the setting.

Further, it would be to, excellent to create a global community around the data collected for these purposes. You

could almost have the engineering teams that are working within the context that they are trying to address act as a form of Ambassador for the data or generally serve as a focal point at which a larger community could be engaged in addressing prosperity throughout the world.

Moving on to the second one, this second food for thought is funding for good is the label. It would be to create an organisation for the prioritization of AI sustainability funding. The discussion following the panel was around something similar to a think Tang but not exactly. That helps in identification of areas that AI research could be impact full and serve as a Facilitator for making that research agenda come about.

Third item if we can change it over. This one I don't think that we were able to devote as much discussion in the panel to it as it deserves. I wouldn't say that we've identified the specific form of a tax policy that we would want to promote, but the problem we are trying to solve here is an event that private company or institution is able to make most of the money and accrue most of the wealth as a result of some AI development. You need some system that allows for that accrual of wealth to flow out to the general population. And the proposal we have here, the food for thought is to tax the value added by AI technologies and part of the inspiration behind this is that a lot of the AI technologies that have been developed with public funding and there needs to be some means beyond the existence of that AI technology to allow that benefit to flow to the whole society. As the investors in it.

>> REINHARD SCHOLL: Okay, good. Maybe on the first proposal? No, can you go back? Yeah? On the first one, create NGO or government funded engineering teams, so not business funded engineering teams?

>> SEAN MCGREGOR: We could likely add business on there. I don't think the panel was too principled in how prosperity is brought about funding wise in that regard.

>> REINHARD SCHOLL: Okay. I'll take maybe one or two questions or comments from the audience.

>> AUDIENCE: Okay. So you just press the red button there and wait.

>> AUDIENCE: Excellent. Just to come back a little bit about why we -- I was part of the panel. Phillippe Beaudoin.

One of the reasons it was mentioned that a NGO or government funded engineering team, for the first part or talking about community funded for social good, if it is funded by a company it will target some types of data and by funding it publicly we are opening up basically to disrupt some of the market forces that might not be going in the direction of prosperity or social

good. So there was a clear idea here that the data itself not only funds should be collected and made publicly available.

>> REINHARD SCHOLL: Yes, please? State your name?

>> AUDIENCE: Christian, I'm a member of coordinating a paper about big data and health. I have question for food for thought number three. I'm Christina from UNESCO. We asked OCD, to call OCD for developing a framework for benefit sharing. Benefit sharing from the ethical point of view is a framework where you deal with taxes but other forms of distribution of prosperity, wealth and profits and to make the population which contributed the data for the AI development and applications, profiting from that as well. Taxes is one way to do it. But did you think about broadening to a benefit sharing framework?

>> SEAN MCGREGOR: I would say that we weren't able to spend as much time on different formulations of benefit sharing and equitable distribution of wealth. I think it deserves a topic and it is mostly a reflection of all the things being discussed and how big an issue of prosperity and AI is in general.

So I think that there is a thing in the application where you can check off contributing to the effort moving forward and I would encourage you to check that off and bring your voice to the table.

>> REINHARD SCHOLL: Was there discussion on why you single out AI technologies when you apply taxes? Why not any technology? Why do you say it's just AI?

>> SEAN MCGREGOR: It is more the mandate of the panel than anything else, I suppose.

>> REINHARD SCHOLL: Yes, good. One last comment?

>> AUDIENCE: Taxes in general slow things down. People have been thinking about taxing the Internet for awhile. That would just sort of grind it to a halt. Taxes put money into the pocket of government, but it is not guaranteed that the government then turns around and actually puts money into the pocket of people.

I think it is important to think about where the money goes. And if there is some way of maybe dividends instead of taxes or something, it is just requiring food for thought.

>> REINHARD SCHOLL: It's good we call it food for thought and maybe a bit softer than proposal. Thank you very much. We give you the opportunity if you wish so, to give your comment on the app and with that we thank this breakthrough group.

(Applause.)

>> REINHARD SCHOLL: We move to the next one. Which is social good data. Please.

>> So the first food for thought from the social good data panel was that we need to ask the right questions of AI and not only problems that concern white men. We need a global

community of practice and funding to have global impact. Right now a lot of the questions, a lot of the progress being made here within AI is done by white men for white men. And the panel was very much in agreement that that needed to change to make sure that we get to the last mile as well.

And to have a global community of practice is absolutely necessary because white men in Silicon Valley cannot ask the right questions of AI. They don't have the experience of the problems of the cultures and values that people have in the areas that we are trying to help.

So to have a global impact we need this global community of practice. Not just that, we need to make sure they have the funding to actually work on data and set up teams to work on the problems that they have.

On the second food for thought, it was agreed that we need to democratize data and that is not just data sharing. It is also making sure if you train a data society or label a data set, you share the label, share the tech and make the data available to make sure that the people who have the funding to have subscription to expensive journals can learn from the experience of others.

(Making the training available also.)

>> REINHARD SCHOLL: Good. Comments, questions?

Yes, please.

>> AUDIENCE: Is the sharing voluntary or mandated?

(Chuckles.)

>> I am pretty certain that everyone on the panel would say it would be voluntary. But strongly encouraged. I mean, we see from, it was also mentioned in the panel that a lot of the most powerful data out there is in the hands of private sector companies. If they don't want to share, they don't share. There should be ways for them to do it. And I think someone also mentioned about having at least aggregated anonymized data at some level that is useful for global impact. But yeah, I don't think you will ever be mandated.

>> REINHARD SCHOLL: Well, I guess it depends on the scenario. I am not sure that the answer is obvious, whether data sharing should be voluntary or not voluntary. If you are driving in a car, your car is collecting data all the time. Maybe communicating with other cars. So should this perhaps be mandatory that the data from your car be transmitted to the other car? If you are driving on a slippery road, the data could be communicated to another car and the other car can take precaution. Should that be mandatory? I'm not sure that the answer is so easy.

>> That wasn't touched upon by the panel. I can say that if you have refugees on the run and we know where they are, we

should not share that with the world. The whole data privacy and privacy of the right to privacy was at the core of what the panel was talking about.

>> REINHARD SCHOLL: Okay. Lady here?

>> AUDIENCE: Okay. So just on the first point, I wanted to know if there was any further part on how to engage the global community.

I would be interested.

>> I can't remember how much there was on that. There was a good question to one of the panelists who worked for the Global Pulse Lab in Kampala whether they were using local workforce for the data problems in the Pulse Lab. The answer was a definite yes. They use people who are educated locally in the universities of Uganda to make sure that they can then answer the, ask the right questions and find the right solutions.

>> REINHARD SCHOLL: Yes, please, say your name and organisation please. Just press and wait. There we go, thank you.

>> AUDIENCE: I'm from McGill University and part of the Alfred startup. I wanted to point out to the point of, it is not so much the question of mandatory versus non-mandatory, but there is I think some forensics to be done with the large data sets that exist in the possession of some entities where those came from and who those actually belong to. I think that there's a lot of retrospective work to be done to decide data sets in a specific way, data sets that exist now, perhaps for reasons of perhaps ownership by the people who own the data, whether it be their consent for that data to be stored, et cetera, that those should be either released for public good or in other ways controlled. Because I think that there is a lot of wild westing going on up until now. There is some order to be brought back into that realm.

>> Interestingly enough, our panelist from Facebook mentioned that because the data on Facebook is owned by the individuals posting it, they can not share it. So I mean, it's a two-faced approach. Facebook are sharing aggregated anonymized data with the human sharing community. We launched a partnership, I'm from IFRC, we launched a partnership with them yesterday. Something is happening for good, but some of the data cannot be shared because it is owned by the individuals.

>> REINHARD SCHOLL: Okay. One more? One last? No?

Okay, good. So if you would like to give feedback using the app, please do so. We thank this panel, this breakthrough group.

(Applause.)

>> REINHARD SCHOLL: Promoting healthy citizens.



>> There we go. So with our panel I really tried to push the concept of how AI applies. I think that we've, we felt that a lot of discussion has happened on data and we wanted to focus on how we can apply AI not so much in an arbitrary fashion but in a real world example. The first food for thought, artificial intelligence can help contribute to healthcare citizens by establishing how to learn about healthcare systems. What we mean by that, there is a lot of data that is outputted when you walk into hospitals, right? There's a lot of decision supports that need to occur. There is workflows, clinician staffing, patient education. There's so much going on. How can we apply AI to that, to improve those? That's one area we looked at applying it.

The secondary was not all data is equal. Meaning the data that we collect, say in New York around disease outbreak is not very applicable to say going to Haiti, right? So we were trying to figure out if there's a way that AI can translate between those two things to better gather data in those areas. Much like you translate from one language to the other and we have seen how AI can do, gather one data set and apply it somewhere else and how that balance can be presented.

The third one was using AIs to train humans rather than using humans to train AI. The context of that is around education for diagnosis that we can teach to Developing Countries or, say, if someone is not of education, how can we have AI guide a human to make the diagnosis without having that person actually have any formal training.

Those were the three that we came up with.

>> REINHARD SCHOLL: Good. Thank you for the three food for thought pieces. Any comments or questions from you?

We'll give you 15 seconds.

Yes, please? Just press and then wait.

>> AUDIENCE: My. My name is Han from UNICEF. What happens when the government disagrees with the data collected on its citizens. At UNICEF sometimes we find ourselves in politically sensitive contexts where the government disagrees with the data on the status of women and children because they feel it is counter to their own narrative of how women and children are doing in their country. So similar to that, I feel like that also ties in with the idea of how much does the government as a collective entity also retain some kind of ownership rights over data collected on its citizens?

>> I felt there were two parts to the question. One part is around the data collection. Another part you touched on is actually a disagreement whether they are religious or social views of how something should happen.

In the panel while that came up, we tried to focus on applying the AI to healthcare. We cover felt that was covered in every other panel, how do you come up with guidelines, how do you apply that.

One thing that is interesting is religious and social acceptances. That came up in the context of how do we train the AI to be context aware? As far as the data sharing portion, that has been covered pretty much everywhere, but the context aware was a big thing, AI has to know its context and be spatially aware of that. We didn't come up with a food for thought specific to that. We thought that was a subset of everything else that it would do.

>> REINHARD SCHOLL: Okay, yes. Just press and then wait.

>> AUDIENCE: Hi, there. As far as promoting healthier citizens go, there is often a healthcare responsive approach to things, whereas there's tremendous opportunity on the AI front to model and drive better preventive measures. And lifestyle choices. Whether in Developing Countries or more state-of-the-art urban environments.

Are there places that that kind of conversation might fit into an existing food for thought area or just other insights that might have been derived from your conversation?

>> Yes, that was brought up in the context of somebody asked the question how do we keep the people who are healthy healthy? That's similar to what you're going at.

The answer as a panel that we came back with was, they said well, there's lots of apps and education happening in that category. Do we focus on the global need or focus on a specific set area? And at which points do humans start to interact with that data and take responsibility as well?

So is there one specific area it fits in? If I had to pick I would probably say how to use AIs to train humans, all the education, we could argue it's doing that. We feel like there's a larger component around when do we take responsibility for something.

>> REINHARD SCHOLL: Then in the back, yes.

>> AUDIENCE: Yes, thank you. I am from the WFP. I have a question regarding the food for thought 3 using artificial intelligence to train humans. I was wondering if this is not a little bit dangerous from both a sanitary and legal point of view. What if the AI makes mistakes in terms of diagnosis? What if people learn mistakes or learn mistakenly to diagnose because of the AI and then who is responsible for that?

If people make mistakes? Because they have been badly, wrongly trained by the AI?

This makes me think of the bridge programme in the education sector where we have thought that teachers could actually

deliver lessons based on scripts. It turned out that teaching was an activity more complex than applying an algorithm although complex and well developed.

Medicine is also very complex. I'm just a bit worried that using artificial intelligence, although very well designed, could still lead to mistakes in diagnosis and then, of course, the question of responsibility leading into that. Thank you.

>> Sure, I'll go back to the previous question because I forgot one part I wanted to add in. Talking about food for thought which would include a cycle with feedback and patient education a lot. That applies a lot as to how we do we keep patients safe out there.

As far as the question of what if AI is wrong in that could be asked of any of questions here. That was brought up. We tried to focus on how could you apply to AI to this. We can dug into those questions all day long, what are the legal ethics and they are coming up in every panel and there are definitely concerns. The panel's purpose was not to solve those. That's a larger question that has to be applied as a whole to all AI.

>> One last, please.

>> AUDIENCE: It is just one further comment to the question with regard to prediction and prevention because the food for thought 1 about the learning healthcare system is mainly about coming close to the P form medicine. If you field healthcare systems with all the data that are not assessed non-days, 90 percent of data are lost for future insight and use.

Then you will come to a predicted and preventive medicine, personalized and participatory one. This concept of preform medicine, you can add psycho-cognitive to that P form medicine will be a necessary impact of artificial intelligence and learning healthcare systems. So it is just an inherent element at this point.

>> REINHARD SCHOLL: Good, thank you. Let's thank the breakthrough group on health. We move to the next one. Smart Cities and Communities.

>> FRITS BUSSEMAKER: Yes, thank you, Reinhard. First and foremost, artificial intelligence is a disruptive technology. So we try to take a disruptive approach in our session and it is also good to see that despite that disruption the different approach, these food for thought completely resonate with the other food for thoughts I see in the other sessions. Basically we've identified first of all develop an open source approach for data privacy ownership and transparency to assure that any AI system deployed by a city will benefit the citizens first and foremost. And next that might also include algorithms and models as well. Secondly, food for thought is that we need to identify KPIs to assess and measure before implementing on a

broad scale. Basically organise living labs, organise pilots and share the results on a global scale so cities become smart and smart cities become smarter.

We've also noticed there was no women, no woman on our panel at all. And actually, that generated our third food for thought. To assure that any AI solution will increase access and decrease stratification across gender, race, and class. Account for the different, you could say, situations of a city. And in the panel we discussed also we should take into account the age factor as well, because AI will definitely help with the senior citizens.

>> REINHARD SCHOLL: Thank you. Questions, comments? I think we may be seeing food for thoughts converging. What you said on your food for thought 3 is what was said earlier. Also the first one. Yes? Please, Thomas, yes.

>> THOMAS WIEGAND: The first one, I think we had a discussion that there needs to be a new approach to data privacy ownership, transparency. I don't think we meant open source was mentioned but I don't think we had a clear consensus. It needs to be transparent, but we just said it needs to be redefined because if it is like very open, then again how can you protect privacy. So it has to be a balanced way towards the whole thing. So develop an open source approach, but expand to new approaches.

>> ANTOINE BLONDEAU: We stand corrected, you're right.

>> REINHARD SCHOLL: Yes, please?

>> AUDIENCE: Regarding the smart cities and communities, I suggest that the real prosperity license smart towns and smart villages, just not focusing on cities alone.

So was there any discussion regarding smart villages?

>> FRITS BUSSEMAKER: In our discussion we did not focus on the smaller towns and the cities. So I cannot speak on behalf of the group or the panel. But on a personal note I think it applies to any living environment where people live, use that technology. So it is not meant to exclude towns and small cities.

>> REINHARD SCHOLL: Did you have a discussion on what KPIs might look like?

>> FRITS BUSSEMAKER: No. I would have liked to have said yes, but no.

>> REINHARD SCHOLL: Yes. We have a question in the back.

>> AUDIENCE: Richard Hill, Association for Proper Internet Governance. Actually a suggestion. This panel is also constituted exclusively of white men. Maybe tomorrow's panels can each include at least one person who is not a white male. Thank you.

(Applause.)

>> REINHARD SCHOLL: This is a question asked by a white man.

(Chuckles.)

>> REINHARD SCHOLL: Okay. Another one? Now then the nonwhite men have to come forward.

Another question? Comment? Women? Okay, good. Then let's give our last group a round of applause.

(Applause.)

>> REINHARD SCHOLL: We thank everyone for participating. Let me repeat with respect to the reception, we are going to open it up. Maybe just if I could have a feel for those of you who have a gray badge, those of you who have a gray badge, who would like to participate at the reception 7:30 at the United Nations?

I think that should all be fine. Please come to the reception area at 7, just you get a number. There is a colleague of mine and we will give you a tape with a number. And the entire group will then leave from 7:15 and walk in one group over to the United Nations.

You cannot get in if you are by yourself. It has to be the group. Thank you very much. See you tomorrow morning at 9:00 o'clock.

(The session concluded at 1815 CET.)

(CART provider signing off.)

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