Gidi Grinstein | TOM A Moonshot to Help 250 Million

- Gidi, it gives me great pleasure to welcome you today to talk about TOM. TOM is an Israeli global humanitarian venture driving innovation in design and technology to create highly affordable solutions for needs of people who are poor, living with disabilities or the elderly. TOM has operated in 24 countries, and its goal is to deliver 250 million products around the world. TOM has won multiple accolades and most recently, Tom Friedman of the New York Times named TOM as a venture that could help the U.S. rise in the aftermath of Covid-19.

Gidi Grinstein is an Israeli serial social entrepreneur, leader and author. He founded the Ray Hood Institute, Israel's cutting edge nonprofit strategy, development and leadership group, which specialises in societal disruptions. Gidi's seminal book, "Flexigidity: The Secret of Jewish Adaptability" offers a unique systematic view of the Jewish people. In 2000, Gidi served as a secretary of the Israeli delegation for the Camp David Summit and prior, let the Israeli team that designed Birthright Israel, which is the largest generational project of the Jewish people. Gidi is a graduate of Harvard Kennedy School of Government, and of Tel Aviv University schools of Law and Economics. He's a long distance runner, having run eight marathons, he's married to Betty and has five children. Gidi, very warm welcome. I'm now going to hand the floor over to you. Thank you for joining us.

- Wendy, thank you very much for having me, and it's really a great pleasure to be here. I just want to mention before we start that I'm joined by my colleague Idan Sella. And Idan is the one who's going to be running the presentation, the power presentation and the tour on the website that we'll be sharing with you in a moment. So just briefly to say few words about myself and my own journey, I've always been passionate about the notion, the vision of having inclusive societies.

And by inclusive societies, we mean societies that work for everybody, which means that the benefits of innovation and growth are shared by all members and all communities across the entire demography, the entire population, and also the entire geography, the entire land mass of the country. And I was actually introduced to this concept, Wendy, by South African, a very, very thoughtful South African that inspired me to be thinking in these ways. His name is Andre Zeyman. So through this exposure or through this, because of this way of thinking, I noticed that there are some areas and some problems in society that are structurally neglected, which means there are some groups and people that suffer from acute needs that will not get a response from markets or from governments.

That was the original insight back in 2013. And then in 2014, I was privileged to be invited to a tour on the campus of Stanford University and introduced to a programme called Design in Extreme Affordability. And I was really taken by the concept that you actually design solutions for people who are at the bottom of the economic pyramid. But that programme Design in Extreme Affordability was locked in Stanford. Two months later, I was invited to go to Rajasthan in India where I saw an amazing place called Jaipur Foot. And in Jaipur Foot, hundreds of

people, about 200 people a day come in the morning with a stump, and by the end of the day, they have their own customised prosthesis, and they pay as much as they can.

And when I saw this, I said, "Why is it only on prosthesis? We can actually do it on many other products." And then inspired by what I saw in Stanford, which is Design for Extreme Affordability, those two experiences brought me to actually launch TOM with my team at the Reut Group. So I'd like to do, in the first part of the presentation, I'd like to share with you a few details about few facts about TOM today, and then share with you the model, walk through our website and open everything for conversation and for questions and answers. So basically, TOM stands for Tikkun Olam Makers.

Visual slides are displayed.

As many of you know, Tikkun Olam is an ancient Jewish concept that requires all of us to be thoughtful and deliberate in making the world a better place. Makers comes to represent the fact that this project comes from a global movement called the Maker Movement. The Maker Movement is a movement of people who believe in making things, in designing things and creating solutions and then distributing them. So Tikkun Olam Makers is the name of the project, TOM, and it was...

- Gidi, I'm sorry, I'm going to interrupt you for one minute because it seems some people are hearing an echo. Can you do me a favour and try without your headphones? Is that possible?

- It's better? Wendy?

- Let's see, if anybody can still hear bad echo, please post again on the chat, but let's carry on and see if anybody is still having a problem. Thank you.

- All right, great. So what I was saying is that the idea of TOM also was inspired by a vision in which Israel, the state of Israel and world jury. And by world jury, we mean the global network of Jewish communities around the world partner in making a significant and distinct contribution to humanity. So these two ideas eventually shaped TOM, and we launched the project on July 14th, 2014, so that's exactly six years ago.

Today we have operated in 24 countries in 67 communities with 5,500 volunteers, and we have a pipeline of about 500 prototypes and products that are being created for the people, the communities, the constituencies that I mentioned, which means people living with disabilities, elderly or poor. The model that we have brought forward, Idan, if you could move to the next slide. Yeah, so the model that we have brought forward has actually been recognised multiple times by leading magazines of innovation in the world, "Inc." magazine, "Entrepreneur" and "Forbes."

We were mentioned as a Superhero Startup coming out of Israel, the Next Big Idea of the

Jewish people, Blackstone, which is a very famous private equity group, we won a first prize in a competition, and we won a few other prizes.

And the reason I'm sharing all of that with you is, because we're now going to take some sort of a deep dive into this very special model that our team has created over the years. But oh, another major insight that has driven us is that we have created TOM in order to drive, to create a systemic solution to a systemic problem. And in this respect, for those of you that saw the amazing three part series about Bill Gates, there's one quote coming out of that that totally captures our approach about TOM. And Bill Gates says that "Emotional connection is retail... To make a dent, you have to think wholesale. My goal," meaning Bill Gates, "Is not inspiration, it is optimization." And this is exactly story of TOM.

We are here to move the needle on global issues. So what we have created is basically a non-for-profit venture that aims to help 250 million people by connecting local, regional, and global challenges and resources. We'll explain how that happens in a moment. And it is basically a project that allows people all over the world to collaborate in creating open source solutions, which means solutions that are available for everybody around the world, and it supports what is called mass customization.

It means that we want to deliver many, many products even though every product is unique and customised to the people, to the person that needs them. And just to understand the potential, in the USA alone, there are thousands of potential locations in the 50 states of the United States, and there are 750 universities that can run TOM communities. This is just in the United States. So with this as sort of a background, I'd like to take a step back and walk you through the model of TOM. First of all, what is our vision?

It's very simple, that every problem, every human problem that can be solved, will be solved, every person that needs a solution will get that solution, this will happen everywhere around the world at the lowest possible price. In this respect, Idan? So our mission is to create and deliver affordable solutions to every human problem that can be solved anywhere around the world. So it's both the creation of the solutions and then the delivery of the solutions to the people that need them. And our goal is, as was mentioned earlier, to improve the lives of 215 million people within a decade.

That qualifies our project as what is called a moonshot project, which means it's a project that is trying to do things to drive results at the scale that is unprecedented, 10 times more than anything that has been done, a hundred times, maybe even a thousand times bigger and more effective. Now, the fundamental insight that is driving our project is that in every community and in every society, at the same time, there's abundance and there is scarcity. So by abundance we mean that there is a lot of goodwill of people, there are a lot of resources that are available, there are a lot of manufacturing capabilities that are underused.

So in all these respects, you have abundance, but at the same time, you have people that have

acute needs. And part of what we're trying to do is to create a platform that allows the abundance to flow to the scarcity and meet the needs that exist in the scarcity. And we believe that this process can happen in a much better and more efficient way in every community around the world, in every society, and in every country. And it can only happen if many people around the world collaborate across political, religious, cultural alliance.

Okay, so this global collaboration is essential for driving this magical process where abundance meet scarcity, and the people that have acute unmet needs are actually receiving the solutions that they need. So in order to share our model, to tell you the story of TOM, I'd like to focus on two stories, personal stories. On the left, you see a woman by the name of Kim. She's from the Bay Area in the United States, and she was born with no hands and no legs. And on the right, you see in the orange shirt, you see a young Israeli man, soldier, by the name of Noam Azek. And as you can see, Noam lost his left arm in military training.

By the way, he's sitting next to a Palestinian kid from Gaza who lost his arms and his legs because of a flesh-eating bacteria and he is being treated in Israel. And this photo was actually taken in our office, in our innovation lab in Tel Aviv. So we're going to focus today on the story of Kim, and on the story of Noam, in order to illustrate the vision and the model of TOM. So how are we going to get to delivering 250 million products, to helping 250 million people? Our strategy has three pillars. The first pillar is what we call the TOM Playbook, or the TOM Process.

This means that we are standardising, we're actually working in a very diligent way to create a process that begins with finding the needs that have no market solution and no government solution, and works all the way to delivering the solution. This process across all TOM communities around the world, meaning from Argentina to Canada and from Kazakhstan to Australia, this process is the same. Everybody speaks the same language and go through the same phases in creating the solutions and delivering the solution. The second pillar of our strategy is creating a global network of TOM communities. And I'll explain that in a moment. And the third pillar is creating the TOM Web-Platform, which is basically a marketplace that houses all of our communities, all the problems that we're looking at, and all the solutions that our communities around the world are creating.

So first of all, I would like to focus on the TOM process. Back to the story of Kim. So Kim was born with no hands and no legs, and she works in a call centre. And like many other people who work in a call centre, she sits on a table and she needs to move objects on the surface of the table. Now, for people that have one hand or two hand, this is a relatively easy thing to do, but for Kim who who doesn't have hands, it's an extremely challenging thing. So she had a vision, and in her vision she would be able to use her jaws to grab objects and move them across the table. That could be a pen or a glass of water or bottle of water and so on.

But this idea was stuck in her head for a long time, and there was nobody that would actually work with her to design a product that would be able to do what she wanted to do. So when we had a TOM event in the Bay Area in San Francisco, a team of engineers joined together with

Kim to create this object that she holds in her mouth that we called the grabber. And what you can see at the end of the grabber, that Kim is actually able to hold a pen. Now, again, this is something that for most of us, it's trivial, we don't even think about it. For her, it had been almost an insurmountable challenge to be able to hold a pen and move that pen from one side of her desk to the other side of the desk. So the first phase of the process is identifying and documenting challenges that people like Kim face.

And because this problem is rare, very few companies will design a solution for Kim at an affordable price. So this is phase one, identifying and documenting the challenges. Once these challenges are documented, they're put online and they're shared with everybody else around the world. So Kim's problem in San Francisco is now available for the entire global TOM network to look at. In phase two, we prototype a solution for Kim. So what you see here is Kim sitting at her desk in her office with a grabber in her mouth holding a pen.

Now, what you see on the left side of the picture is a detailed technical explanation on how to build the grabber. And the coloured elements that you see in these drawings are basically 3D printed elements that together are the components that make Kim's grabber. So this is the second phase. The first phase was to identify and document the challenge, the second phase is about creating a prototype of a solution. Now the magic is that Kim and all the engineers and the programmers and the product designers who are working with her, everybody donates their intellectual property to the public domain, which means that once we have a prototype solution for Kim, that solution is being deposited online in the cloud.

And now everybody else around the world that has a similar problem to Kim actually has an access to a solution. In the third phase of the project, we are moving from prototype to product. So in this case, you already seeing a different person, his name is Sethy, and Sethy lost, was paralysed from the neck down due to a car accident, he's an Israeli. As you can see, he's holding the grabber, and by this face, the grabber is looking much nicer, and it's also being used for clipping vegetation. Sethy has a hobby of gardening but he's paralysed from the neck down so he needs something to help him to clip the vegetation. So here you see this grabber being used for clipping Sethy's plants. And by now it's a much nicer product.

Now the question is, how will this product in our vision, how will it get to all the Sethys in the world, and all the Kims of the world, people that are paralysed from the neck down, cannot move their hands or have no hands, but they need this grabber in order to move objects and do things with their mouth. And the answer is, this was a very big insight in our project, that all over the world in the last decade, thousands and thousands of 3D printers have been bought and most of them are underused. So our vision is that all of these places that house 3D printers that are called makerspaces, so all of these makerspaces around the world that are underused, they will serve as the distribution points of this product.

And that means that if someone who lives in New York now needs the grabber that was created for Kim in San Francisco, this person will be able to go to a makerspace in New York City, and

there are dozens of these makerspaces and in this makerspace, they will get a product that is customised to them, okay? And as you can see, this is a graph that is until 2016, I believe, on the left, you can see the growth in the number of makerspaces around the world. And again, just to give a sense, in the United States alone, there are probably 2200, 2300 makerspaces, it's not even, thousands of other makerspaces that are basically not documented. What we mean by undocumented makerspaces is, for example, in universities, almost every university with engineering and design programme built a makerspace to educate the students. So these makerspaces with 3D printers are being built for the purpose of education, but they're barely used.

If they're used 30% of the time, that would be a lot. So it means that in the United States alone, you have 750 locations, universities that have amazing makerspaces that together represent dramatic access capacity across the entire continent of the United States that could be used to deliver products for people living with disabilities, elderly, or just poor people. And that is the margin that we're trying to grab in our project, and what is true in the United States is actually true everywhere else. And just before the call, because I know, Wendy, you came from Cape Town, I googled how many makerspaces are in Cape Town, and immediately you'll see, there's three makerspaces in Cape Town, not including the universities there and the high schools that have their own makerspaces.

So basically this is the top process, identifying challenges that don't have an affordable market or government solution, creating the prototype, driving from prototype to product, and then, which is what is happening now, beginning to drive the distribution to people all over the world. So this is one pillar, the pillar of the process. The second pillar of our strategy is creating a global network of TOM communities. To date, we have operated in 67 locations around the world in 24 countries, but our vision is to actually have hundreds and then thousands of locations that have TOM communities.

In general, Idan, if you flip to the next slide, in general, we have five types of communities. We have a TOM: City community where the TOM team, the local TOM team orchestrates activities in a city. So if we're talking about TOM Melbourne, it's about mobilising the local universities, schools, makerspaces, local corporations to engage in TOM activities. The second type of universities that we have is, I'm sorry, the second type of communities that we have are called TOM@University. In this case, we know that in thousands of universities around the world, there are students that have to do projects, there's faculty that is committed to teaching these students, there are amazing facilities, and there is usually a commitment for community service.

This is a massive pool of abundance, of resources that we believe could participate in a global movement of creating and delivering TOM solutions for people that need them. Similar process happens, similar dynamics happen in schools, in high schools, because in high schools, especially in high schools that have engineering and design programmes, again, there are facilities, there are students and teachers that can be used to create or disseminate products locally. Then we have a lot of rehabilitation centres, in this case, rehabilitation centres all over

the world, and I can tell you the story of a major rehabilitation centre in Israel by the name of Milbat.

They create solutions for people that come to them, but there is no incentive to share these solutions to basically make, the solution was created for a person in Tel Aviv, available also in all other countries or across the state of Israel. And that phenomena that happens with Milbat in Israel, is happening with thousands of rehabilitation centres around the world. So in this case, our vision is very simple, we want to digitise all these solutions so that every solution that is created in any rehabilitation centre anywhere around the world is available for everybody else.

And by doing that, our vision is to unlock a tremendous amount of societal value that today is just, you know, it's just buried in these amazing locations. And the fifth type of communities that we have are called TOM@Corporate. In this case, if you think about companies that have programme, that have talent, that have human resources of engineering, of engineers, programmers, product designers and so on, all of these corporates may actually want to support their employees creating or disseminating solutions.

So what you see in these five types of communities that each and every one of these communities actually capture the fundamental idea of TOM, which is that there is abundance, there's scarcity, and our role is to allow the abundance to flow to the scarcity, and that way basically to make the world a better place. So this is the second component. Third, another big idea that we had that has been driving TOM is that, you know, as was mentioned earlier, actually a little bit of a personal story. My background 20 years ago was serving in government and serving in Israeli Government.

Part of what I saw when I served in the government was the tremendous amount of energy and ingenuity and thoughtfulness that goes into winning wars, okay? Creating the innovation and the technology that is essential to win the war against our external enemies, but not even a fraction of that is being dedicated to dealing with poverty and with the acute needs of individuals and communities that are struggling every day and every week to make ends meet. So my idea was, our idea was to create in Israel an R and D centre, a research and development centre that specialises in designing for people at the bottom of the pyramid.

So basically what I saw in Stanford, I wanted to do in Israel on a much bigger scale, basically on a national scale. But we are a nonprofit, so obviously we cannot work at the scale of the government, but what we have created is an amazing makerspace called Impact Labs in South Tel Aviv. And in this makerspace, basically this is the headquarters and the research and development centre of TOM. It does other things as well, but basically that's how we, all the time we're driving innovation, we're looking at problems in Israel and designing solutions that can then be shared with anybody anywhere around the world. Idan?

Yeah, so basically when you think about TOM, many people think, or many people perceive TOM to be a project that focuses on innovation in design and technology, but really what is

special about TOM is the innovation in the process that we have created. So this process actually allows people from all over the world to collaborate around creating innovating solutions for social problems. It is about the marketplace, the website that was created to allow people to share this innovation, it's about having a playbook that everybody shares, it's about what is called crowdsourcing of problems, of challenges and solutions, and ultimately it will be about distributed manufacturing.

And that means that instead of manufacturing solutions in one place and then shipping them to another place, every person will be able to have their solution created for them where they are. So with this background, actually, Idan, can pitch me another photo here that captures this idea. So as you remember at the beginning, we spoke about the story of Noam. This is the Israeli man, soldier, who lost his left arm in training. As you can see, he's wearing their orange shirt on the left picture. A team of engineers in Israel created for Noam, a customizable prosthesis that could be used for multipurposes.

Noam likes to paint, he likes to cook, he wants to be able to sit to a dinner table and use a fork and a knife with both his hands, and the bionic prosthesis, near bionic prosthesis that the Israeli VA, that the Israeli Ministry of Defence gave him is not useful for that. It's heavy, it needs to be charged, it cannot be used for painting and it cannot be used for cooking. So he wanted a second prosthesis, basically a PJ prosthesis, PJ from pyjama, a prosthesis that he wears when he comes home, and he uses that for these specific functions. So a TOM team in Israel created for Noam, a prosthesis that weighs one pound, will cost $60, customizable to his stump, and could serve him to do all these things.

A few months later, which is the picture in the middle, a TOM team in Singapore is being asked by a person by the name of Boon, Boon is the person in green shirt sitting in the middle with a prosthesis. Boon lost his arms and his legs to a flesh-eating bacteria, and now he wants to be able to go to the toilet on his own without assistance. So he needs special prosthesis for that. So because the TOM community in Singapore and the TOM community in Israel are connected, the Israelis emailed to Singapore the design of their prosthesis, and the TOM team in Singapore creates an adaptation of the prosthesis that was created for Noam, and that prosthesis is now be being used and was basically adapted to allow Boon to go to the toilet on his own.

The other major difference is that Boon is a double amputee, so he needs two prosthesis in order to be able to do that, and that's what the TOM Singapore community created for him. The picture on the left is of a French soldier who works, who lives in a farm in France, he lost his arm in Afghanistan, and the same idea was used to create a prosthesis for him that helps him use a shovel and other things he needs to do in his farm. There's a fourth chapter to the story that I'll share in a moment. So with this background, I'd like to shift to our website and do a quick walkthrough. First of all, so all of you now can see our website, our vision is to improve the lives of 250 million people. Idan, can you please move to the map of the communities.

Right, so what everybody can see here is the map of our communities all over the world, 67

communities, some more active than others, but every community, as you can see on the left, has its own webpage. So Idan, can you just choose one and let's share with everybody. Yeah, so for example, this is the community page of Cornell University. Cornell is one of the campuses in the United States where we have activities. And what you can see here are the products that this community is working on, some of them are prototypes and some of them are products. Okay, Idan, can we go to the PJ Prosthesis? Okay, so in this case, this is the page of Boon. Boon is the guy in the green shirt. Idan, can you scroll up just a moment? Yes.

Okay, so he's basically a double amputee, by the way, the person standing in the middle in the red dress is the Israeli ambassador to Singapore, and the person on the right is the deputy prime minister of Singapore, basically speaking with Boon. So after this product, this prosthesis was created for Boon, it was the design of the prosthesis was deposited online. Idan, if we scroll down a little bit, as everybody can see, stop on the download, Idan. There've already been 132 downloads of the design of this prosthesis, for different people, again, around the world. So basically, this is the process of created for Boon, this is the prosthesis, I'm sorry, the solution that was created for Boon.

A few months later, we were approached, Idan, can you go to the picture of Elle? A few months later, we were approached by this family, on the left, you can see a girl age 16, on the right, her father, and she doesn't have an arm, and she wanted to be able to play the violin. So a team of students in Shenkar College in Israel came together, they took the design of the prosthesis that was created for Boon, and they created, they worked with her and her father to create a prosthesis that will allow her to play the violin. Now, this prosthesis agree exist in the world, but they're extremely expensive. This one will cost the equivalent of $60.

And that's the beauty of it, because their family is not a family that could afford very expensive devices, but now they have access to this solution. Now, this is actually a product that was highlighted by the "New York Times," and as you can see, 275 downloads already of the design of this product. So basically this website does for us couple of very important things. First of all, it houses all TOM communities. As you saw, every community has its own page with its members and also with all the products that it's working on, and the website is also housing all the projects that we're working on, a total of 500 projects. So we are basically a relatively small nonprofit that has a pipeline of 500 products under development.

And you can see that some of them are more mature than others and every product has an amazing story because every product comes through a partnership between a person that has an acute need and a team of engineers, programmers, product designers are willing to work with this person to create a solution, and that solution is basically shared with humanity. The last thing I'll say before we move into the questions and answers is that can Covid-19, we shifted. Idan, can you move to the Covid-19 page, please? Yes, so we shifted all of the talent in our network to create solutions that are available for anybody anywhere around the world for needs that were generated by Covid-19, and as Idan scrolls down, you can see a lot of the partnerships that we have created.

We have many community members, dozens and dozens of community members, and then you can see the products that were designed by these communities in many cases through international collaboration. So people from Serbia work with people from Mexico, people from Argentina work with, I'm sorry, from Chile work with people from Israel, 45 different solutions that were created by our TOM communities around the world. The most, I believe, the product that is coming up as most needed is actually a see-through mask. Idan, can we focus on that?

There is it. So what we see in these many people that have hearing disabilities, when they put the mask on, they cannot communicate. So the clear mask is actually a mask that people use in order to protect themselves, but it's see through. And this is a product that has been developed over the last few weeks, and actually as upcoming Monday, we are beginning to have sewing parties, sewing like a, you know, a sewing machine in order to begin to deliver these products to the people that need them initially in Israel, but then also in other places around the world. So I think this is a good point for me to stop and actually take your questions, Carly's questions or anybody else.

Q&A and Comments:

Q: Thank you, Gidi. So I wanted to take a bit of a licence here given that we know each other reasonably well. So we're going to take questions on TOM, but also a little more broadly. But first of all, when we started on TOM, we actually looked at the map, but you skipped over the kind of the global nature of TOM. So I just hoped you could take a step back and tell people a little bit about the country's TOM's in, but also where you are actually seeing TOM really grow and what that looks like.

- Can you hear me?

- Yes.

A: Thank you for that. As you can see, it's a global map. The beauty of TOM is that our model can work from developing to developed countries. So we often say from East Palo Alto to East Africa, thank you, Idan, for sharing, and we have active communities today, if you wish, on a triangle, not triangle, a rectangle that goes from Australia, Idan, from Australia, Melbourne, Australia to Japan and Kazakhstan, and then in Singapore and in other places, obviously in Israel, all the way to Latin America, Chile, Argentina, you move, north we have a very strong community in Mexico, we have a very strong high school community in Columbia, and then across the United States.

So basically TOM is relevant, and this is the beauty of the model, the process of TOM, the platform of TOM, the approach of TOM works in a similar way across Africa, from developing countries in Africa to the most developed communities, let's say in the west coast of the United States and anywhere in between. Now our vision is, which is as you know, very ambitious, we

believe that the TOM community can exist in every country around the world, within every country, in almost every city around the world. There are thousands of locations that could have a TOM community in the United States alone.

So in this respect, our vision is to democratise and empower people to join our movement locally. Now, specifically when it comes to us and our priorities, we are now very focused on growing across universities around the world. So our focus as management, meaning what are we prioritising? It's universities and the potential is tremendous. In Israel, 42 campuses, in the United States, as I mentioned earlier, 750 campuses, total over 8,500 campuses around the world that have engineering and design programme, and technically, each and every one of them can be part of the global TOM movement, which means, contribute to the creation of solutions, and participate in the distributive solution.

And the beauty of it is, the TOM community may contribute five new ideas to the global repository of solutions, but because these ideas are shared with everybody, they are open source, there is no intellectual property, then community can contribute five ideas, but tap into the 500 ideas that exist in the network. And next year, God willing, hundreds of additional ideas will be added and everybody will be able to benefit from that. Carly?

Q: Gidi, I'm not sure if we are as struggling with your internet connection a little bit, but I just wanted to also ask, is TOM only available in English? And have you looked at translating it and making it available around the world in other languages?

A: For sure we want to translate it, we want to make it available around the world. We haven't had the, I would say the opportunity to do that, but for sure we want to do it. Our vision is that everything in TOM is democratised, which means at some point we will allow a lot of people to participate in translating TOM materials to their local language.

Q: One of the places where you would see a natural fit for TOM is in refugee communities. You know, a lot of the scars of war can leave you in a position where you require the solutions of TOM. And actually there has been some efforts by NGOs around the world to put makerspaces into refugee centres. You know, take Jordan where, you know, the first refugee camp with a 3D printer in it, you know, would allow for arms and legs in the way we've seen today to be printed in the refugee camps. Is that something you've explored?

A: Yes, that has been something we plan on doing, we are doing right now as an first step experiment with Syrian refugees in Turkey and Kurdistan. So basically masks and personal protective equipment created in Israel, donated by an Israeli company, is actually going to go to camps of Syrian refugees, as I said, in Turkey and potentially also in Kurdistan. But this is for us just the initial experiment, because ultimately, we create a TOM as a platform for coexistence and collaboration across borders and nationalities among people of different religions and cultures. So especially as we are coming from Israel, but we always envision creating a global humanitarian project.

We've always had a soft spot for the vision of using TOM as a platform for collaboration among Israelis, Jews and non-Jews, with Palestinians, with Jordanians, even in Gaza. Three years ago, four years ago, a team from Gaza came to visit us to learn about us, and then they went back, and we believe that one day we'll be able to collaborate with them, which means that the solutions that are created in Israel and in other places around the world will be distributed in Gaza through the makerspace that they have there.

Q: Turning our attention now to Covid, you gave us a little glimpse of the work that you've been doing. Now obviously the topic of ventilators has been one that has, you know, covered the front pages during the last five months. And although now we do understand that perhaps ventilators aren't the only solution that can help with Covid, it was one of the major difficulties in terms of supply, but also access, especially for developing countries. they're a very expensive piece of technology. So I wondered if that was something TOM had looked at, and then to expand on that, you know, what you are looking at in terms of medical devices and other ways in the medical field that you can help.

A: Basically, one of the big decisions we made very early on is that we don't deal with anything that requires regulation of healthcare authorities. So we don't deal with anything that requires FDA regulation, you know, to put it in American terms. But when it came to ventilators and respirators, again, there is a massive difference in terms of regulation. In Israel, you cannot get anywhere close to a hospital without having very serious certifications, which is not something that we do. But in other countries, there is openness to using solutions that are 3D printed, specifically, our TOM community in Mexico delivered, perhaps Idan can share the screen and show the product, delivered thousands of what is called Y-splitters.

It's a basically a device that allows one respirator and ventilator to serve two people. So basically doubles the capacity of ventilators and respirators, and Idan will bring it up in a moment, but, and he will correct me if I'm wrong, but I think in Mexico, see this, the Ventilator Splitter, thousands and thousands of units like that were delivered to hospitals in Mexico. And that product and its design is now available for anybody anywhere around the world to download one of these.

Q: So how do you measure this huge goal of affecting 250 million lives and really know where you have an impact?

A: So basically, this is actually a great question because one of our big challenges is that, let's say someone downloads the design of a solution, now that person can use this design multiple times, right? In Mexico they downloaded, they actually helped create, you know, the design of the Y Splitter, but now that design's being used thousands of times for manufacturing. So we are still asking ourselves what is the right way to measure?

And we're using all sorts of approximations to assess how many products are being delivered,

but this is definitely something we have to work on. What I can say is that when we look at the number of downloads, we already have multiple products that were downloaded hundreds of times, and in this respect, when a product is downloaded hundreds of times, it could be used multiple times. So our vision is to create a project that is exponentially growing by the fact that you can have, let's just, you know, metaphorically, 1000 products with thousands of distribution points, all these makerspaces that I mentioned in universities, and then you actually get to multipliers that get you to millions of products. But it's obviously very ambitious project and we're creating the infrastructure to allow it to grow.

Q: So one of the questions that we're getting on the chat is what does it require to build a TOM community in a country? You know, be it South Africa where you were inspired by South African or in the UK, what are the ingredients you need and also what's the cost?

A: Okay, so basically in order to start a TOM community, the most important thing you need is a social entrepreneur that is committed to the vision. This person then engages us, engages our team, we sign a licensee agreement. The essence of the licensee agreement is not money, there's no money that is being moved from one side to the other, our licensees around the world don't pay us. There is one major thing that they commit to in this relationship, and that is that everything that will be created within the framework of TOM will forever be public domain intellectual property. Which means that all the innovation that will be created by the local team will add up to the global repository of solutions that exists, okay?

So once this person, this local entrepreneur is committed and they signed a licensee agreement, they basically can kick in it. And actually only the last few weeks we had TOM community launched in Seoul, in South Korea, in Ethiopia, in UPenn, University of Pennsylvania, and in a few other places.

Q: In terms of people looking to commercialise the products that are available off TOM, is there a way to protect against somebody coming along and looking to actually make a large profit from the designs?

A: So basically, once product is deposited in the public domain, it means that the intellectual property belongs to human, nobody can lock that IP again. And we actually, and we had a very strong team at Wilson Sonsini, that it's a very famous law firm in Palo Alto that help us create the legal documents that . Now once the design is out there, it doesn't mean that people cannot manufacture it and maybe sell it, but if you work through the TOM system, then we have one golden rule, the user that receives the product forever will only pay the cost of manufacturing, okay? So that means the cost of labour and the cost of the materials.

This means that in many cases in TOM, we will deliver products to people at 80 to 99% cheaper than the available market alternative. Our vision is to dramatically transform the accessibility and affordability of solutions for people at the bottom of the pyramid. Now when you look at this pipeline, this portfolio of 500 solutions in TOM, about a third are basically inventions and

two-thirds the innovation is around accessibility and affordability, which means teams of people around the world are looking at the solution that exists in the market at a certain price point, and they innovate around making that solution more affordable and easier to make.

The other thing, as I mentioned, a third of the products in TOM never existed before. And this is something I'm so proud of, because TOM is basically a platform for inventions, for thousands of people to become inventors of solutions again, for people living in disabilities, elderly and poor.

Q: And in terms of actually, if people have an idea but not the know-how to design the product, how does that work? So, you know, for example, the granny hugging screen during Covid, you know, that a grandma wants somebody on the platform to design for them, can they just put the idea out into the TOM community and ask for somebody to design it?

A: So depending if there's a local TOM community or not. If there is a local town community, it's very easy. This person that has an idea, usually these ideas come from a place of need, we call them in TOM, need knowers, these are people that know the need. So if there is a local town community, that need knower will be matched with a local team of engineers, programmers, product designers, they will become one unit, they will become a TOM team and together they will begin to design the solution.

Obviously it begins with the short process of due diligence to make sure that there is, you know, no available affordable product online, et cetera, but if there's no affordable solution online, then the team gets going and begins to design to prototype the solution and then productize it and so on. Now, if there's no local TOM team, you could still post challenges on our website. I won't walk you through it, it's too much detail, but basically people can still post challenges on our website, and other TOM communities around the world may look at these challenges and decide to pursue them.

Q: So if off the back of this call, somebody would like to look to get involved or see if there is a TOM community or even look to help support one, how would they do that?

A: Best is to reach out to us and we mentioned three options. If people want to launch a TOM community, it's a very easy process, we have a person on our team who is responsible for supporting on global communities, step by step process, we've done it as I said, 67 times, you know, we'd love to be doing it at 68th time, the 70th, 80th, 100th time, okay, hundred TOM communities is one of our goals for this coming year. Now, if people want to be involved in the design or innovation process, there is also a process for that.

So basically, just reach out to our team, shoot us an email, get on the website, send us a message, and we'll respond and get the process going. And with regard to financial support, obviously we always need financial support in order to grow the global movement. So that's financial support basically goes to the nonprofit either in Israel or in the United States, obviously all tax deductible contributions. But all local TOM communities are self-funded. So if someone

lives in, let's say in Melbourne or in Santiago, Chile or Mexico City on this call and they would like to support their local TOM community, that is something that is really welcome, and we are very happy to make that connection as well.

Q: Does anybody who contributes to the design or has their design reproduced, get paid in any way, or is it all volunteer led?

A: All volunteer. This is one of the biggest insights of TOM. There are, I believe, millions of people around the world with top talent that don't have an avenue for deploying their talent for society. What I mean by that is that if you are a master's degree engineer working in a global company and you want to volunteer today, most of your volunteering opportunities involve low skill, helping an old lady cross the street, go and paint a house, work in a soup kitchen. This doesn't really tap into your talents and skills.

So we believe that for tens of thousands, hundreds of thousands, millions of people around the world, they would like to be able to contribute, I'm talking about engineers, programmers, product designers, they would like to be able to contribute at the top of their skills, and we would like TOM to be their platform for doing that. So if you're an engineer and you are working in Google or in GE or in Salesforce or even in a small startup and you want to contribute your skills and your talent, we want to be the place that you come to. And that is really the massive potential, the ocean of potential that we're trying to tap into.

Now, in order to deploy your skills to serve a community, serve society, to serve humanity, it's much more complicated than people think because you have to find a product, I'm sorry, you have to find a problem to work on, you have to find a team to work with, and you want to know that if you have taken the process from point A to point B, someone else will carry the ball across the line. We at TOM, we want to lower the barriers of entry, make it very simple for you as an engineer to come forward, find a problem to work on, find a team to work with, do your thing, deposit the progress that you have made, and allow others to carry the ball forward.

Q: So I'm just going to ask one more before I hand back over to Wendy, and don't worry, I'm not going to ask you about your role in Camp David and what that means for annexation, take a sigh of relief.

- 20 years ago.

- I know, 20 years, 20 years next week. So in terms of Israel's role in this, you know, Israel, Tikkun Olam Makers is the full name for TOM. And you know, I know that Israeli innovation and Israeli knowhow is underpinned a lot of the TOM creation on the platform. How much do you kind of need that Israeli spirit to help drive this forward? And do you find that a stumbling block or an asset as you open the communities around the world?

A: It's actually a gorgeous question, thank you for that. Because I believe that we are literally

living in a new period in Jewish history, the history of the Jewish people, because for 35 centuries, 3000 years, the contribution of Jews to humanity was qualitative through our ideas and our values and the institutions that we created and the laws we introduced and so on. For the last 20, 30 years, for the first time in the history of the Jewish people, we are actually able to help move the needle on global issues for hundreds of millions of people, and that ability to improve the lives of hundreds of millions of people comes from this explosive combination between four elements.

The fact that we have Israel as an amazing playground for innovation, the fact that we have Jewish communities around the world as a most effective and efficient distribution system for ideas, the third thing that we have is the power of technology, and the fourth is the value of Tikkun Olam. There are thousands and thousands of Jews and Israelis, obviously not just Jews and Israelis around the world, that are inspired by the opportunity and by the vision, and by the ethics of making the world a better place. So between the values, the technology, the innovation in Israel and the worldwide web of Jewish communities, this combination really places us at the cusp of a new period in Jewish history.

Now, is it only Israelis? The answer is no. Is it only Jews? Obviously not, a lot of other people are making amazing things around the world, and many participants and even leaders in the TOM community around the world are not Jews, they're local people. But I can tell you that everywhere we go, the Israeli spirit is unique. We see it in these TOM events, we call them megathons. There are marathons of innovation that used to happen until Covid-19. Until March, we had 88 marathons of innovation around the world. We were even called in one publication, the New TEDx of Social Action.

In these innovation sprints, innovation marathons, the Israelis bring an ability to work with scarcity, to innovate, to try things, to work in a creative way that is really very, very unique. And we have seen the Israeli participants shine in developing places, let's say in Kazakhstan and in Central Asia and in other, you know, in Vietnam, but also in Palo Alto in San Francisco, in these places. So there is something about the Israeli spirit that is very unique, but fundamentally, we have created a project born in Israel with a vision of Israel and Jewish people making a significant distinct contribution to humanity, yes, that is at the foundation of TOM, but TOM is a global humanitarian project here to improve the lives of every single individual around the world, across all religions, cultures, and nations that will need our services. So the global vision and the particular starting point, with a special sauce of the Israeli Jewish contribution.

- Thank you very much, Gidi. Wendy, I'm going to hand back over to you.

- Thank you, Carly.

- Gidi, thank you my dear friend for giving us all a taste of the limitless potential of TOM. What a vision. The movement you have created has touched hundreds of thousands of lives around the world. The innovation and processes you have created is really so inspiring. I'm a big believer in

the path of collaboration. For me, one plus one equals eleven, and you and your team embody just that. Israel and this technology has a power to change the world, and you are leading that change. I love your phrase, "Every problem that can be solved will be solved, and every person that needs a solution will get it." We look forward to you seeing you move the needle and seeing what you can achieve and the 250 million lives you will change over the next decade. So on behalf of all of us, I just like to thank you for today. I'd like to thank Carly for being in conversation with you, to all our participants around the world, thank you very much for joining us, for our American friends, enjoy the rest of the day, for our English and South African friends, goodnight.

- Thank you very much, thank you very much.

- Thank you.