V: How would you briefly define circular economy and sustainable consumption in one sentence each? #00:00:14-9#

A: I think the circular economy is best described as a way of looking at consumption in such a way that everything that you produce, everything that you work with in this system stays in the system so nothing falls out and is pretended to not exist anymore because that is actually not true. And we have been working like that for a long time, we have been pretending that there is an end to this production change but there isn’t obviously. I think the circular economy expresses that every party in the chain is responsible is responsible for everything that it handles so that you know as well where it is going. That you know where it comes from and that you also make sure that it doesn’t get lost. And sustainable consumption - sustainable consumption in my opinion is being able to look at the future of consumption in a responsible way but also basically in a way that we can sustain what we are doing now so that we can continue producing without depleting the entire planet or having only a few people in the world that are able to afford items. I think sustainable production means we have to look at the way we produce things not only in the now but also in the far future. #00:02:10-6#

V: So consumption is about consuming in a responsible way today so that we will also be able to consume in the future? #00:02:19-7#

K: Yeah, exactly. I think if you want to continue to be able to consume in the future it means that there has to be a planet so we shouldn’t destroy the planet. There are going to be a lot of people so in my opinion it is also about equality because I think political tensions are becoming really high and you can’t sustain this idea that only the West is able to have access to certain items and the rest of the world is not. So I think it is also looking at consumption in a democratic way. #00:02:53-0#

V: If you imagine a truly circular economy - how would consumption change and why? #00:03:03-3#

A: Most importantly or the way I look at it is we would go completely from an ownership economy to an access economy. Because it doesn’t make sense. In the model now as a consumer you become basically the owner of a problem once something is broken. When your washing machine breaks you are really stuck with a big problem and a heavy problem as well. And it is actually ridiculous that I am now the owner of so much material and so much still potential elements that I have to get rid of but I am not an expert in getting rid of these things and I don’t even know what is left of the value of it so it doesn’t make sense that it is my problem in my opinion. I think a truly circular economy is an economy where there is very little ownership and products that don’t have particular emotional value would be owned by a companies or systems. #00:04:21-3#

V: And the key driver of that would be as far as I understood from what you said the convenience for the consumers? #00:04:29-2#

A: I mean that is always the key driver when it comes to consumption. I mean you tend towards convenience so I don’t think it is the key driver. I think the key driver should be that as a producer you are held responsible for what you produce and I think that will be a great incentive for companies to want to move towards a circular economy because then you don’t produce anything and nothing is left nothing goes out of your system, but I think a way to sell it to people is to create a service that is very convenient, because you can also of course create an access model that doesn't make it convenient at all. I think the challenge is to make it convenient and to also make it cheaper than owning an item. But that will become the case be easily if you if punish producing waste, as a consumer but also as a producer.

Q: Ok now we have already touched upon the next part, which is very nice, that’s about the sustainable business model, and that has three aspects to it. Three bigger ones or blocks. The value proposition, value creation and delivery, and then finally value capture.

Value proposition is the value the firm offers to a specific target customer segment. We have now already talked a little bit more about product and or service. How do you think these elements should be changed? How do you think companies should shape their value proposition when implementing circular economy? So the aspects of customer service, customer segments and relationships.

A: So I think there are a lot of items that are obviously better in a service model than in an ownership model. And those are usually complex and big items. So I think those are the items that you should start with so to say. I’m looking at the bugaboo that is standing over there, I’m literally using that thing one year, and it’s a really big, rather complex and extremely expensive item. And I don’t want to hold onto that item until I might in the future have another child. Also then it is out-dated, and I would probably want a newer model. So I think it is ridiculous that that is not an access item yet.

Q: Bugaboo used to offer that or they did a trial on it?

A: They did a trial yeah, and I actually signed up for that and I never heard back from them so either it failed, or they are just really lousy at getting back to their customers. But a model like that doesn’t exist yet. But I think that’s a good example. There are numerous examples of things that I needed to purchase when we moved into this house, that Id rather not have purchased, like the refrigerator, or the oven, or the washing machine, or the dryer. And what I would also have loved if a company had solved is lighting in my house. I think if Philips is now experimenting with that, but I would have loved to have somebody else think about the optimal lighting of my house, because its a really complex problem, that I don’t want to think about, I would rather have someone else think about it. And I would have wanted to lease maybe designer lamps, lamps that I want to change every now and then, but I don’t necessarily want to own all of them. So I think there’s still a lot of opportunity for these business models to be figured out, because there’s also, for example with Peerbygo, you know I worked for Peerby right? And with Peerbygo we tried some models, but what we found is that the key thing is that it has to be cheaper and more convenient than buying. We are living in an economy, where everything is optimised for buying, it the most easy and convenient thing possible, with amazon tough you don’t even have to go online anymore you just sort of wave at a button and things are delivered to your doorstep.

Q: And do you think that is also the way distribution is going to work in the circular economy, or what do you think about distribution channels? How are they going to change? How should they change in the transition?

A: I mean due to Internet at the moment distribution logistics are extremely optimised, because there is a big need for cheap delivery, of course for parcels. And I think the circular economy is eventually going to benefit from that. If anything, the logistic systems are becoming finer mazed so they're becoming more diverse and there are different solutions for different problems in terms of delivery. The thing that we haven’t solved yet, which was also difficult with Peerby go and that will be necessary for the circular economy is that you also have to pick up things. But I honestly think that once we are going to start working with drones, local pickup points, lockers and stuff like that, those things will be solved. But were currently in a transition for those systems to become more mature.

Q: So what does the transition to the circular economy mean for customer segments and relationships? How should companies change that? I mean it sounds a bit like its a more frequent interaction, simply because its service?

A: Yeah, so when I think about the washing machine for example Ideally the person that releases me or rents met the device, would also be able to control and monitor that device from a distance, and they would only send me a text whenever they need to do something and the only thing that they need me to do is let them into my house, and then its their problem again. What I want is a working machine. And of course you can also go further and that is probably also happen is that at some point you don’t even want to own a washing machine in the house anymore, it just happens on maybe a central place.

Q: And what do you think is the value proposition that companies offer society and environment. Thinking about the shift to the circular economy how should they change that value proposition. What kind of value can they offer to society and environment?

A: Well first of all once you fully transition your model towards an access model, you will have to redesign your items because then it becomes very interesting for you machine to last very long, for your machine to be able to be repaired, to be refurbished, to be recycled or first have parts be recycled and eventually you also want to control your resources stream because that’s of great value to you then to your company, you don’t just buy the resources and then sell them again. So as I said before that is a way of sustainable consumption and that is a way of offering it to (society and) Environmentally. And society, ideally it would become more democratic, because you see it with Uber, Uber makes taking a cab cheaper, and therefore more accessible to many people, because its a much more efficient way of managing your fleet. So Uber drivers they never stand still anymore so they can actually offer cheaper rides. So more people can benefit from these services. And also I think more people can have access to better things, because if you want to develop a washing machine that is really good, now there is a rental service that actually rents out washing machines. I investigated it before moving in here, but they are still more expensive than buying the machine, so that’s stupid. But of course they make use of Miele and then their best washing machine because otherwise they cut themselves in the fingers, you don’t want to rent out cheap items and then have to replace them every two months. So then more people have access to better things. Also uber is a great example, you drive in amazing cars all the time. You are all of a sudden transported in Mercedes and BMW, so it’s a more democratic way of consuming

Q: Ok and then lets go to the next part that is value creation delivery, how do you think should companies change and shape their activities in order to achieve circularity and sustainable consumption, and activities to create value that customers are willing to pay for?

A: As I said I have thought about this a lot and I think really the thing that has to happen first is that we have to make people responsible for what they produce. So we have to put taxes on waste. I think otherwise there will not be big enough incentive for companies to transition any time soon. So you need a bit of this force. I think you can distinguish your services by just providing great service. I was in New York last year for work and we investigated the market there, and there you see there is a big service market there right, people are already living very expensively and they are living in small spaces so there is a big market for services. People don’t own washing machines they don’t own a lot of things. So it is interesting in that sense. And what you see is that the companies that provide the best service they just win. And they move towards a monopoly in the cities. So I think that is something you have to think about, really provide great service. Also great products, I think there’s a difference between for example in the Netherlands you have Green wheels and in Germany you have my car. And I think it is kind of the same service. But green wheels took 25 years to grow into their market share right now and Mycar just went from 0 to 100 in a few months. Of course now is the right time but also what they were doing really well is that they only have BMWs and they are amazing cars, like when you drive it you feel like a king. And they are hybrid so they are also sort of sustainable. And you really want to drive a car that's right so if you make using the service it is cheaper than owning a car and you

Can get to drive a BMW, which is an amazing proposition. Whereas green wheels, they used to have shitty cars. They were really shitty cars, also they were painted red with really big green wheels on it so you could never use it to go to a client, especially back in the days when sharing gas still seen as something strange and cheap. So I think you marketing still, and the way you position your brand and in this case allow people to experience luxury is still very important.

Q: What do you think are key resources and how do you think they should be used in the transition. So tangible resources like the plants, equipment’s? Cash reserves, intangible and human resources. What do you think is the role of these in the transition to the circular economy?

A: I think the biggest challenge of the whole thing, in terms of resources is resource separation at the very end of the chain. So making sure that you can re-harvest all the materials separately and you can reuse them again. Especially when it comes to something like nanotechnology- all the materials are so intertwined. All the materials are so intertwined it is really difficult to re-harvest them. So I think that is by far the biggest challenge. Other than that, a big change is that factories will for example produce much less, because you can sell less. So you have to re-educate or reorganise your people, because less people will be producing and more people will provide services. And there are more things to be done in a circular economy that we are not doing now, like recollecting, recycling those are all new activities that people need to be educated for. And with Peerby we did a pilot with Makita actually where we tried to create a smart, circular power drill.

A: Also new kinds of services and I think it still is yet to be determined whether, and I think it can vary also a bit, whether one company is going to take care of all the steps in this circular chain or if it is going to be fragmented and there are going to be more companies responsible. I can imagine for example with the lighting that Philips provides a service and me as a customer I only interact with Philips but Philips sublets to different companies that take care of placing the lights, recollecting the lights, monitoring the lights so this can be different kinds of companies because I think you will specialise in different activities. #00:00:56-7#

V: Let’s go to the next aspect that is value capture. How will companies actually monetise on these activities and when will they receive payment - what do you think? #00:01:25-8#

A: And again I can give you an example of PeerbyGo, you know PeerbyGo is a rental platform for peer to peer items. One thing that we were looking into and which I still believe would have worked greatly. Which is you pay a small monthly fee and for that you get access to anything you want - the great thing is the people have this feeling of abundance and usually people just don’t realise that they don’t use that many items but you have the feeling that in case you want to you have access to anything. I think that is also how for example Spotify works. Spotify knows that you are not going to listen to all the music in the world because people just don’t but you do want the library with all the music in the world just because it is a great feeling to have. I think that is a really a key thing about the access economy that you need to have a feeling of abundance whether in variety or in direct access but something needs be constantly at your hands. #00:02:54-1#

V: How do you think companies can monetise that? In case of PeerbyGo your idea is a monthly fee what else can you imagine? #00:03:00-9#

A: I think you should look at service companies right now, like phone providers for example. I think there should just be different types of payment models. If you want constant access for example then you pay a monthly fixed fee for example and you can use it as much as you want or you can also pay per use if the product allows for it. I think with the washing machine they had this idea where you paid monthly fees and then depending on how much you used it you paid a variable additional fee. So if you wash everyday then it is more expensive than if you wash only once a week. That is something that I think could definitely work. #00:04:31-4#

V: How do you think should companies capture value for others?

A: How to capture value for others. Again, I think the waste thing is a very good measurement of how circular your business actually is so how much waste you actually produce. Which waste do you cause and that is something that is easily measured by measuring the resources that go out of your company and that that come in. I think you there should be a big focus on durability. We really have to move away from this throw-away economy that we are living in now. So you need to be moving towards products that last. But that would automatically happen if companies would benefit from products that last.

V: And what the value of that for the environment and the society?

A: For the environment - we have to produce less so there is less production waste and we don’t produce waste so we don’t pollute the environment with the waste we produce like the plastic soup that we created right now. And we also don’t deplete, we don’t run out of scarce materials, all the materials you need right now for a smartphone are becoming really scarce and if we continue like now then there are going to be big wars for the scarce materials that are still in the ground in some areas in this world so we need to be more careful with these items. So I think that is better for the world because we don’t have to blow up every single mountain that we have in order to harvest the last bit of gold or the last bit of platinum and there will be less, if you project it macro-economically, there will be less wars because countries will be ideally be more self-sustaining. Once you have a certain quantity of goods you can endlessly reuse it. Which would make sense, in combination with locally produced, sustainable energy I see a bright future. I think if every country becomes self-sustaining in that way there will be no need for fighting and wars anymore.

V: So how do you think should companies change their growth strategy and growth ethos in the transition to the circular economy?

A: Yeah, I think that is a good question. The thing with services, especially when it becomes human to human service and humans need to be involved it ideally you organise this very local. So I think companies are always going to grow if they can, internationally, but I think you have to organise it locally so there will be local sort of service points or like the way Uber is doing it, local people working for them everywhere in the world but they are an international company. Same with AirBnb for example, they make use of the services of local photographers that photograph all the apartments in a professional way. So you sort of provide the local ecosystem, I think that is a good way. Scalability is in this economy I think a really important thing anyway.

V: So just a different scale, maybe more locally.

A: Yeah, so scaling internationally but implement it locally.

V: Do you feel something is missing in this sustainable business model framework?

A: Well, everything is still based on a lot of assumptions. I think we covered most of it. I was just talking to a guy from Booking the other day and we were fantasising about the future of mobility which would be all access and no ownership. I think there is going to be a really different kind of cars. Because now the cars we drive are suitable for everything; they are suitable for going on holiday, going to the city, getting groceries, picking up your kids, going to a party, all those things you have to use one car for. But once transition to this access model for car for transportation you will get much weirder and specific cars because you have one car that is specifically designed for going into the city, one for going to a party, one for going on a holiday. So I think in terms of product design it will be a very interesting time.

V: Okay, then you can also tell me a bit more about technology and product features – how do you think should they change in the transition?

A: Well, technology obviously the fact that everything becomes smart is very important for this access economy because you can monitor use and you can monitor from a distance everything.

V: And what is the benefit of that?

A: So you can manage your fleet from a distance so users are not responsible for doing that and you can very efficiently provide service and you don’t have to go and check your devices every week but you can only go to the ones that are experiencing problems.

V: Okay, you worked at Peerby – which of these business model elements do you think have they focused on to become more circular?

A: The idea, the premise that Peerby is based on is that we are all seeing this circular economy as the future but currently the problem literally is today is that people own still so much shit. So we thought we need to deplete all that first and then we can slowly transition towards this access economy. So what we did is that we got baby boomers on board as lenders because they own everything, they are from a generation that bought everything. And we are tried to get young people on board as renters and borrowers because they were still in the process of either buying or renting and so we tried to convince them to rent or borrow rather than buy and therefore we hoped to educate a new generation. And stimulate also this new way of consuming and I think it is not only us but it is a bigger movement it is not only Peerby. There is a generation for which ownership is just becoming a different thing, it has a different meaning, I think it is really ridiculous that I still have to buy my Apple laptop because every year I just buy a MacBook Pro and why would I have to buy it? It looks exactly the same once I have installed it as my other laptop so I don’t even notice that I have a new laptop so why own it? And I think there is a whole generation that is starting to understand that now. Also I don’t take any pride in the kind of car I drive, it is not part of my identity or I don’t need to necessarily show off with only a cabriolet and I think most of my friends have the same thing. They just buy a stupid Japanese car because they don’t break.

V: And looking at Peerby what do you think they should do to achieve really truly circular business model? What do you think should be the next step for them?

A: So the next step would be to start working, so now we are still using people’s things that they own, and we were already thinking about it and talking to producers but we would actually start working with companies and we would be the platform distributing the items and we would just rent out really good items from manufacturer that were made circular and that were made circular and that were made sustainable and smart.

V: And what are the benefits of that for the consumer and the company?

A: That you can provide a better service because the quality of the products is guaranteed. Because what happened now is that people would rent a camera from a neighbour and we would have no idea and control what kind of camera, if it would work, if there were the right lenses so it is really complex. But if you have a company taking care of that it is much easier to control and you can provide a much better service. You can have much more certainty in your offering so that is a big benefit. Also, this way the companies that we work with again have an incentive to produce their items in a way that they are reparable, recyclable and refurbishable. So for the circular economy there are lots of benefits there. And I think that would have been a good example of a mature step in a circular value chain because we would be the platform and we would provide the brand but we would not provide the items so we were not going to be the manufacturer. We would just collect all the different items and offer them. But being a platform is actually a really complex problem and something that Makita would not be able to solve anytime soon and probably don’t want to. So it would be a really good product-service system.

V: How do you think can circular business models lead to sustainable consumption?

A: As I said you don’t throw away things anymore so you create no waste as a consumer and I think the waste streams, because there will always be waste streams, will be much better controlled.

V: And what will be the key differences in the way business will be done in a truly circular economy from a user/ consumer perspective?

A: You would have a lot less problems. Cause you would own a lot less stuff so you have very clean houses or you could live in very small places. I think you are also much more flexible when it comes to… Look at the set-set payers in the flex- economy, those are freelancers, I think that is a development that is going to proceed. I think there are lots of people who are flex-workers. They are people that some months can afford luxury and some months cannot and they probably don’t build up a lot of capital, that is something for the past that we are saving up for later and building up capital. And I think access over ownership economy really fits that model because some months I can drive Uber and some months I have to bike through the rain and it is okay and I don’t have the responsibility of owning that car and paying it back. So I am also free in that sense to also to live a flexible lifestyle because I can also be a flexible consumer and I think that is a big change for people.

V: Do you have any final thoughts or is there anything that has not been covered?

A: I think the key is going to be almost global governments realising that this is a transition that we need to make together that is the big first step. We need to acknowledge as people that we need to punish wasteful behaviour once we do that there will be nirvana and I think it is possible. I is so ridicules that these models are already thought through and at our hands in combination with renewable energy we would be flourishing.