How would you briefly define circular economy, and sustainable consumption in one sentence each?

R:Okay, so circular economy, I think I’ve been trained with the Ellen MacArthur foundation, “haha” definition, so in that sense, yeah yeah closed loops, and that rather than materials being going from production and going to waste, that they go back, and loop in that sense, back to make new stuff out of it. And sustainable consumption I would define as the type of consumption that is less harmful for the environment

How would you explain the key characteristics of the future circular economy to others? So for example friends, or relatives who don’t really know anything about the circular economy.

R:How I would explain it today? I think I would explain it to them by saying like that it’s in a sense of waste that you just make things and then throw them away. And then just without considering the fact that actually many materials that are used in those products are scarce. So just by going on like this, certain things are just not possible in the future. And I notice that many of my friends and family are not aware of that. I usually stress that point that if you just continue the way we are doing now, with the amount of people that we have now, that’s just impossible. And that you need to change our way of thinking in that sense, and then looping things back rather than just recycling things. But also just re-using things and for example refurbishing things is a way that we need to go, otherwise it’s not possible to maintain our level of welfare.

Imagine a truly circular economy, how would consumption change and why?

00:02:17 R:In a circular economy the consumption changed. How it will change and why: Okay, it will change first of all because we need to, uhmm, the consumption should move from just being buying things new all the time to either not buying things but just renting things or just leasing things or other types of consumption ways. And also not only new. People are really focussed nowadays on just buying new stuff all the time. That’s this strange view on consumption that we actually have whereas there are so many products that are hardly used in people’s homes, like drills and other many many… everyday not used efficiently. So we just need to change their whole way of thinking, in a way to do not automatically buy things but just seeing whether there are other opportunities like indeed secondhand, refurbished, leasing, product-service-systems, etcetera etcetera. Does that answer the question?

Consumption would change because people probably own less stuff, and they would consume like more used goods.

00:03:42 R:Yeah. Yeah. Also sharing, I think sharing is also ehh, if you look at what Peerby is doing for example, I also find that an interesting way of looking at things, just saying like “yeah I just drill here: if you’re my neighbour just come and pick it up…. Cause it’s really weird how certain products are hardly used, of course some products you can not share, like tv, most people watch that every day, so you don’t want to share that, but yeah there are so many products that you hardly use.

The sustainable business model has three aspects: the value proposition, the value creation & delivery, and the value capture. And each of these aspects have several sub-elements…

00:04:40 R:So I’m not really that into the sustainable business modelling, so value proposition, value…. Mompelen…. Yeah….

How should companies shape their value proposition when implementing circularity and sustainable consumption?

00:05:20 R:Yeah I think you cannot really say that for… it really depends on the company and on the type of product they deliver. I think the only thing that you can say is that they should not stick to their traditional way of thinking. I think it really depends, if you look at a tv-screen there’s totally different value propositions that are needed than when you look at a drill. So I don’t think you can say like one general rule there, but I think it’s really important as a company that you just don’t stick to the things that you have been doing the last twenty or thirty years. Cause that’s not the way we should be going on. So in that sense they shouldn’t just stick to their current value propositions but just keep an open mind and see: “okay, can I actually change the business model to for example indeed a sharing culture, or can I change it to this leasing thing. I now have a graduate student at Homie with you and I also have one at Bundles actually. Both are very interesting, like washing machines have also been on just selling the washing machines, and for washing machines it actually makes a lot of sense if you just go for this pay-per-use. On the other hand, for other products, I see other opportunities, so for example as said, the drill, that’s much more of a sharing thing or maybe that you rent it at the store. So I don’t think you can say anything general here. I’m not sure whether I misunderstand your question then. #00:07:35-3#

Customers segments, I’m not sure whether they should change their customers segments. Because in a way you want everybody to move on to a circular economy, so you don’t want only to address really the environment of friendly people. I think at the moment, like if you look at Peerby, those are either people that want to earn some money, out of the whole sharing, because nowadays they also have this that you get some money out of it. Or they are indeed more passionate for the environment people, which is nice as like a starting point, of the circular economy, so I can imagine that if you want to move to this, first you may need to address those more environmental-friendly people. But you will never make it if you only address those people because that’s in a way just a too small target group. And actually that’s one of the things where bundles is talking about, like yeah that’s nice, but in the end you want to yeah change the world or change the whole way of thinking. So change customers segments. I think it can be like you first want to go for the innovators in this segment, but then you want to go on and go to the early majority and late majority. With relationships, that I think is definitely going to be different, depending on the type of product-services that you include. For example if you have… now it’s really… well you just .. well let’s go for the washing machine example again: you just sell a machine, and as long as the washing machine works well, that’s that. They don’t do anything else with it anymore. And I can imagine, if you would go for a more product-service-system, with this pay per use and you want to change and help people with their consumption behaviour, then it’s much more an intense relationship. Because you can also give the person advice about how to use this product in between, in order to create more sustainable consumption. For example you can give advice on washing temperature, you can give advice on the amount of detergent to use.. So there’s many more opportunities available which makes it a lot more intense relationship in a way, rather than just: “hey here is the product and if it doesn’t work, let us know, otherwise bye, and see you in ten years from now!” which was current type of relationship they have. But again I see that more with like this products that have this use intensity and also the use is on an environmental perspective really important. Like the washing machine, or the dryer, or even your microwave, or your dishwasher. With a tv-screen: I’m not really sure, maybe you can say like okay, but that’s really “big brother is watching you”, but like “hey your tv was on but you were actually not watching (hahaha) we can turn it off after five minutes, because you fell asleep, or whatever.” Haha, I’m not really sure there. But for the energy consuming products that indeed have some other alternatives, that you can have other washing programs or that you can use different things, that I think makes a lot of sense. Also the weight, that you load it to the appropriate amount. So in that sense relationships will change in my view, because the PSS make it possible to have a different relationship in which you are much more as a company also advising about consumption.

What do you think could be the value proposition that the companies offer to the society and the environment?

00:11:54 R:So, the type of value that the company delivers for the society and the environment. Okay. Well, for the environment, in the end, if they produce products in a way, or at least launch them, market them in a way that the negative effect on the environment is reduced, that’s value for the environment I would say. Because I don’t believe in too extreme sustainable … in that sense I think circular economy is great, because I think there’s this “okay we want to keep this level of well-being, and we just want to change it in a way that we can get the same benefits, but still make a better world in a way”. Rather than just: “Okay we cannot do anything anymore, because we need to change the world. “ I don’t believe in this extreme sustainability-focussed people. So in that sense, that’s the value for the environment I would say. And value for society… yeah I think the environment is related to the society because if the environment is better, then the society benefits as well. For the rest, if you go an can be a little bit creative about it and say like if you have a more sharing economy… actually I had this Peerby graduate student, and some of the people said that they actually liked it, They had three types of people: they had the people that want to earn some money out of it, they had the people that did it from more of a sustainability perspective and they had some people that just “yeah it’s so nice to help my neighbours” so they did it much more from a social thing, like “okay, and then I talk to some people, and I give them my thing, and I hear for example this party tent things, and yeah I had this party, it was nice” and so then they really feel that they contribute to their neighbourhood in a way, so that’s much more, that’s also society, so I think sharing things can move in that direction that you’re much more of like a group, and a bit more in that sense a collective society than there’s just this individual society. But I think that’s really about sharing. I’m not sure whether I see any other societal effects rather than the positive effect on the environment.

Value creation and delivery: How do you think companies should create and deliver value in the transition to a circular economy?

00:15:28 R:How should they change their. Yeah, I think I’m starting to repeat myself a little bit. I have the feeling that again that’s really depending on the product category and the market that they are in. I don’t think that you can say like “okay you should definitely do this or should definitely do that”. I think it’s really important that they are open to this change first of all, so that they don’t.. yeah I think that’s the tricky thing in lots of markets, that they are a bit resistant to change because they have been doing things the way they have been doing that for the last decades and they suddenly need to change all the activities and suddenly make/create this whole new relationship with their customers if you want to go for a PSS for example. But I think it makes sense for a lot of companies to move in to this PSS. On the other hand whether that’s the only way to reach like circular economy I also don’t belief that’s the case. For example if you look at refurbishment well I think it doesn’t… it makes… it can go into this PSS, because then at least you’re getting them back. On the other hand I think there’s other ways to get the phones back. So maybe you don’t need the PSS anyway. I’m a bit hesitant to really say like this is the way to go, because I think that’s a bit of a short sighted approach on things. Yeah, I think it really depends first of all on the companies, on the customers, on the market that they’re in, on their competitors, so I think it, yeah, it has so many things it depends on, so I think you need to just analyse things a bit like we teach our students in a way, yeah. To do the internal analysis, to see what the company can do and what they, yeah which value they can deliver and how they can change things. And yeah so do the external analysis on what to the people want, what do the customers want, what are the trends that are occurring, so what will they want in the next few years. What are the competitors doing, so how can you give something that your competitors cannot give the customers. This gives you like this unique selling point. So yeah… I’m sorry but.. hahaah…

What do you think about partners and suppliers? How should their role change?

00:18:30 R:Yeah, but I’m not, uhm, I think that’s the … yeah.. Talk about a specific industry, I’m like yeah, I’m not in that industry, so again I feel that I would be given a bit of a, maybe a limited view on things. Like and partners and suppliers, yeah I think, in a way, if you want to change your activities, because you want to create this… of course you need your partners and suppliers so of course you need to involve all the stakeholders to make these changes. So you can not just say like “hey, by the way, I’m just going to change everything because I want to deliver some new type of value for my customers” and not expect that you involve your suppliers with that change, because yeah if you for example, and that’s again an example, if you go for refurbishment, like okay I want to change my activities and move into the refurbishment more, then you also need to make sure that the product design is created in a way that makes refurbishment easy. So that you have the logistics to take the products back, to have a look at them, to repair them when necessary, to check them quite easily. This also means the design, this means the logistics, and of course that also means suppliers, that you can change like certain components relatively easy. And then your supplier of course needs to be involved in order to make that possible.

What do you think about distribution channels? The way a firm goes to market and how it actually reaches it’s customers? Do you think that will remain the same? Or should it change?

00:20:35 R:So how the product goes to the market, goes to the consumer for the market. I actually think that many things will change, so the logistics makes sense that they will change as well. Well for example if you look at the leap products, another example like the refurbished smartphones, of course because they are refurbished, each smartphone is slightly different from the other ones, because they’re used. So that makes sense there, all slightly different from each other. So normally it’s just like, this is a brand new product, a brand new smartphone, this is the one that you will get, because all the brand new ones look alike. Whereas the refurbished ones are slightly different from each other. So actually they also have these specifications on their website, so in that sense logistics already change, because you’re selling one individual refurbished smartphone, rather than just the general new one. So it’s much more this “unique selling” what they do. And then you can actually see, okay this smartphone has these specifications so like it has this type of RAM, it has this type of battery still available, etc. etc. So in that sense logistics already changed, because this specific product rather than just a new one. And I guess the same would apply if you would go for more PSS. Because for example if you would go for a more sharing economy, or a more rental economy, then you might not want to sell things anymore, but you just want to have like places where they can pick up things. So rather than, with the cars for example, the car sharing, yeah you just have spots where people know okay that’s where I can get my Greenwheels car (or my other types of sharing car). So it will definitely change things, but again I have a feeling that it really depends on how you implement things and whether you’re going for sharing, whether you’re going for leasing, or whether you are going for selling refurbished products. It depends on what specifically will be done. Am I helping you in any way? Because I have the feeling that I just …

What do you think about the role of technology and product features? How can this aspect of technology and product features help the transition to the circular economy, and how should companies utilise these options?

00:24:15 R:Well I think actually here there’s a lot of opportunities that can still be applied by companies, because of course if you look at technology and especially at IoT, there’s many ways in which… first of all you can check how people are actually using their products, so in that sense you can know, based on technology and product features, how people use their washing machine for example. You can see how often they use it on which temperature, how well it was loaded, etc. etc. So you can get all this new insights from how people use their products, through the IoT possibilities. So in that sense you can get/give much more advise on how to use things. That’s one way. Because yeah in that sense the circular economy involves like reducing unnecessary energy use. Which is not necessarily included because it’s sometimes only about closing loops. On the other hand, if you are using lots and lots of energy, there’s also a problem there from a sustainability perspective. So I think that should also be part of it in a way. So if you can use technology in order to, first of all find out how people are using their products and then guide them in doing it a better way, that can also help. Then you also of course have this smart technology, charlotte did a whole phd on that, that you move your use of the washing machine to a different moment in time. That’s also technology which helps people to change their behaviour in a way. So this whole smart technology, it’s really achieving. And I think it can also help for example to make people maintain and care about their products better. So if you would, maybe also for phones, you can also give some advice like “hey you’re … this and this is going worse in your phone, but (for example the battery) but actually you can change it quite easily if you could fix this and this.” One of my personal experiences: I had this tablet, and my son uses it a lot, so actually the battery was kind of slowing down, so I went to this guy, who wanted to repair it, and I said like “yeah it doesn’t last that long anymore” and he said “yeah maybe it’s not the battery, maybe it’s the linking pin, so where you plug in” and I was like “yeah.. I don’t know?”. So and then he had a look at it, and I had to pay him like 40 euros or so, and it was not fixed… Well that was kind of annoying! So in the end I was like, “yeah okay I can invest another 60 euros in it” but I decided to just give it to my father and buy a new one, because then you’re already like “okay I tried to repair it, I tried to invest money in it to fix it and it didn’t work at all. It didn’t do anything.” But if you can prevent that, through technology, that it really like links to the.. this is the specific component that needs to be changed. I’m not sure if this is possible anyway haha, but it would be perfect, because then you don’t run this risk. He also said like “yeah I don’t really know for sure, but this is what I think..” and then you have to pay a lot of money and it’s not fixed. Naaah that’s not so nice. In that sense there’s a lot of things I think in the usage but also how can you make sure that people make use of their product for a longer period of time. Because actually the product already sees for itself how you can maintain it better. And it’s not only like okay this is broken and you need to fix this, it’s also about just making sure for example that unnecessary data is deleted in time, because it also speeds up the whole thing. So it can be all sorts of maintaining. And if you take it a bit more global, if you take a look at furniture for example, then the whole taking care of a product also… maybe it’s a bit strange but if the table would say to you like “hey it’s time to put some oil on me now,” in a nice technology way, then that could also trigger you to like “okay yeah indeed, my table needs some oil, and then it will last for a longer period of time. So I think there’s lot of opportunities in technology and product features to make sure that people are triggered to take care of their products and to maintain them better, and also to consume them in a better way. So that’s more the washing machine, and the maintaining is more the example of the table.

What can you imagine are key resources, and the transition to the circular economy, and how should they be used by companies? So for example tangible resources, intangible resources and human resources?

00:30:05 R:Now you need to help me out a little bit: the IoT, and then tangible resources?........and then the question was?......ehm okay……so what are the key resources? I think you need all of them. Well if you…. You have quite difficult questions with you… haha, usually I’m quite sharp in the morning, but they are just not really things that I’ve been thinking about a lot. Like tangible resources, like the equipment, and the machinery etc. And intangible were more brands, trademarks, and patent. Well if you take Fairphone for example, you would say that’s really that circular economy thing with their Fairphone two at least, which you can repair easily, they take them back, they are planning to refurbish them then. Well then first of all your equipment and machinery should be that it can be repaired etc. So they should change their… what is it … produce their phones in a way that your equipment allows for that. That you can easily adapt components and that they can also produce this components and that they can sell this components as well. So in that sense the equipment needs to be addressed for that because in the current way of thinking it was far less focussed on selling components. Whereas the Fairphone is really about selling components as well and they have this modules. Rather than just selling one component they have like this two components that tend to fail, and then they sell them together because those are the ones that… so in that sense your equipment needs to be addressed for that, on the other hand your intangible resources should also be in line with that. Because for example they… I’m not sure whether they have, but I can also easily imagine that they have a patent, for like this is how my modular system works. So that they can easily take it apart and that competitors can not copy that. So we can have all sorts of modular phones, in a way that from technological perspective it’s at least secure that the competitors will not just take it over as easily. So in that sense the intangible resources should also be in place, because otherwise you’re losing your competitive adds over your competitors……. The patent thing, I think it will be the same as now, because now it’s also really important that you, if you have a patent, that saves the possibility to copy your unique thing. That is important for companies. And I think that will stay the same. The only way the patents will not be about… they will be about different things maybe.. about product features that allow the circular economy to grow. But they still will remain important. Cause in the end… well I guess I think why a lot of companies are attracted to this whole thing of circular economy, is that where lots of sustainability things in the past, did not really look at the economy perspective. So they didn’t really look at: okay in the end the company needs to earn money. They just focussed on “okay we need to make this better world”. And then the company.. yeah it’s just more expensive, but they just need to be willing to do that. And with circular economy, I think that’s why it’s working so well: it’s a combination like “okay you wanna have a growing company so you want to earn money, but you want to do that in a way that is still beneficial for the environment. So in the end you still wanna earn money. So I think a patent is a way to do that, and to safeguard from people copying all your efforts in order to improve your product. So in that sense I think that would stay the same. And brands as well, I think it’s also really important. And especially if you have a brand that really shows like “hey I’m also doing this thing to improve the world”, that can also address people. Although I’m still hesitant to only see that as like the way to go. Because I really think it’s a too small customers segment. You also see it with Fairphone. It’s nice, and I know some people that have a Fairphone, but there are only a few of them. Most of the people they don’t have a Fairphone. Even though they all like the concept, yeah in the end it’s a combination of things that play a role. So as a brand you need to focus also on getting sales, so getting a lot of phones out. And it’s nice if only the very high environmental friendly people buy it, but you need to move on. And human resources, yeah I think that’s clearly important. Because if you don’t have the people, first of all, if you would go for more PSS and let’s say repair or refurbish things, you need human resources to do that. Because that also needs a lot of human time. You can automate some things, but depending on the product I don’t think you can do it all of it. Which is like more execution part of human resources. On the other hand, human resources to think about how to change your value proposition. How to change the way you market things. That’s I think even more important, so that’s the key thing here. That you have the capacity and the people eager to change things, and ready to change things, and also able to change things. So if I would choose one, I would go for the human resources. Because I think that’s where it starts. I think that’s maybe why I would say it’s a key resource. Because I also think the other things are important but if you don’t have the human resources, if you don’t have the trigger, like “hey, we feel this need and we want to change this, and these are our ideas:..” then the other ones will fail anyway. It starts with the human and then patents will come, and then the machinery will change.

How should companies shape their growth strategy and growth ethos in the transition to the circular economy?

00:39:11 R:Personally I always find it strange that the economy always needs to grow. I’m always like “why is just staying the same bad?”. On the other hand, yeah the whole, our whole system is based on this growing growing growing, so I’m not sure whether that’s possible to change, because it’s like everything seems to be depending on that. So I always wonder why. Because I think yeah, if things stay the same, we are already so lucky with what we have, why couldn’t things stay the same. Why is that a bad thing. So in that sense the growth strategy… I guess from economic perspective that’s really necessary, in order to make also the stocks, the people having stocks, making them happy. So I guess that’s their value capture, that companies in the end they need to earn money. So I think yeah you can have a nice circular strategy but if it results in a value proposition that people will have products for free, and that they make use of all these products but the company isn’t earning any money, it’s not going to work. There always need to be this economic perspective to it.

Talking about the economic perspective, how do you think will the cost structure and the revenue streams change for the company?

00:41:30 R:Well I’m happy to give my view on things, but I think these are much more “Nancy-questions” haha, I mean with cost and revenue… Okay, ehm I think in that sense, the revenue streams, now the revenue streams for the washing machine is really like okay 1000 euros, here you have the money, and that’s that. If you would go for much more PSS, like the homie and the bundles, it’s much more like that you get this constant revenue stream. So it’s a different way of getting money out of it, because of there’s a different system. Saying with the sharing, yeah if you would just rent it as it goes, then the amount of revenues will again be much more stable throughout time. Which also would trigger them to pay attention to other things. Because then yeah you want to have like a washing machine, or a drill that lasts for a really long time, and that hardly needs any maintenance, whereas if you sell just one product and you’re just like okay if it lasts for two years, especially the cheaper ones… haha I would not say that about… yeah you have some people that really are buying this really cheap washing machines with the intention like okay I’m just going to stay here for five years, and it’s fine if it brakes down after that, because I have to move anyway. Then I just don’t need to move it with me. And that also of course challenges your cost system. Because then you want to invest maybe in different things. So maybe your products will be more costly, but because of the whole long revenue stream you get out of those costs. It’s less like one product. I think without the circular economy it was just like “okay we’re selling one big product, you get a lot of money, that’s it” and if you go for circular economy it’s much more like this constant revenue stream. And you can also sell products for example twice, if you go for refurbished products, and you sell those, then you can sell them twice. It doesn’t mean that you didn’t invest any costs in between. Because of course if you want to refurbish a product it will also cost you things. So in that sense the costs will also be different because it’s not only about creating this new products, but it’s also about getting them back (which will cost you money), repairing them (which will cost you money), etc. etc.

What do you think would be the next steps for these companies to really achieve the circular economy and circularity?

00:44:50 R:So besides the things that I already commented on

00:45:08 R:I think partly they need to develop the technology, so in that sense that they indeed can give people advice on their consumption behaviour, like in the case of the washing machine, because now they can have some insights but I don’t think they pass it on to the consumers yet. So then is it to find a way to do that efficiently and I think that can also by quite tricky. If I look at the washing machine example, that my PhD student did, or the changing of the “when to wash”. It was quite tricky for them to understand that technology, and to make efficient use of that technology. So I think a really important step for companies is involve consumers in their development of this technology. Because it’s quite difficult for most people. So in that sense just going for like “okay we’re just going to develop this technology and then it will be fine”. I think that’s too short-sighted. They really need to make it in a way that consumers understand it and also are triggered to do it, and are motivated to do that. I think that’s definitely not easy. So it’s technology in combination with user testing I would say. And for other companies I think it’s also just to start doing it, because there are some examples like Fairphone and Homie and Bundles, and Peerby. But it’s just really these tiny companies in a way, that are just trying to change the world, whereas the big companies are not moving that fast. So I would say for the Philips companies, and the other big players out there, like Apple and Samsung and whatever, those also just need to get moving in a way. So I think they just need to… yeah for me the next step would just mean to embrace the circular economy, and I think they’re just a bit hesitant at the moment, and they see it in a little bit too limited way. So I know that everybody is interested in it, but to really go for it…

If you look at Peerby, what they are doing has some aspects of circularity because products are utilized more. Do you think that’s already a fully circular business model?

00:48:17 R:For Peerby, you mean, specifically that company… I think if you look at Peerby, my suggestion for their next step would be to scale it up. Cause it’s still a really tiny company and a tiny market segment that they have. So in Amsterdam it worked quite well and I think they also worked in Utrecht. But it only works in specific cities, and it’s also mostly for specific products, so they have a really limited scope in first of all the amount of products that they are actually allowing to be shared. Because people just don’t want to share some things. And, well maybe they don’t know about it, that can also be the case. It’s just a very small amount of people still. I think with Peerby I would say: scale it up and make more people aware of it, to really achieve the circularity, and also understand: if they know about it, why are they not doing it? Because with my graduate student, there was a big issue at Peerby is that people would start doing it, but then they would stop again. So rather than, they didn’t retain the customers in a way. So they only shared the product once. It also has to do with the fact that, of course you need to have like a sufficient number of people asking for these products, and those people should also get the product in the end, because if they don’t get the product they are also annoyed. It’s a bit tricky in that sense, and it really requires a lot of participants. If you don’t have… If you want to rent this party tent, and in the end you don’t succeed, and then you still need to buy one, you will never try Peerby again. So it’s also vital for the success that a lot of people are on there. So in that sense… and that they stay on there. Which for Peerby I think, that’s their main challenge. But again that’s the challenge for Peerby, and I think for Philips there’s many different, there’s a completely different challenge. Because they have lots of markets, they have lots of customers, but their organisation is much more like inflexible, I would say. Peerby is a company with maybe twenty people, so they can easily adjust things. Whereas in Philips, like the whole mentality, because it’s thousands of people working there. And they are all used to this, like “we are selling products and we just sell them and then they’re sold and we have warranty but that’s it.” I did this study to investigate the types of product categories that you can refurbish, and what people think about that. But you can also think even of refurbishing, like, your toothbrush. So there’s lots of products that you can… or maybe your coffee maker. There’s lots of materials in there as well, so if you would refurbish your coffee maker, then for Philips that would be a completely new way of thinking about that. Because then they need to get them back, they need to make sure that that’s also inside the company: they’re not only about selling new things anymore. So I think the next steps for these companies it really depends on the company. For Peerby it’s completely different steps that they need to take than for Philips. Philips it’s much more organisational steps, and to at least make people aware of it, and then see how they can accommodate for that. Also in their tangible resources, also in their equipment, and logistics how to get products back.

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

00:53:00 R:Yeah, isn’t that a bit obvious…? Okay, I have the feeling that it’s a bit automatically, the effect. Because if you think about circular business model of leasing for example, then the idea is that you, in the end, use this products more efficiently and longer, which is sustainable consumption, because then you get the most out of this product from an environmental perspective. Which is the type of consumption that’s better for the sustainability perspective. If you look at sharing, then you’re also making more efficient use of a product. For example in the Peerby sharing things, which is also like types of consumption could otherwise the party tent is just lying in the shed, and now it’s at least used more often. And in that sense it’s also less often bought. Which is also sustainable consumption. Look at refurbished products, which is also, yeah, you get products back and you refurbish them. Which is also circular business model. And then you also use less new products, so sustainable consumption. And if you go for a bit more extreme, like Homie, in which they give some advice, well then you’re going to the next step: it’s also, you’re not only washing more efficiently, but you’re also using the detergent more efficiently, you’re consuming less energy. Which is the more general thing of sustainable consumption.

What do you think will be the key differences the way business will be done in the circular economy from a user-consumer perspective?

00:55:10 R:So the key challenges… and differences from a consumer perspective… wel I think an important difference is that the consumer is not the owner anymore.Because in the linear economy he’s always the owner of things, and that’s a really important difference. But I think it’s also a challenge. Because it also suggests that we need to at least motivate and trigger consumers to not see that as a problem. And lots of consumers tend to see that as a problem. If you look at, for example, KPN at some point decided to lease their phones rather than just sell them, a few years ago, and I actually had a graduate student at Vodaphone, and Vodaphone said: “then we got the most customers. It was great times, because then KPN made this stupid move, and we just got all of their customers!” It was really interesting, and it was a circular economy related person at Vodaphone, but he was really like “yeah, apparently, because humans were not ready for it, or they did it the wrong way, so KPN introduced this and Vodaphone benefited greatly. Because they were really like “yeah we made so much more profit as a result of their move to this, from a circular economy perspective, very logical sense.” For some reason their consumers were all suddenly like “leasing a phone? No! I want to have my phone. I want to give it away, and etc. etc.” So there are really lots of challenges and differences because of the fact that if you’re not owning a product anymore. That’s one thing. If you look at it from another perspective, because I think circular economy goes beyond just not owning the product anymore, it’s also about keeping your own products for a longer period of time. Another difference is that consumers need to be more involved in a way with their products. So that they also understand that they actually can do things themselves, so that they can repair things themselves, and in that sense you also need to make people feel that they can. So that they first of all are motivated, to maintain their products, but they also are able, and that they have the opportunity to do it. Like again my, because I really experienced an interesting way of trying to go for a circular economy, and being unsuccessful with my tablet. Cause I really tried to, and I was motivated to do so, I went there, I had the opportunity, but apparently the ability somewhere went wrong. And I was just demotivated and I still bought a new one. Or it is even for someone teaching this quite weird, but yeah I was.. you can see the effects going, if it’s unsuccessful, then whatever, I’ll just… yeah and it also needs, you also need to have some success in it. So if you are trying to repair things, or trying to improve things, then it should work. So in that sense, that’s also a challenge. That it’s possible to do it for consumers. Because like if you want to repair things, it’s not easy, and maybe they should change it in a way that it is easy. …… I think we’re a long way from achieving that but in an ideal circular economy it would be easy. But then the difference is that they would be like “of course you’re going to repair it”. And now actually I was already asking some people and I asked two people, and both of them said… because I first wanted to repair it myself. I am an engineer, I can do that, there are Youtube movies about that. I asked two people who are also engineers and both of them said, “maybe you shouldn’t do it, because you might break it down completely”. I was like, okay, that’s an optimistic way of thinking. In that sense the key challenge is to show that it is possible.

V: But what are the challenges for the consumers?

R: Maybe, in the end, consumers also want to express who they are. In a perfect circular economy, they should be able to allow that to happen. Rather than having very general and modular products, you can also have a personalization option in a circular economy. I think that is what people want in the end. They want to communicate who they are and when everything is the same, that doesn’t work. I don’t see any problems in an ideal circular economy. I see lots of problems in getting there though.

V: And the key differences in a circular economy from the current economy from a consumer perspective?

R: You use your own products for a longer period of time, by maintaining and repairing them. You’ll have a closer relationship to your products and also a closer relationship to the company, who can give you advice on how to use it and what to do with it. You’re much more getting advised by the company on what you’re doing and how you can improve your skills.

V: Anything that we haven’t covered that you would like to share?

R: I was thinking about Vodafone, because the guy was really into circular economy things, in the end they created a yearly checkup for your smartphone. He wasn’t into leasing, as everybody would leave KPN and come to Vodafone, and they shouldn’t make that same mistake. In my opinion the biggest challenge in a circular economy, besides the whole technological developments, it’s to market things in a way that consumers see value in it, rather than seeing this negative thing. I think in most cases they will see it as a negative thing. They will never accept it if they keep seeing it as negative. Circular economy is nice, but only if the market accepts it in the end. If they don’t accept it, we can keep thinking of solutions, but it won’t work then.

I had a talk about a refurbishing test, and they could see the people would just not take care of the products anymore. If you’re not owning a product anymore, people will not care about their products anymore. I was surprised to see that these effects already occurred in only 50 people.