**Interview Johan Borje**

V: Could you tell me a bit about how you came in touch and involved with the circular economy in your work?

J: I was the Marketing Director at Ragn-Sells - a recycling company in Sweden

and then we actually became the first company to become a partner of Ellen MacArthur and I was in that job in charge of representing Ragn-Sells in all the Ellen MacArthur Foundation work groups. So that is really my background in terms of circular economy. Then in that job I also was in charge of the largest customer of Ragn-Sells which happened to be \*company\*; which is one of the 3 major energy companies the the Nordic region. And in particular, in Stockholm there is something that is called \*company\* heat - which is really about heating the city because the city is entirely heated by district heating. All the buildings are actually connected to the district heating network. Working with them I eventually got very interested in the energy questions and decided to move on with my career and started some kind of consultancy work where I was engaged by \*company\*. The engagement was to work with them to develop new business models and customer engagement for heat recovery. Heat recovery is of course very interesting because if you can recover heat that we have already in our society then you don’t need to incinerate to produce the heat for heating the residential houses. That had started within \*company\* and I have been engaged for the last 2 years in trying to further develop that and the focus is primarily on data centres. Data centres are really using a lot of energy and all that energy that is driving the whole new economy is wasted because all all energy that goes into computers is turned into heat because there is no mechanical work actually performed so all of that energy can be taken care of. This is my job today to work out these businesses for \*company\* with companies who have a lot of processing power, the data centres, and we try to attract them to come to Stockholm because in Stockholm you can really do heat recovery and the reason that you can do this is that we have such a vast network so we have such a vast demand for heat all the time so we can really take care of everything and now comes the good news and we are prepared to pay for that heat because we can then reduce our alternative cost would be to purchase fuel to incinerate since we then can eliminate that cost we can then instead pay for this heat. Then the beauty of this is that if we do this then we will also no longer be incinerating fuels that emit CO2 so actually by doing this the data centre in a way becomes net climate positive because we avoid emitting CO2 that we otherwise would do in the incineration process. It is a really attractive idea where loads and loads of energy are just wasted in the data centre industry if we could just capture that heat and use it in our cities that would be really be smart and that is what we are trying to do.

V: How would you briefly define circular economy and sustainable consumption in one sentence each? #00:00:10-8#

J: The circular economy is an economy where you maximise resource efficiency through prolonging the usage of the resources. Sustainable consumption - sustainable consumption is a mode of consumption where the aggregated consumption of consumers does not reduce the net amount of resources from one year to another. #00:01:15-6#

V: How do you explain the key characteristics of the future circular economy to others? #00:01:33-3#

J: A circular economy is when we move away from that you have to own all your stuff and instead acquire the functionality or the usability of these products but in other forms. Typically, in the form of leasing or renting. One way to express that would be to move away from a consumption thought to a thought of capital goods. But then we get to a more academic view of it. So instead of thinking of everything as something that you consume and then it is over we start to think about it as if it is a capital good that should live for a very long time and instead it will be now the producer that owns the product and rents you the usage of that good. #00:02:56-6#

V: And if you imagine a truly circular economy - how would consumption change? #00:03:09-9#

J: Well, assuming that net-consumption doesn’t go down in terms of usability for consumers then it will dramatically reduce the amount of resources needed for that consumption and that is through models where the individual doesn’t necessarily own but rather acquires the right to use and that is not a sufficient requirement. The other requirement is that we then also need to share these resources so it will then be combined with how we allocate these resources over the time cycle. And then it means that resources or goods that are today practically idle all the time will now be in circulation or operation all the time but by different consumers. And that means that the total amount of resources that has to go into physical products will shrink dramatically. That will take a lot of technology to schedule and book these resources because if they aren’t available in a reasonably practical way then consumers will not accept this idea. And of course, every answer now is maybe just a slice of circular economy but you know the most obvious aspects because then you have the whole recycling dimension of circular economy. When in a sense the products have reached their end of life there is still a lot of resources to take care of but I would consider and cover that within recycling. #00:05:22-0#

V: So let’s talk about different aspects of the sustainable business model now. I would like to know from you, based on your experience and view on the circular economy, how companies should shape different elements of their business model in the transition to the circular economy. #00:00:25-4#

T: An interesting thing here is whether you actually believe that the circular economy actually creates new services in a genuine fashion or new products and I don’t think so. I think the way to understand the circular economy is not really that it’s inventing new value in the very deep sense. Let me try to explain, if you think about the innovation process and the economy as such deep, important innovations like mobile communication, new materials, genome discovery that doesn’t take a circular economy. So the circular economy value proposition in my mind is actually about proposing things that we already have but that adds some additional value rather than the core value. If you think about a car again - a person would be a car and the value proposition is to get from A to B, that is the fundamental value proposition that you have independence and liberty and control getting from A to B and on top of that some people also buy a car because it gives you status. Now, in a circular economy the fundamental value proposition is still to get from A to B. It doesn’t really change so what I think that to convince the consumer to do that you must then somehow create the value associated to a change of behaviour. Because now I don’t have the full control anymore, I don’t go down to my garage and take the car and just go off. So you value proposition will come down to the two fundamentals of life and that is time and money. #00:04:23-8#

V: Looking at the product and or service at the company level - what do you think should that look like? #00:04:36-4#

J: I am thinking about the value proposition from a consumer perspective - what value do we create for our customers? I would switch to this type of car if I can gain something in terms of time or if I can win something in terms of money. In terms of time it may actually save me time in this sense that I don’t have to find a parking lot anymore I might actually just park the car because there is more favourable parking there for this type of cars. #00:05:14-3#

V: You are talking about car sharing now, right? #00:05:14-3#

J: Yes, I take car sharing as an example. Why would I do car sharing? Which is again maybe not the perfect circular product. For the car sharing I would save possibly time from a few aspects; I don’t have to look for parking in the same way, I don’t have to take care of all the repairs, I don’t have to be responsible for insurance, if there is an accident I don’t have to handle the mechanical shop. What I am trying to say here is that the value proposition here is that I can probably position this as making life simpler for the consumer. On the money side you could obviously position it as cheaper. If a car pool thing wouldn’t turn out to be cheaper for the individual then I think it is probably a failure as an offering because now I don’t actually own the car all the time. I only use it at very few instances compared to the actual lifetime of the car so it has to come down to the life cycle cost in terms of the functionality should be lower than if I make the capital investment upfront. If you would take a service where you would be sharing advanced equipment, EMF has done this thing where you share a drill and this is roughly the same as sharing a car and I think the sharing of a drill will fail because the capital expenditure of acquiring a drill is too low. You have no capital gain and you have no convenience gain. I think you will always get back to the capital gain and the convenience gain. When you go into the washing machine example, where you would kind of rent a washing machine and maybe there the capital starts to matter a bit because you could probably make a calculation including all the repairs and the hassle that comes with that that a lease product where somebody takes care of actually doing this for me. But I still think having the washing machine at home is a little bit of old school thinking and I think the clever thing will eventually a smart solution where somehow your laundry is made for you as a service. Maybe going back in history that is what we used to do. Then you could actually think of it as you don’t even have to have a washing machine and you don’t even need to have all the plumbing and this space in your apartment for that, you can use that space for something else. It always comes down to very smart logistics to bring down the cost of moving laundry. If you cannot save time or convenience or money, tie and convenience I consider the same, I don’t think customers will adopt the circular business models because they will not adopt it just because the potential increased environmental value. #00:10:34-3#

V: Talking about consumers - how do you think companies should change customer segments and customer relationships? #00:10:42-6#

J: The whole segmentation question is a very big question in strategic marketing. I think when you design a circular product you are sure that you can design it. If you think about different financing options and when you think about different level of technical competence that people have, if you think of different level of risk-aversion that people have - you could actually construct your offerings in different ways. Some people have capital, some people don’t have capital. Some people know how to screw things together, other people don’t. Some people want 100% sure that when I want a car I get a car, other people might be happy if they can get it with a 90% certainty. #00:12:04-7#

V: And how do you think should companies shape customer relationships in the transition? #00:12:12-8#

J: You have an opportunity to build a much stronger loyalty because you can have a much more continuous interaction with your customer. If you would be renting stuff or have somebody do the laundry, whichever example you take, if we just go into material reuse then it will be less visible but if we go back to the Rolls Royce thing that also gives you a fantastic opportunity to continuously talk to your customer and provide them with big data analysis on their behaviour and how they could save money on all of that. It will give you more points and reasons for interaction which strengthens loyalty. I think that is an attractive side of it from the companies’ point of view but most importantly it has to be smooth. Because consumers won’t be happy if they get 10 emails and the ordering process isn’t very smooth. Because I think that is the true challenge of the circular economy. You really introduce some kind of scheduling mechanism and that scheduling mechanism that really is an allocating mechanism for resources that is a burden to the consumer and that is what you have to crack to make it really simple and easy like with smart technology. If you think about Spotify as circular economy, they have been very successful at making it easy to listen to music. If your resource allocation becomes complicated you can never succeed. #00:14:40-5#

V: The next aspect of the business model is value creation and delivery. You already touched upon technology and product features could you expand on that? #00:14:54-1#

J: Product features, I think you can think about that as value creating features and then enabling features. Some of the features that genuinely create new value and then the question is whether that in itself may not really be circular but if that is part of a circular economy product then that can help the circular economy. Let’s take Spotify as an example again. I think Spotify has a much better search capability than Tidal so that search feature is really an essential value creating thing in the digital music offering. #00:16:37-7#

V: Tat goes back to convenience right and not to circularity? #00:16:37-7#

J: Yes, that is a feature that strengthens the offering. #00:16:41-2#

V: Can you think of features that could assist in the transition to a circular economy? #00:16:44-4#

J: Then I think that are enabling features and then music is not a good product to think about but you can think about design for reusability. The features that enable the circular economy from a product flow perspective would be very much tied to design actually. But then again when the resource allocation scheduling mechanism, where you actually make sure the customers can use the functionality when they need it. That is really the most critical enabler from the market interface perspective. Then you have the material flow, then I think you are mostly in design for reusability but also many of the logistical aspects; how we actually track and collect and determine value of the raw material that these products contain. #00:18:29-5#

V: Okay, then let us briefly talk about distribution channels. Do you think companies should change the way in which they go to market in the transition and if yes how? #00:19:05-2#

J: I think it is completely changing but I am not sure whether it is circular economy actually. I think you have such a tremendous change. Let’s talk more generic first, that Amazon is potentially killing Walmart. And that is kind of the most amazing thing that has happened in the American economy. They are also now building their own aviation control system for drone deliveries. So the way you go to market is completely different. Either you build a lot of department stores with big parking lots and lots of people driving there getting their stuff and blocking the roads or you sit at your computer and the things gets delivered by drone to your doorstep. #00:20:26-9#

V: And in the context of the transition to the circular economy? #00:20:27-2#

J: What I am trying to say here is that neither of these are really circular, right? But I think there is such big change going on in the whole distribution chain now. I just wanted to talk about that because I think that is a really important factor one must keep in mind. If you think about going to market obviously everyone, no matter whether circular or not circular, is completely dependent now on the digital means for communication. Even if you have a department store or an outlet of some kind most of your interaction with customers would probably be via Google or any of the search engines. So this is tremendously changing the way you have to think about how you actually go to market and now I will try to focus my brain on whether this is important for the circular economy or not. As I said you would need a lot of digital technology to overcome all the mechanisms that have to do with the fact that you would be sharing resources when those kind of offerings are concerned. And that will be super digital. If you for example offer yourself as chef and you go to people’s houses and cook dinner for them. That could be kind of a circular service where you reuse yourself as a resource. Then of course you have to be scheduled and I can do one dinner at 4 o’clock and then I will go to the next family and do a dinner at 5 o’clock and then I will go to another family and do a dinner at 7 o’clock and I do a dinner at 8 and 9. Everything in my mind that has to do with the sharing among multiple consumers of the same resource has to do with scheduling to be successful. Then if we go to the kind of Rolls Royce thing or the more material related thing there it’s really basically the same because it is a business to business communication and you sell them but you sell them other features. You sell on convenience, on reliability, on capital expenditure or avoidance of capital expenditure - you actually sell on the presumption that they prefer operational expenditure over capital expenditure. You would actually be shifting from only having talked about traditional functionality features, you go into money structure features and soft features like hassle-free maintenance but also arguments which are in between soft and hard where you would say that reliability would be increasing. Because that resource is actually not shared among multiple users at the same time, that resource airplane for example. #00:24:22-8# There you don’t have a scheduling problem. So there you really have to talk more about the benefits more from the money structure perspective, reliability and maybe other aspects whereas on the consumer side you will be having features which are coupled to the allocation of the resource. And you will then end up with new types of marketing tricks like you need to convince these customers somehow to try I mean I get offerings in my mailbox if you today book this type of car that you can share in this pool you will get some kind of discount. A little bit different from the way a guy who wants to sell a car to me would go about marketing. #00:25:25-9#

V: What do you then think are the key resources and how should they be applied in the shift to the circular economy? #00:25:32-1#

J: So resources, there are of course many types of resources to think about. Let’s talk about the material side a little bit because there is an interesting angle which I think is the most important which I haven’t talked about. If you think about the circular economy as a way to increase the pressure on natural resources then all of these flows will eventually end up in a situation where you have to reuse the materials so you will circulate your products around a few circles and then eventually you have to take care of the materials. And that is where we get to design for reusability. Reuse or reproduction and this is whatI think is really critical too. Because there is limited point to a circular economy if by the end of the product lifecycle you have not figured out how you can actually reuse the material to a very high degree. #00:27:13-6#

V: It wouldn’t really be a ‘circle’ then. #00:27:16-6#

J: Exactly, it would be linear with a high level of usage. You have to ensure that you have well functioning markets for these secondary materials and I know the circular economy community is a bit disturbed by down-cycling but sometimes I think you have to think how down cycling can actually work in the circular economy in the best way. I think there will be a lot of materials that will simply not be good enough to take a round in the same circle again but then you have another circle where it can actually serve very well. I think you will have that in textiles and you will have that in plastics. When you do reuse activities eventually you will come to a point where you need to redo the product and what I say that if you haven’t figured out what that looks then I don’t think it will be circular because you may even have shortened the life of the product but you will have had high utilisation during a shorter lifespan and that is why I say that you have to think about the next phase for the material and the material will not always be able to go into the same product because I think that will not work for textiles always and that will not work for plastics always and it will not work for paper and wood-based products and then it becomes essential to think through in your design how can I, when the product eventually dies, make sure it actually goes into another circle. And more explicitly, if I can’t use the material who can buy it from me and at what price will they buy it because that will determine your total economy for your product. #00:30:09-4#

V: So it is about partners and suppliers as well? #00:30:19-5#

J: Exactly, and that is a huge kind of eco-system of material flows which is the really big challenge and the really big challenge is about two things and which is really contrary to all companies’ thinking today and that is that you need to ensure product quality for those secondary flows you need to ensure that you meet the quality required by the receiver or purchaser and the second thing that is equally demanding is that you need to be able to produce on legally committed delivery times in the requested volume. So quality, time and volume - those are the three most difficult hurdles to have a circular flow of materials. #00:31:32-4#

V: The next element is value capture. How should companies shape the way they translate their proposition into value for themselves and others in the transition to the circular economy? #00:31:54-8#

J: This is in my mind not a difficult question. What happens in my mind if you would be selling batteries to a hybrid car manufacturer who needs your lithium-ion batteries you can choose between selling him the batteries or you can then rent him the batteries. All the kind of economic aspects and convenience aspects that we were talking about before apply here. So from your revenue stream perspective; I don’t actually think that the important question is revenue. But the important question is whether you as a producer have the muscle to carry that capital on your balance sheet. Because if you think about it all of a sudden you make a lot of investments to produce your product but you do not lift that off your balance sheet in the sense that you get revenues immediately. What happens to you is that you inflate, not in a negative sense but in the real sense, your balance sheet. Every sale you make you are not shifting from a stock asset into your bank account, it stays as an asset that has not yet been translated into a monetary stream for a very long time. So it means that you actually end up with a financing problem. #00:33:44-2#

V: That is actually a massive topic at the moment. So how these can be financed and whether accounting needs to change to accommodate for this and to maybe change the incentives. #00:34:13-4#

J: The more fundamental question is if you take loan in order to build your factory and produce your products typically you will have amortisation and interest payments on your loan. Those should be paid by the revenues from your product. And now you don’t have the same level of revenue coming anymore with the same size. Your revenue amount per time unit will be lower because you haven’t actually sold your product. #00:34:52-4#

V: But only in the beginning, right? #00:34:55-8#

J: No, because the circular economy from a balance sheet perspective implies that the product stays on your balance sheet, it doesn’t leave your balance sheet. It means you have less money in your cash portion of your balance sheet. And that will then really challenge you from living up to the commitments you have made on your loans. That is a nut that you can end up in if you have a weak capital structure in your company because if you have a weak capital structure you just want to sell to get the money in. Now it takes me 5 years to get the same amount that I would otherwise get immediately. So rather than a pricing thing you need to ensure that you are capitalised so that you can actually enter into the business models. Then of course you can talk about pricing structures for ever but that is more bells and whistles compared to this question which is more fundamental to the existence of the company. #00:36:19-5#

V: Ok, then let us talk about a related topic - growth strategy. How do you think will and should growth strategies change in the transition to the circular economy? #00:36:42-8#

J: Is this more a political question than a company economy question? #00:36:50-3#

V: No, when you think about the circular economy and how it should change in order to achieve that. #00:37:14-5#

J: The whole idea for me why circular economy is attractive is of course you can have a positive economic development without always increasing the resource usage. I think the circular economy must imply a decoupling of economic growth from a GDP-perspective and the actual resources committed to that growth and then I think about natural resources. I think actually using human resources is probably good. The more human resources we use probably the better in some general sense. Circular economy eventually needs to prove that the resource utilisation has gone down. And I think there are a few ways to look at that. One of the interesting measurements is of course energy consumption per GDP per capita because that gives you an idea of how energy efficient your system is. And that ultimately will be a reflection of how much raw material has gone into your production. #00:38:48-7#

V: Are you now talking about the company level? #00:38:51-7#

J: No, this is country level because if you look on energy consumption per GDP per capita in a country. #00:39:04-4#

V: Yes, I was just wondering whether you were suggesting to break that down to the company level. #00:39:09-4#

J: What I tried to say is that your energy consumption per GDP Dollar will be a reflections of how much raw material goes into your economy. And will be a reflection of how much CO2 emission you produce. Then obviously there will be one day when all energy is CO2 free and then my statement will be wrong but for a very long time my statement will be true. #00:39:56-2#

V: Then let us briefly talk about how companies should in your opinion capture value for the environment and the society in order to transition to the circular economy. #00:40:10-5#

J: I think that is the whole motivation, right? Obviously companies are driven by profit motives, full stop. If you want to be dramatic, circular economy is so far the only plausible idea where we can believe that we somehow can go in the same way as we have done and still be sustainable. So either we succeed with circular economy thus bringing down the resource utilisation per GDP Dollar or we have to change lifestyle. I mean the value that circular economy can and should bring is in that sense fundamental. #00:41:36-3#

V: So you think that circular economy doesn’t imply any consumption reduction or change in lifestyles but changing the way the needs are satisfied? #00:41:49-7#

J: Yes, and then of course you have a shift from physical goods to services. I don’t think we as Homo sapiens will allow ourselves to consume less. This is the way you could have a system that still deliver on the desire of humans and in particular in countries which do not yet have our standard of living there is no chance that they will forgo consumption on a voluntary basis. Either we succeed on maintaining consumption and then I am of course not talking about physical consumption so maybe it is a bad word. We succeed in maintaining the consumption of the functionalities that we appreciate but in a circular way or we have to change the way we live. But you just go to any of the major economies and start to ask the middle class whether they want to change their lifestyles and the answer is no. #00:43:10-7#

V: Let’s briefly get back to value capture for the environment and the society. So what would be the environmental and societal benefits that the companies should ideally deliver with their circular business models? #00:43:29-9#

J: I think that is what I was tried to say that the circular business model doesn’t deliver an immediate value like a higher tax base or something like that but it shall allow the environment to feel a reduced pressure from our consumption. I mean the whole idea with circular economy for me is actually that. If circular economy doesn’t accomplish that value to society or the environment then we might as well forget it, then we might as well go on with the linear economy. #00:44:13-9#

V: And that would then again be measures in CO2 per Euro produced or resources used per Euro produced? #00:44:23-3#

J: Exactly, and I haven’t given academic thought to that but you have to find a measure where you actually start to assess that the resource consumption goes down while the wellbeing doesn’t go down. #00:44:46-7#

V: Do you have the feeling that any element is missing in this business model? #00:44:57-2#

J: There is a risk that we focus too much on material resource scarcity whereas the real problem is energy and CO2 emissions. Because it’s not easy to convince yourself that it will be the resource constraint that will make life terrible on this planet but it is rather going to be the climate. So the energy structure that we set up to produce the materials. I think while we should do the circular economy it is probably even more important to get the energy system that will be delivering all our products. #00:46:28-4#

V: I think that is always one of the assumptions that a really circular economy would be based on renewable energy sources. #00:46:35-6#

J: And then of course we talked very little about the so called biosphere and what I think has to be talked about there is that you don’t want to circulate hazardous substances so there is actually very important that even when you have ambitions in circulating stuff in the biosphere you should actually ultimately landfill stuff that is hazardous or destroy them in some way and take them out of circulation. #00:47:32-5#

V: Can you think of any outstanding examples of companies with circular business models? #00:05:46-2#

J: Of course, but I think they will all be known to you. What I think is really exciting in my mind are the car pools that are being proposed in many cities today which will reduce the amount of cars needed in the future. While many people think that the petrol and diesel cars are dead in favour of the electrical cars I think the cars in general are dead because the amount of cars will go down in cities and I think that will be quite dramatic in the end. So I think that is a very understandable and clear option. I think that other services like Uber for instance is not really circular economy it is just different way of structuring the economy where you cut out the middle man so I think that wouldn’t really qualify. The other example which I really liked because it changes the way companies think is the also well known example of Rolls Royce airplane engines because they spent quite some time on moving from a model where you sell these engines and own the engines and how that impacts the whole idea of preventive maintenance in order to make sure you spend more capital on the engines and then you of course put in more technology so that you can sell these hours in a fashion with less interruption for the consumer than with a normal set-up where they would be owning it and buying maintenance and services and I think that’s a brilliant idea because then we have more robust products which over time will be more resource efficient. On the product level the circular economy may even consume more resources building an engine which should last not for 10 years but for 40 years will be a more complicated design, will use more material, more expensive material, will use more energy in the production. I have of course not done the calculation but I think it will be pretty obvious that you can then eliminate significant numbers of these products that will still make a lot of sense from a material and energy perspective. #00:08:59-5#

V: And if you think about the example of Rolls Royce; what do you think should they do to really become fully circular? What do you think should be their next steps? #00:09:15-1#

J: I don’t have visibility into that and it depends of course on how broad we go on circular. I mean you can still mess it all up by having inefficiencies in how you would be dealing with your spare parts and how you would not actually profit from preventive maintenance and how you wouldn’t recycle the engine at the end of its life but scrap it or something and not make use of the material then of course the whole idea would be unattractive. But assuming that you would maximise the operations hour of this engine through smart technology and preventive maintenance and assuming that you have a good recycling methodology and assuming, which I know is the case, that they have a business model where customers actually believe they come out economically better by renting performance rather than buying physical goods then I think you have what can be a target for the circular economy in my mind. #00:10:50-7#

V: And how do you think can circular business models lead to sustainable consumption? #00:10:58-5#

J: I am a little bit pessimistic on these questions because I believe that a circular business model or this whole transition has to be win-win. It is more realistic, basic economics. If you know that your business model doesn’t reduce capital expenditure or operational expenditure in a way for the customer that they perceive they have an economic benefit than they won’t pick up the models. And I think that is a very important qualification of circular economy; there is no free lunch - it has to perform better for both sides. I think both parties must be incentivised with basic and classic economic incentives that it is cheaper somehow or more profitable somehow. #00:12:26-7#

V: Okay, and now thinking more about business to consumers - can you think of business models that would lead to sustainable consumption? #00:12:37-8#

J: I can imagine in fashion. I think there is an opportunity to actually… It’s really hard because you really need to influence the perception of people but I believe the younger generation is less obsessed with owning their own stuff so you could imagine that you have clothes… I think you can have two things; you can have clothes which you use rarely like when you want to have a nice bag for going to a party, you don’t need to own that you can rent that, or a sophisticated kind of equipment or clothing for climbing a mountain that you do maybe every third year - you don’t really need to own that stuff. So you could rent that. So that is one angle so the infrequent usage of certain things. The other is more that you could consider that you have a layer of people that want to have the latest fashion all the time and then you have another layer of people who don’t care as long as the clothes are okay and work able so you could have some people use the clothes first and they could arrange some form of exchange and trade so that you could actually circulate clothes more actively than today. In my opinion the clothing companies are really because their current model is truly unsustainable and they are trying to do a lot of good things but it doesn’t come near being sustainable. #00:14:40-2#

V: What do you think will be the key differences in the way business will be done in the circular economy from a user/consumer perspective? #00:14:57-1#

J: I think the key difference is that when you think about your spending you would have less peaks and it would be more evened out because in a linear economy you take expenses and then you own it and for that reason it costs you more at that point. In the circular economy you spread it out. The cash flow of consumers, the pattern will change. This is one thing that is important and it might actually be an advantage to smoothen out you cash stream on the other hand it may sum up to a little bit more and I don’t think consumers are very well equipped to understand the theory of discounted cash flows so they may consider that to be more money whereas from an industry perspective you would discount the value of future money which may not be well appreciated. Consumers will probably only add up the money and say this is more. So you will have somewhat of a conflict of understanding there. And the other thing that is important, it will require a little bit more of an effort. You need to plan the resources somehow. And obviously with modern technology the effort for that can be very very slim and even though Uber is not really a circular economy thing in my mind it has proven how slim it can be to distribute and allocate resources. And if those hurdles are too high then it’s going to be a nightmare. I had a dinner the other night with a friend working at H&M and they are looking into whether you could actually scan people. And this you may not quote specifically. Then you would go into the store and they would scan the body size of people so they get the perfect measurement and once that is in the database then you could immediately get alerts for clothes that fit you perfectly and that would actually reduce your time on buying clothes in one format or another. With smart technologies you will end up in situations where we eliminate time or rather gain time and that is of course the holy grail where this search process net wise actually saves you time. #00:18:39-3#