

SUPPLEMENTARY MATERIAL

Investigating the Potential Adoption of Product-Service Systems in the Luggage Industry to Promote Sustainability

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A: ONLINE EXPLORATIVE SURVEY

A.1. STRUCTURE OF THE SURVEY

Invitation Paragraph

We would like to invite you to participate in an exciting study that looks at perceptions on leasing luggage instead of owning it, moving towards a sustainable ownership model.

Before you decide, it is important for you to understand what the research is being done for, and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask the research team if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

This study intends to understand perceptions towards leasing in the travel sector; a new, sustainable ownership model in which one can rent, rather than buy, luggage / travel accessories from a company. There are four sections in the questionnaire, which cover aspects of current use and ownership, maintenance/disposal, rental/leasing and demographics.

Please note: Luggage here is defined as a rigid or structured fabric case or bag primarily used for travel, with wheels and a telescopic handle, closed with zippers or plastic frame with latches. The term used in the questionnaire is “luggage”, but this can also represent “Suitcase” “Baggage” ‘Trolley bag” “Duffle” ‘Duffle-on-wheels” and other names.

Section 1. Demographics

Gender

- Female
- Male
- Prefer not to say
- Other

Age

- 18 – 25
- 26 – 35
- 36 – 45
- 46 – 55
- 56 – 65
- Over 65
- Prefer not to say

Where do you live?

- EU member state
- UK (non-EU)

- Other non-EU European state
- Prefer not to say

Highest education level achieved or currently enrolled for:

- High school degree or equivalent
- Bachelor's degree
- Master's degree
- Doctorate
- Other (specify)
- Prefer not to say

Marital status

- Married/civil partnership
- Single
- Divorced
- Widowed
- In a relationship
- Prefer not to say
- Other

Employment status

- Employed full-time
- Employed part-time
- Self-employed
- Unemployed
- Student
- Retired
- Prefer not to say

What was your annual income last year?

- Less than 25,000 EUR
- 25,000 EUR to 50,000 EUR
- 50,000 EUR to 75,000 EUR
- 75,000 EUR to 100,000 EUR
- 100,000 EUR and above
- Prefer not to say

Do you have/care for a child/children?

- Yes
- No
- Prefer not to say

Section 2. Current luggage ownership and use

I own at least one cabin size (small) luggage?

- Yes
- No

I own at least one check in size (large) luggage?

- Yes
- No

Which brand of luggage do you primarily use?

- Samsonite
- American Tourister
- Delsey
- Away
- Briggs & Riley
- Antler
- The North Face
- Patagonia
- Louis Vuitton
- Antler
- Tripp
- Victorinox
- Rimowa
- Tumi
- TravelPro
- Roncato
- it
- Other – Please specify

Prior to COVID-19, each year I used my large luggage approximately:

- 0-4 times
- 5-10 times
- 11 times or more

Prior to COVID-19, each year I used my small luggage approximately:

- 0-4 times
- 5-10 times
- 11 times or more

Next are some questions regarding luggage use. Choose a number to indicate the extent to which you agree or disagree with each statement.

- Strongly disagree: 1
- Somewhat disagree: 2
- Neutral: 3
- Somewhat agree: 4
- Strongly agree: 5

Please answer the following:

	1	2	3	4	5
When the COVID-19 Pandemic related travel restrictions are lifted, I expect my travelling to be:					
Less trips but for longer periods					
More trips but for shorter periods					

More trips but for shorter periods					
More trips for longer periods					
Same number of trips for same periods					

Section 3. Service, Maintenance and Disposal

The warranty was one of the main reasons I bought the luggage I primarily use now.

- Yes
- No

I think the warranty on my luggage offers good value.

- Yes
- No

If you usually repair your luggage than buy a new one, please specify how many times you have had your luggage (one or more suitcases) repaired:

- Never
- Once
- Between 1 and 3 times
- More than 3 times

I would be more likely to repair (... sized luggage)

- Small cabin size
- Large check-in size

What damage does your luggage get most frequently?

- Fabric tear/s
- Wheels
- Telescopic (trolley) handle
- Zipper pull-tag breaks
- Zipper (teeth) malfunction
- Other (please specify)

When I have had luggage repaired, I had to communicate with: (Pick as many as are relevant)

- The Luggage Company (Brand) I bought it from
- Retailer I bought it from
- Airline I used when it was damaged
- A Repair agent
- Other (please specify)
- Not applicable

I have discarded/disposed of functional luggage in the past - by the following methods: (check as many as are relevant)

- Given to a friend/family member/charity
- Left for municipal collection / solid waste collection
- Sent back to manufacturer or retailer

○

I have discarded/disposed of broken luggage in the past - by the following methods: (check as many as are relevant)

- Given to a friend/family member/charity
- Left for municipal collection / solid waste collection
- Sent back to manufacturer or retailer
- Kept in storage
- Other (please specify)

I would like the following services as part of my next luggage purchase, in order of priority (1 being most important, 5 being least important)

- Option to 'Trade-in' for a newer model with a large discount (at least 25%) up to 5 years, with 10% discount after 5 years
- Free yearly maintenance (collection, cleaning, parts replacement where necessary, redelivery) for at least 2 years
- Collection and guaranteed re-purposing and/or recycling (at the end of product life)
- Customisation (colour/s, decoration, identification tags, material and finish options)
- 24-hour, worldwide, on-trip replacement in the event of serious damage eg. Wheel falls off. (Including airline &/or accidental damage)

Section 4. Luggage Rental and Leasing

If I was going to consider renting (for these questions renting means obtaining and using luggage for individual trips, and each trip could have any number of days), I would be most likely to consider luggage size/s:

- Small (cabin size)
- Large (check in size)
- Both

If I was going to rent small cabin-size luggage I would be prepared to pay up to: (per day)

- £1 / €1 per day
- £3 / €3 per day
- £5 / €5 per day
- More than £5 / €5 per day
- Not interested

If I was going to rent large check-in size luggage I would be prepared to pay up to: (per day)

- £2 / €2 per day
- £5 / €5 per day
- £7 / €7 per day
- More than £7 / €7 per day
- Not interested

If I was going to consider leasing (for these questions leasing means obtaining and using luggage as many times as you wish for a period of time), I would be most likely to consider luggage size/s:

- Small (cabin size)
- Large (check in size)
- Both
- Not interested

If I was going to lease small cabin-size luggage I would prefer to pay:

- £15 / €15 for 6 months
- £25 / €25 for 1 year
- £35 / €35 for 2 years
- £70 / €70 for 5 years
- Not interested

If I was going to lease large check-in size luggage I would prefer to pay:

- £20 / €20 for 6 months
- £25 / €25 for 1 year
- £40 / €40 for 2 years
- £90 / €90 for 5 years
- Not interested

Regarding a 'subscription' service, which gave access to a range of different luggage and bag types, sizes and combinations of products for a chosen period of time, I would be:

- Not interested
- I would consider it, but I wouldn't subscribe
- I would be interested enough to try it
- I would be very interested to try it

Regarding a 'subscription' service, which gave access to a range of different luggage and bag types, sizes and combinations of products for periods of time, I would be prepared to pay:

- Not interested
- £5 / €5 per month
- £10 / €10 per month
- £20 / €20 per month
- More than £20 / €20 per month

Regarding 'Peer to Peer' sharing services (where you rent out your own things to other people, usually nearby in your area, for an agreed fee):

(Choose a number to indicate the extent to which you agree or disagree with each statement.)

- Strongly disagree: 1
- Somewhat disagree: 2
- Neutral: 3
- Somewhat agree: 4
- Strongly agree: 5

	1	2	3	4	5
I would be interested in renting out my luggage to others through an intermediary (most likely a digital app)					

Regarding 'Peer to Peer' sharing services (where you rent things from other people, usually nearby in your area, for an agreed fee):

	1	2	3	4	5
I would be interested in renting luggage from others through an intermediary (most likely a digital app)					

If I was considering renting and/or leasing luggage, it would be for the following reasons, in order of priority (1 being most important, 5 being least important)

- To free up space / reduce clutter at home
- Reduce ecological footprint / environmental impact
- To always get the latest suitcase design for travelling
- To reduce the risk of suitcase breaking during travel
- Because it's only a suitcase – it's not important exactly which one it is

I would not consider renting and/or leasing luggage, and it would be because of the following reasons, in order of priority (1 being most important, 5 being least important)

- I would be concerned with external visual qualities and interior cleanliness (from previous users)
 - I don't think there would be a measurable environmental impact
 - I have plenty of space at home for my luggage
 - I like to keep stickers or other signs of wear and tear on my luggage as a reminder of trips taken
 - If I buy good quality luggage, I expect it to last for a very long time, so I don't see a benefit to me with these options
- I wouldn't want to manage all the administration involved with renting or leasing

Regarding re-sale or second-hand luggage. I would prefer to buy refurbished second-hand luggage from a brand I trust rather than renting or leasing luggage.

- Yes
- No

Do you work, or have you worked in the luggage or travel-goods industry?

- Yes
- No

A.2. SURVEY RESULTS

See Excel Spreadsheet enclosed as "Full Survey Questionnaire & Responses - Raw Data" and the accompanied PDF.

B: IN-DEPTH EXPERT INTERVIEWS

Invitation Paragraph

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Thank you for reading this.

What is the purpose of the study?

This study intends to capture the views of senior product development and marketing managers within the travel-goods industry in regards to adapting the leasing model in the travel sector; a new, sustainable ownership model in which one can rent, rather than buy, luggage or other travel goods from a company.

The key questions for the experts are in regard to service-oriented business models such as Product-Service Systems, and whether they can be applied for market success and higher levels of environmental sustainability.

Semi-structured interviews questions

A. Ice-breaking question(s)

Could you tell me a bit about yourself?

Participants are expected to mention:

- Job
- Married/Single
- Cohabitation

B. Leasing model / PSS-related questions

1. According to recent travel industry research* the sustainability of travel is a quickly growing concern with consumers - seemingly accelerated by the COVID-19 pandemic. In your view, how will the luggage industry react to this potential shift in consumer attitude?
2. What are the major factors driving the travel-goods/luggage market towards greater environmental sustainability?

3. Are customers looking for enhanced and new services within the travel-goods/luggage market, and if so, how can these be characterised?
4. How are major brands in the industry looking to servitisation concepts and Product Service-System business models to improve market success and/or sustainability?
5. What are the major barriers to the adoption of (a) *product-oriented* Product-Service Systems (such as products sold with expanded service contracts) and (b) *use-oriented* Product-Service Systems (such as renting and leasing) in the travel goods/luggage market?
6. Do you think there is economic value to be found in 'sharing economy' business models (such as peer-to-peer), and do you think this may impact the travel-goods/luggage market?
7. Do you foresee a scenario where all physical products produced by the luggage industry (hard-shell and soft-shell textile) are required to be taken back for re-processing and if so, how might this affect existing business models?

*Source: Euromonitor International, Travel 2021 edition: From Sustainability to Purpose: Roadmap to Recovery for Travel and Tourism, December 2020.

C. Closing

Thank you for sharing your experience with me, is there anything else you'd like to add before we end our interview?

Semi-Structured Interview Summaries

Responses have been anonymised, and edited, with minor paraphrases where necessary, for clarity and brevity

Table S1 Responses to interview questions

<i>Question</i>	<i>Manager 1. BRAND A Sales & mgmt.</i>	<i>Manager 2. BRAND B New product dev.</i>	<i>Manager 3. BRAND C New product dev.</i>	<i>Manager 4. BRAND D Product mktg.</i>	<i>Manager 5. BRAND E Sales mktg.</i>
<i>Q1. According to recent travel industry research* the sustainability of travel is a quickly growing concern with consumers - seemingly accelerated by the COVID-19 pandemic. In your view, how will the luggage industry react to this potential shift in consumer attitude?</i>	So far I think the only thing the industry has done really in-depth is look at recycled materials in manufacturing. I think in our company we have made a big commitment - we're aiming to be completely carbon neutral by (20--). Although I'm not quite sure how we measure that when we have out-sourcing for so much of our production. I think so far that major reaction is just in materials use of materials and that will accelerate.	Our brand has always this mindset of quality so, a quality perspective – this is important for consumer goods in terms of sustainability. So we reinforce this. And this is something that we communicate a lot, that one of the key points of sustainability is to make product that is designed for life. (We) offer a service that you can keep your product as long as possible. (Also) in terms of sustainability, We use a lot of materials that are easy to recycle, and we have a very short supply chain. So we have already something, without changing anything. We just (started) communicating what we are doing.	I don't think travel for leisure will be less because that's a kind of personal experience you cannot replace. If the corporate policy would be more environmentally friendly, I dare to say that the business travel will be less than before but travel for leisure you wouldn't cut your vacation abroad just because you want to reduce your two emission or your carbon footprint. I would say if the pandemic is really over, everybody is vaccinated, people would have a much stronger urge to travel and I think you should see a kind of boom instead of a sharp decline.	I think there needs to be a real deep analysis of how the COVID pandemic (will) change the travel industry. Probably people will travel less, they will travel more by car and train than by air. (If people are) traveling shorter (trips), they need smaller, softer luggage because if you travel by air, you probably use a different piece of luggage than you use traveling by car. I think the focus on sustainability at the moment for most of the brands is trying to use recycled materials to give your own brand of kind of “green touch”. But I do not see really a clear sustainability strategy from any of the brands for the moment.	I think what is happening is an acceleration of a trend which started years ago. In (terms of) consumer (sentiment) sustainability is a big part of most brand positionings (in adventure travel). For outdoor luggage brands, I did research on sustainability offers across various brands a year ago and I think out of the top 30 collections, only 5 were sustainable. (But) in two years it will be two thirds eco-friendly. So the trend is happening, especially in this adventure travel area of luggage. (The outdoor/adventure travel) consumer is more advanced than in other consumer target groups, and now just the acceleration happened.
<i>Q2. What are the major factors driving the travel-goods/luggage market</i>	I think it is primarily driven at board level from a sense of social	I think for the global impact of the travel industry there is one	Number one is CSR - that every brand is going for the Green-wash in order	I would say the major factor driving the industry to more environmental	(Firstly, at macro level) I believe that financial markets and shareholder

towards greater environmental sustainability?

responsibility, but also probably a commercial interest. I think that there's a real concern that if we don't get to the head of the pack then we may suffer in the long term in terms of our market share.

Anything we make in our in our own factories - I think this is really quite balanced now in terms of the sustainable nature. I think at some point there will be a legal necessity to have some element or a very major element of any product to be of a sustainable nature using sustainable materials.

important part and that is how the people are traveling. (Regarding the other) key impact is on the product itself. Basically (it's) the raw material and the process, and the internal supply chain. (There we have a) direct solution. (We) try to minimize the quantity of material we use, in the global supply chain. (Our) products are designed to live (for) 20 years, (which) is probably better than if it lives two years. (We) try to not scrap too much material. Try to reuse our scrap. Try to use recyclable material - or even better recycle material. Take into consideration the recyclability of the full finished goods afterwards. Consider how (the product) will end up after the market. Repairability (and) re-engineering of our product. Considering (how not to) be blind to the global supply chain (impacts) of our material. Considering the full chain of tier 1,2,3 (suppliers).

to look better on stock market for shareholders. I really think this is (an) important factor because if they want to get more investment from investors, if they want to have like an image that they can distinguish themselves from the others, this green wash is (a) very trendy thing to do. So I think this is one thing one important factor.

The second one is, this this can be easily used as a brand differentiator - it is already. Not just for luggage, let's say fashion in general. There are many brands for example, H&M. (Using the) sustainability aspect, as a brand differentiator. And then the third - I think a trend is think(ing) more towards the long-term future. I think young people in general are more environment(ally) conscious than the old generation. So if you invest now in your brand to make (the) image greener, I think in the long term it will really pay back.

sustainability, is probably to produce less pollution than we do for the moment. And the pollution is done (by) creating raw materials, creating the product and then shipping the product all over the world. And also the question is "Is a long lasting product a sustainable product?" I think the focus could be as well producing the best quality and not producing cheap luggage which is breaking within the first two years.

At the moment I will say every brand is trying to give themselves a slightly green touch. Nobody knows exactly how to do it. Let's say is it because of materials, recycled or biodegradable materials? Is it because of shipping (or) production quality? Nobody clearly shows a real, clear sustainability strategy. For the moment, there is no common (idea/agreement/consensus) in the industry of what is sustainable luggage.

value of this is having a bigger impact for some of the listed companies - to become sustainable. Second, it's good PR and also good for the image. So, (it's) good for sales if you have sustainable products in the range. (Secondly, in the) adventure travel market, it's a must. You will lose the game if you're not participating in the trend of developing (more sustainable) luggage and maybe interesting is also that now on (the) retailer side, the pressure is accelerating. From Selfridges to John Lewis (Dept. store/chains), having programmes (like 'Greener Choice') which define (that by) 2025-27, they want to have a certain percentage of sustainable products. They have created their own labels for this so that consumers can find sustainable options easier within the online shop and there will be (hang-tags / labels on products) in the offline store.

Q3. Are customers looking for enhanced and new services within the travel-goods/luggage market, and if so, how can these be characterised?

I would say connectivity / connectability. And a sustainable nature to the product in the manufacturing process. People are more demanding in terms of the delivery proposition and then probably after sales service than they ever were. This is Amazon's impact - people want it (a suitcase delivered) in minutes nowadays.

The COVID period showed to everyone in the world that (video conferencing) is efficient and this is working so you can exchange some meetings you did by the past. I think a lot of people's experience is that there is an efficiency to make it digital. A service (which is now) expected, is to offer different options (and flexibility) for sales and delivery, so for sure we have developed a lot for our E-commerce, like a lot of brands. In terms of service, we offer different capacities of personalisation, (so) you can customize a new one, but you can also customize an (existing) one.

I guess consumers, especially the young generation, are looking into, (or) would be interested in, is a kind of servitisation in the luggage space. What about the concept of renting or leasing or the subscription or the sharing like a peer-to-peer sharing. These are the things that I'm sure if the platform is there, people, especially the young generation, they will be interested. We have good logistics. We have also a digital platform to help us, but still, that's not the core business of (Brand A). You will never be able to compete in that arena with Amazon, to hope that brand will deliver within 24 hours.

At our brand it is mainly that people are looking for personalisation or individualization. They're not asking us for recycled fabrics or recycled materials really, because probably in the premium segment of bags and luggage, it is slightly more about the brand and not so much about, currently at least, the sustainability. They're expecting a long guarantee - that the product can be repaired even after 5-6 or seven years. They also expect from a premium product that there is a service centre, all over the world, which is nearly impossible.

First of all - ease of shopping, that's for sure. That's a continuous trend and you have to be better, faster, cheaper or whatever. And next to this I see still the trend of personalization. (This is) a big opportunity in the outdoor industry, and overall, in the luggage industry. I don't see big traction around everything which is related to warranty. I found it very disappointing - we have one in (Brand E) We (offer a) limited lifetime (warranty) and it doesn't seem to be really a factor to buy us (Brand E). Repair is one of these sustainable topics always coming up with brands like Patagonia. (But) I really don't see real traction. If you own a directly operated retail, you (can) offer fast repair - I think that can be an advantage, but it's not as big as you would expect.

Q4. How are major brands in the industry looking to servitisation concepts and Product Service-System business

I think the whole end of life & re-use of a product will become increasingly important for people at the point of purchase.

Some competitor brands try this service - to make some kind of rental or leasing. The key thing is - is that going to reduce

I think every brand is looking into this is working on that but to my knowledge that any brand actually has a successful

There are probably only two major brands within this industry, and these two brands are the only brands acting (globally).

(In) clothing, it's a big story to (rent) - and (back)packs as a 'hardgood' which for me normally would be more

models to improve market success and/or sustainability?

I think having a whole service proposition to show that you know there's a backup and it's not just at the point of sale with a spurious guarantee. In terms of rental – (the idea was discussed) 10 years ago. About how it could be that (customers) don't buy suitcases anymore. We (Brand A) turn up at the door with a box. And we'll be back tomorrow to pick it up and then deliver it to your hotel and then do the same thing in reverse. But I'm not sure that there's enough expense in the cost of purchase of a suitcase to make something like that work. (Customers) can get it too cheap basically.

any kind of footprint compared to the actual (current) business model (where) I buy a new one, and I keep it for as long as possible? This (rental/leasing) is not something that we are considering (in the short term), but it's a question mark.

In terms of (a) service - it's what we (already) do. What you (could call) engineering or retrofit is what we call "XX" offer (where) you can personalize your luggage. So for any reason (if) you want to revamp or re-engineer (you can) - not so much because of functionality (at the moment), it's mostly because of style. You want probably to modify to modernize, to change a bit your product. You have the possibility not to buy your full new one but just to change two or three elements.

servitisation model available. It's still very much exploration phase. Why don't we consider luggage lease, because people were really making the analogy between luggage and the car, because we had company cars and it's all (lease) plans. (But) I think the culture was not there. It's like anything that would be against driving the (sales) volume up would not be seriously considered. Maybe Tumi (a premium luggage brand) would have (success) because of the price point and this association with luxury luggage. Because it's (luggage) less affordable and in the end, after you leased for four years the residual value is so much smaller then buy it then you might feel this is a much better deal than if you just invest upfront the full price of a \$500 bag.

Most of the other brands are really acting locally, so this is why it is quite difficult to answer this question if there's something which on a more local basis without a global network could work. I think for the moment it is quite difficult to really repair a broken shell or to really repair softside (textile) luggage. I mean if the product will be designed so that you can easily repair - more like you can as you can repair a car by changing every single component - and this is something which is not available in the market for the moment. So for me, if a product could be really long lasting and can be always be repaired, this would improve (sustainability), especially because there is quite some raw materials used and if you ship a piece of luggage, you will ship a lot of air all over the world.

logical to offer this kind of (renting) service around the product, because the longer life cycle etc is not really happening, (but) I don't see much traction. Of course, (re-) stitching a jacket or renewing the taping of a jacket maybe easier than more complicated hardgoods (like bags and luggage where) it's more complicated technology. So I think that's one of the main drivers (barriers in this case).

Q5. What are the major barriers to adoption of (a) product-oriented Product-Service Systems

(Renting) It harks back to the 'do I really want to use just a box that other people are using as well?'

In the luggage industry we just make some boxes to protect your personal belongings. I have a

I tend to think for the product based (PSS) - the barrier will be lower. I don't think it's in practice

If I would have my piece of luggage rented out to someone else - in this respect I would say it is

Your level of 'caring' about this product category by most consumers is not big

(such as products sold with expanded service contracts) and (b) use-oriented Product-Service Systems (such as renting and leasing) in the travel-goods/luggage market?

And the other thing is that everybody generally wants to use a suitcase either at random or at the same time, so that's a that's going to be difficult with demand spikes. (For an existing luggage brand) it would be a service proposition alongside trying to manufacture and sell, and that I don't know how they (the two propositions) would sit so comfortably together. I think you almost have to be committed to one or the other. (You would need a large network of stores or drop off points, otherwise you'd need a contract with others which would eat into margins)

feeling that you want to be sure that you are the only one to use it. And form a bond (over a period. Do you accept that somebody will use the luggage just before somebody else? So, it's not your own personal product? I think that could be (difficult) from the consumer perspective. (Also there is) the flexibility of the freedom that I want to be sure I can have the product available exactly when I want, and I don't have to book (it). If we in our industry (can) find a way to do the same thing (as a car-share service) And maybe we can - but as soon as you have to deal with logistics that you have to book, you have to pick up. You have to control. You have to inspect and so on. I think (it) will be difficult to break the (cycle). I think we have for sure this barrier. The (other) key question of the business model offer - to transfer a turnover (revenue) that is based on) selling product, by selling your service,

(yet) but to emerge and different brands offer like an extra premium like buying insurance for our luggage and we provide your lifetime repair service, I mean this I can really imagine. I don't see it happening yet in luggage industry. (But) this becomes a really important initiative for brands to get consumers hooked. These are things that (are) worth a pilot (programme) and then you can really test if consumers are open for that. If we say that somebody would be concerned about the hygiene aspect of the used luggage, I think that's not really true then. Are we not concerned (about hygiene) when we use Airbnb? But the barrier is higher. (And) brands would have a lot of concerns, like (that) will this jeopardize the (sales) volume? I think it's an interesting concept that you would only know if this is ridiculous or this has real business potential after you do a pilot. Just like in

probably a personal belonging because you put some very personal things in there. If you rent a piece of luggage out, you have to really completely clean it afterwards. You have to be assured that it's hygienic. If you even look to, let's say a criminal area - somebody could put a knife in there in between the outside and the inside material. Somebody could put drugs in there, and if you rent a piece of luggage, you get problems in customs. So this would mean a renting company, would need to scan every piece (of luggage) that is coming back to really see that there is nothing inside which can cause problems to the next user. Leasing is something people are doing or is quite popular in in cars or in products with a higher value, the question is "If you if you lease it, what is what is your advantage and in the end, how expensive is it to lease the product?" If you don't have much money you buy a cheap duffel(bag)

enough – (unless you are) speaking about frequent travellers who travel every day. The product (luggage) is now a bit more fashionable, but it's still a product without high emotional value. For example - people wouldn't be interested (in expanded service contracts) because they're not emotionally linked to it, that's the biggest barrier.

For the user oriented product service systems (like) renting and leasing, (then) it will be the whole topic of hygiene. Which, for me personally I wouldn't like so much. And secondly, you have consumers who only travel once a year. Maybe it makes sense for them to get (rent/lease) a big suitcase (which) just takes space, and money to rent it is right? But most people are using their luggage for weekend trips and so – (where/when) do you pick up the case? The ease of shopping (is not there). (And) at the same time it must be a good

Q6. Do you think there is economic value to be found in 'sharing economy' business models (such as peer to peer), and do you think this may impact the travel-goods/luggage market?

	<p>that's transformation (to a) model that (not) every company feels comfortable with.</p>	<p>the beginning, everybody found AirBNB very ridiculous but it turned out to be a huge business.</p>	<p>and you can go traveling. If you have more money, you buy (something more expensive). There is (something) at every price point.</p>	<p>business model for the company renting (out) so I think there's a clash – it's a price/value topic.</p>
<p>I think it's kind of a secondary market. It's almost like eBay. I don't think that the demand for new product will probably ever go away. But if you can't afford a new suitcase or you don't attach that much importance to it, you might go on eBay and just say, pick the first one of the right size and buy if it's £20. And the other thing is that everybody generally wants to use a suitcase at random or at the same time, so that's a that's going to be difficult with demand spikes. I think this is probably X number of cases out there circulating, but all the people who are in that community wanting to use and probably want to use in the same weekend or the same week or the same service same couple of months.</p>	<p>I think there are some products that are more adapted to this (than luggage). I think (in) the best business models, the products are the ones that are quite expensive if you want to buy it. I think that the same kind of barrier that I mentioned (exists here) - are you going to take the luggage or the bag from somebody else and put your personal belongings into it? You have probably a category of young people - like backpackers, I think probably (they) don't care (about) borrowing for one month, the backpack from somebody else. And I think also the peer-to-peer business model works also when you can borrow or rent this kind of product for a very, very short periods, like one day.</p>	<p>I definitely believe in the value in this sharing economy, especially the peer to peer sharing economy. There's money to be made, but that money doesn't go to (luggage) brands which work with the traditional business model - they will be hurt. They will not be the ones who are interested in building that digital platform to do this. Sharing peer to peer number one, they have not this kind of expertise. Number two. It's against their business model. It will hurt their (sales) volume. They don't want to do that. It's a very different way to make money, but I think if you think a bit more long term that will be inevitably the direction. We don't really need to have so much luggage locked in our attic. Luggage in the field is luggage in use, that's</p>	<p>Is this really a business model or is this something you were doing with your neighbours and friends for the last 20 years? If you're renovating your house and you need a hammer, you just ask the neighbour. And if I would need a piece of luggage, I would probably also ask a neighbour, because I then I know that it's not dirty, that it's in good shape. (So) I do not really see a big potential in sharing luggage. In my opinion, there is no real impact because people will still buy (luggage). I know for sure the younger generation if they go backpacking, they ask their friends if they have a big backpack. All of a sudden you need a big backpack which is €250 or even more, then people ask if they can get it from someone. (So) a</p>	<p>It will have a certain level of impact. A certain part of the of the population will be ready to do more sharing and/or renting. But, (will the) number be big enough? Because you need service (other facilities for renting) - like warehouses – and do you have standard products which are easy to clean etc? We have in the outdoor industry some models coming up where you can rent backpacks, trekking packs and so on, but they're all tiny business right now. So you (can) order and then you get the pack shipped (but) the price-value ratio is already a bit out of proportion.</p>

Q7. Do you foresee a scenario where all physical products produced by the luggage industry (hard-shell and soft-shell textile) are required to be taken back for re-processing and if so, how might this affect existing business models?

I can imagine that it might eventually pass into law. Certainly it becomes more commercial. If you can offer that knowledge to the consumer, who's buying the product in the 1st place. But there are so many constraints, partly because of the fragmented nature of market. There's very little vertical luggage selling. Yes, we've got a factory in (Country A) and we sell hard suitcases and we have some shops. So in theory we could (take back). We could produce product that we can easily take back, recycle if necessary, but most of the luggage sold in the world is made in China. Those factories have absolutely no interest whatsoever in

I do feel that some countries could go in this direction, that if you want to sell the product on my market you have to guarantee that you are able to totally recycle (and) manage the end of life of this product. I do not believe (it will happen) in the short term because I think that geopolitics (dictates) that every country will manage it personally. It could start to be to become a big global (trend) when one major (country or) economic zone will apply it. So if tomorrow China or US said that you want to sell something in my market, you have to ensure that (take back). Probably 80 percent, 90% of luggage at the moment

really the value of the luggage, and we actually just need really high quality and (a) much smaller pool of luggage. And then they can be circulating all the time in the field for use and people can get some profit from that.

If you want to make sure your customers still buy your brand once their luggage (reaches) end of life, then you say you bring the luggage back to us. We give you a discount, so we give you part of the value of your old luggage and then you purchase a new one. That was discussed but it's never actually took place - why? If you think about it, theoretically this is perfect. We get an old one back and we sell the new one. We still keep the customer loyalty. We make sure the customer satisfaction while we can recycle the old one. (But it's not done) because once it's back at (Brand A) you can't just grind it away. You first have to

backpack would probably work on this platform better than a piece of (rolling / structured) luggage. You probably need it once in five years. But the luggage you use yourself often enough. I think you still buy into the price range you can afford.

As mentioned before, there are two big brands and is the biggest by far in terms of quantities. So it would be interesting to see how they would collect, (or) have to take back - whatever brand it is. Then you have the problem of materials you cannot use. I would be interested to get my product back, so at least I know what is in the product, which materials are in it, and how the construction is (made). And if you install something like this (take back scheme), I think it could have an interesting effect because it (mean that) construction of luggage needs to be rethought completely, because if you have to

It will change the game, that's for sure. The brands who have innovation and development skills (will be able). (Large) groups with direct retail stores and locations, they will more easily adapt (to taking back schemes). It would cost money at the first stage, but same time it would impact very much the competition, (those who are not able to) as maybe they have core products in (geographic regions) where the whole recycle process is much more difficult. If a brand that has (it's own factory) and some (suitcases) which are fully recyclable, only the wheels, you can't recycle, (then) they don't lose as much money, so that could be very

taking product back, so it goes up the supply chain to a distributor and then it ends up in a retailer. Or maybe another retailer. I think the product solution has to come down to manufacture. It has to be made of materials that are easily recyclable, so that you can take it to the recycling center. And leave it there and then. It can just go into general recycling as opposed to back to the manufacture. I don't think the manufacture is going to want to take back everything they sell.

is made in China. For me, the "made in China" is not (always important). As (long) as your supply chain is short. If the Chinese maker has local Chinese subcontractors and so on. And if you are using similar materials as in Europe honestly the global footprint is not (very different). If we have to (manage) the afterlife (we would). A total new service that we would have to create and invest in. That's like a new production line. It's not to produce new product, it's not to repair (but to) disassemble and to separate. If we manage to bring our customer (to pay for this), there is normally no major impact for us. We are probably the only one so much integrated, so it will be probably less complex for us to consider this, this. 90% of the (other brands) are subcontracting. They have not their own industrial power, so that could create a huge question for them.

do a separation (of components) and then the labour cost (is too high) to do that. I (can) imagine a scenario, but I would think that's really coming from the government. Just like now the government, in order to be greener, put a lot of extra tax on the company car because they try to make the company car less attractive. Now the (other) thing I imagine is that they (luggage brands) have to design luggage in the way that it's really recycling friendly. To dismount (disassemble) the luggage- it should be done with within minutes or seconds. So the product design will be very different because you need to take into account product end of life situation during your design, in the beginning already, so that you have to make it really recycling, reprocessing friendly.

take it back and re-process it then you should think from the very beginning how is it made (so) you can easily deconstruct again. If you glue and laminate everything together and then in the end of the life cycle you are forced to take the different materials back to recycle - you will have big problems. But I do not foresee a scenario where a brand must take back 1.5 million pieces of luggage at the end of the year. We have a government system of payments for packaging but it would be interesting if you could do something similar (for example with) polycarbonate, you must pay a kind of a fee. It needs to be recycled a certain amount or you have to recycle a certain amount of Polycarbonate from somewhere else. This could be a possibility. (There are) much more complex products in the (car) industry and there are companies able to recycle 80 or 90%. So I'm pretty

possible. And I see a certain chance that this could happen, (but) I don't think that will be an Europe-wide legislation. It could happen in certain countries like Norway or Iceland – countries with more advanced because legislation (in that area). It could kill some competition (brands). I find the (luggage) industry very behind on the topic of sustainability.

Additional insights, ideas and information provided

(Renting - Leasing)
 There will be an element of rental also because in the in the heads of some people who are very committed to self-sustainability, they think, well, I'm not into owning material goods. And I think that's an increasing trend in all generations is to try and own less stuff. Because it just takes up so much space and you know you don't need it. And frankly, I think people are realizing that. I would imagine that one of the threats to sell big suitcases is that.

(Industry approach to sustainability)
 (It's) probably the responsibility of the brand to put a figure on (sustainability) and to try to package this potential need or wishes into something, and to propose (things), especially (in the) premium and luxury world. You try to anticipate and create something new. So I think in terms of sustainability we are a bit in this situation. To take the responsibility to propose something in this direction. And hopefully, make the right choice.

(Renting – Leasing)
 Like for brands, they might be worried about how this would hurt their traditional business model (and) jeopardize (sales) volume they normally expect, and then from a consumer (perspective) some people might be concerned about the hygiene aspect or ... I even dare to say that it's because it's not there (a platform). If you really create a platform like that, I think it might be more wanted than what people now predict.

sure for luggage this could be done.

(Greener production & shipping) We should look into different regions (for production) - this is also something which could be really rethought. I would say 95% of luggage (quantities) is coming from the Far East. Production of soft luggage) is not possible in most of the Western countries - there are not even workers anymore who can do it? But I'm pretty sure we could train people here as well to make it happen again. Not easy, but shipping all over the world is most probably also not the best to do - and not the best (for) repairs. If we look at the shipping costs these days – (they) are now four times higher than they have been before Corona.

Industry approach to sustainability)
 I'm in a sustainable steering committee together with (other staff in the company) (but) we are in our own bubble (and) I don't see much happening in (the luggage) industry. Right now from competition, (it's about) durability and long life and so on, but overall, the product and the competition in the industry in general, including retailers – are struggling to make sustainable products. I don't see them even thinking about sharing (information).
(Sharing)
 At (other luggage brands) they always bring up sharing every one or two years and then (the conclusion is that it's) not worth it.

*Source: Euromonitor International, Travel 2021 edition: From Sustainability to Purpose: Roadmap to Recovery for Travel and Tourism, December 2020.