ACTIVITY

# 04

## THREE STORIES ABOUT SCALE AND SELLING

CAN THE THINKING BEHIND A CIRCULAR ECONOMY BREAK THE TYRANNY OF 'SCALE AND SALE'? OR DID DIGITAL DO THAT?

### CONTEXT FOR THE ACTIVITY

The basis of production in an industrialised society is cheap energy, large economies of scale, adequate infrastructure and sufficient customers: a suitable market. This makes production per unit very efficient as, at scale, the introduction of technology allows labour to be very productive, creating two important elements of economic growth - falling costs and rising incomes/wages.

If only we could compensate for the environmental and social issues which this system creates – surely this is what the focus of attention has been for decades in environmentalism, sustainability and now, if we make waste = food , a circular economy? But what if the very idea of 'scale and sale' was vulnerable to technology - including digital technologies?

In this activity the consequences of operating at scale are unpicked as a largely systemic driver of a linear economy. The logic which follows from 'defeating' both 'scale and sale' through higher utilisation of significant durables via a product as service model might be one key to being "at home in a modern world". A case study of the innovative car company Riversimple is used to illustrate the possibilities and challenges.

Lastly, the question of user protection is raised. How can shifting from ownership to use reflect not just resource benefits, but improve the rights of users? c.f. those conferred by ownership.

## RESOURCES AVAILABLE

- 4:R1 PPT Intro slide and Sequenced slide set - 'Selling and scale' and its consequences
- 4:R1a 'Selling and scale' summary slide
- 4:R2 PPT Sequenced slide set - Defeating 'Selling and scale' by servicisation
- 4:R2a Defeating 'Selling and scale' summary slide
- 4:R3 PPT Riversimple case study - slide set
- 4:R3a Riversimple business model - 2 visuals
- 4:R4 Riversimple video clip - 8 minutes in length and begins at 7.30 minutes on the video - when the car company business/ownership model is discussed. Available at: https://www.youtube.com/watch?v=utmkddBFUg0

A sequenced slide set is one where a picture of the idea is built up as the diagram/comments are progressed. In the PowerPoint R1 a visual prompt for participants is used before each successive element is summarised by the facilitator.

## ORGANISATION

Presentation R1 with input as it proceeds - plenary
Presentation R2 with discussion at the end
Presentation R3 (case study) with video clip
Small group work and plenary debrief

## TASK(S) AND RUNNING ORDER

1(a) Introduction, how an industrial production system brings benefits (see Context).

1(b) Presentation and discussion with R1 PPT. The consequences of selling at scale discussed. Systemic cause of economic growth and resource and other related issues (externalised costs).

1(c) Presentation and discussion with R2 PPT. What happens when extended product life and higher utilisation replace 'sale and scale'? Is this designing out waste?

2 Riversimple story and film clip R3 PPT, R3a and R4. Example of thoroughgoing rethinking of production and business model to critique argument made in 1(c). Is it convincing?

3 Zooming out. Small group work around what might be needed to allow people to be comfortable and secure around giving up ownership for access in various forms.

## TIMINGS

Overall approximately: 75 minutes. Task 1 a-c: 20-25 mins; Task 2: 20-25 mins; Task 3: 20-25 mins

## AIM OF THE ACTIVITY

To consider the question: is the shift to access over ownership ('sharing economy') able to save resources and benefit the user? Possible outcomes of this activity include: to be able to contrast linear and large scale production for sale with smaller scale and high utilisation models where products deliver a stream of chargeable services. This consideration to include the notion of consumer/user protection.

## GUIDANCE FOR FACILITATORS INCLUDING DEBRIEFING NOTES


As a very brief introduction to the slide set R1 (30 seconds), mention how an industrial production system brings benefits (see the notes in Context above).

But note that, surprising as it may seem, the roots of much waste and pollution are to be found in the very notion of producing at scale and for sale. The reason for this is explored through the first slide set (R1) when the consequences of 'scale and sale' are highlighted. A visual icon pops up (on mouse click) to prompt the participants to suggest what each of the consequences are. The further mouse click adds the 'answer' to a list on screen. This story can move along quite briskly, but ask short supplementary questions which emphasise the locked in nature of the system. For example: "What choice has the manufacturer here? Extended life products mean fewer sales...?"

The 'surprise' is that the system generates overproduction quite easily as competitors chase

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economies of scale. This lower cost often means thin margins. Since the investment up front on the building, plant and machinery is substantial this low margin drives the urgent need to sell what is produced or risk fixed costs per unit of output rising and lowering margins still further. In turn, this need to sell drives both advertising/marketing and built in obsolescence - so that customers quite quickly become customers again. Provision of credit may be part of the drive to make sure the customer is able, as well as willing, to buy. Bringing back objects to be repaired or material recovered is usually avoided as the costs are high compared to production per unit and may get in the way of further sales. Since waste collection from a consumer is usually organised at taxpayer expense these costs are worth externalising and the firm does not want the product back.

The wash up in the discussion on PowerPoint R1 here is that poorly designed products - from the perspective of longevity and repair ability - are incentivised and the creation of often spurious novelty is part of the task of getting customers to upgrade or change. It's the very scale and fact of *selling* the goods which does so much to cause the problems. As a lead into slide set R2, ask participants: "so what if both *scale* and *selling* the goods could be challenged profitably?"

## TASK 1c

The slide set R2 demonstrates the systemic consequences of a business retaining ownership and instead selling services or access; including what it offers to enable smaller scale production and flexibility. Investment in fixed capital can be lower and, although no longer benefitting from the same economies of scale margins overall, this approach benefits from high utilisation rates, extended product life and supplementary service opportunities. Digital technologies provide valuable feedback mechanisms. Discussion can also move into debating whether resource savings are possible/minor/significant with the shift to 'access over ownership'. Is this part of what we mean by saying a circular economy is 'by design'? What is missing? The most obvious element is the next life of the resources in question. How are materials dealt with at end of service life?

## TASK 2

The Riversimple story is a way of bring this 'ownership to access' shift to life. In this task, use the Riversimple video clip (R4) and the slide set (R3) to examine and critique a) how this car company is rethinking conventional production and business models b) the argument made in the R2 slide set. Is the argument convincing? So why isn't it to scale yet? Can the Riversimple approach save resources and how does it benefit the user? The most relevant clip to use from the Riversimple film is 8 minutes in length and begins at 7.30 minutes - when the business/ownership model is discussed. Note that the business model is also visualised in the slide set R3 and resource sheet R3a.

In the task debrief, note that Riversimple is still very much an innovator and is barely visible as yet, but their ambition is not to maximise scale in the traditional sense but to encourage widespread adoption of their technology by competitors. The aim is by open sourcing to enable others to profit, avoiding standards wars and driving down their own supply chain costs. This is breaking the 'big is better' assumption by redefining what it means to be big. Their accompanying social and environmental standards are also instructive (see Further Reading). *Continued above.*

*Task 2 continued.*
A note on innovation and the evolution of ideas and practice: society has come to expect rapid change and yet seems ill prepared to accept failure. The constant stream of new product ideas, often variations on the already existing, are mostly condemned to failure and failure is even more pronounced with truly innovative approaches of a systemic kind. Riversimple does not attempt one thing but a very different perspective on mobility. It would seem pretty harsh to demand that this product/service approach be seen in the same light as a new flavour of crisps, supermarket ready to be consumed. It is a little bit like wondering what can be done with solar panels at the end of their life and arguing that because this isn't fully worked out then somehow solar panels are not a sign of progress and something to work through. In the context of the 5 trillion dollar costs per year of fossil fuel subsidies (Abraham, 2017), the fate of solar panels after 30 years is a concern but an insignificant one by comparison. It seems we are harsher critics of novelty than we should be. The debriefing for task 2 could therefore concentrate on what the story behind this shift from selling and scale represents rather than on "how many vehicles has Riversimple produced?"

## TASK 3

The debate around the Riversimple case study may be tied into, perhaps as a prompt, to this last task. Zooming out to the wider story, ask small groups to reflect on what might be needed to allow people to be comfortable and secure around giving up ownership for access in various forms. What would it take to make the consumer become a user, and especially consider the notion of 'user protection'? Rights as a property owner - a vehicle is a property in this sense - are much better than the rights accorded to people renting/paying for access on demand. What will the enabling conditions look like for an economy, a society where 'usership' was much more to the fore? This links nicely to the debate around the future of manufacturing and production and the impact of Artificial Intelligence and automation as it spreads into services. The old assumptions of income being an exchange for labour, of surplus income being primarily spent on buying durables (including housing and vehicles) and whereby labour insured itself through pension and national insurance payments looks to be falling apart.

At the end of this activity, ask participants to reflect on whether we need a different set of assumptions perhaps around usership, a universal basic income as a foundation for human activity, and access to tools *(including digital)* which make for increased opportunities for local and social enterprise?

## REFERENCES AND FURTHER READING


Abraham, J. (2017) Fossil fuel subsidies are a staggering $5 trillion per year. *The Guardian* August 7 2017. Available at:

https://www.theguardian.com/environment/climate-consensus-97-per-cent/2017/aug/07/fossil-fuel-subsidies-are-a-staggering-5-tn-per-year

Clancy, F. (2017) One of our favourite words: Usership. Riversimple website. Article available at: http://www.riversimple.com/category/sustainability/
*The Riversimple perspective on 'Usership'*

Ellen MacArthur Foundation (2018) The Performance Economy. Available at: https://www.youtube.com/watch?v=o0LTo0r-9ZM
Video introduction to the concept of the Performance Economy, featuring Walter Stahel
*Basic circular economy 'schools of thought' article, illustrating the systems perspective which comes with 'circularity' (if possible)*

Stahel, W. (2017) Economy without waste. What are the challenges and opportunities of moving towards a circular economy? Article in: *SDGs: from promise to practice.* UNA-UK. Available at: http://www.sustainablegoals.org.uk/economy-without-waste/
*A Walter Stahel article on performance and product service*

The lightbulb conspiracy: the untold story of planned obsolescence. 3 minute video. Available at: http://www.videoproject.com/Light-Bulb-Conspiracy-The.html

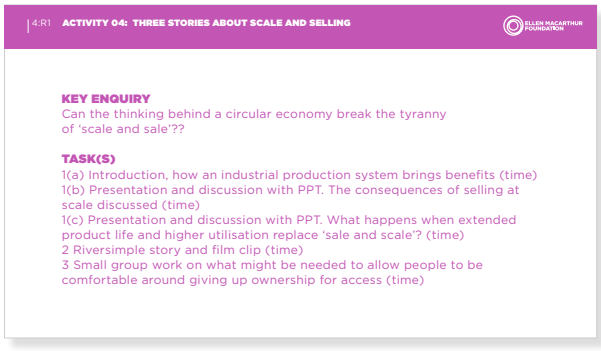
The Riversimple story. Fully Charged Show, May 2016. 15 minute video. Available at: https://www.youtube.com/watch?v=utmkddBFUg0

Riversimple website
http://www.riversimple.com/

# THUMBNAIL RESOURCES

CLICK TO DOWNLOAD HIGH RESOLUTION VERSIONS FROM BELOW

### 4:R1 Intro PPT slide and Sequenced slide set - ‘Selling and scale’ and its consequences

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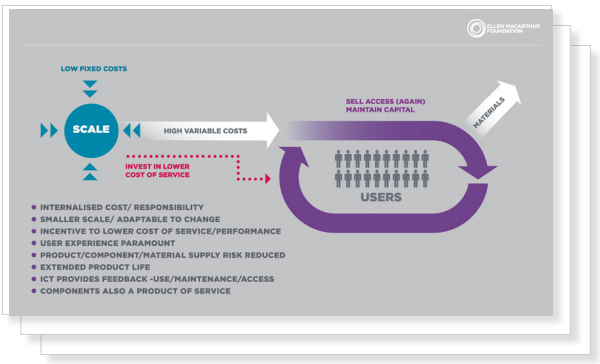
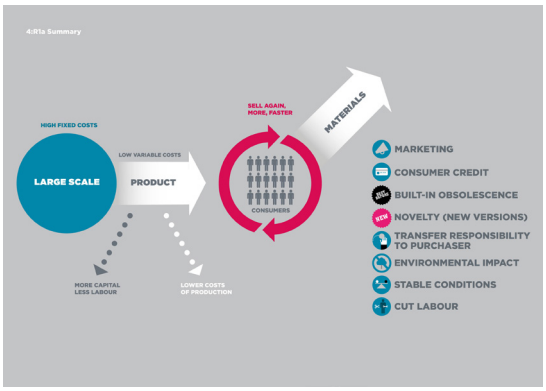
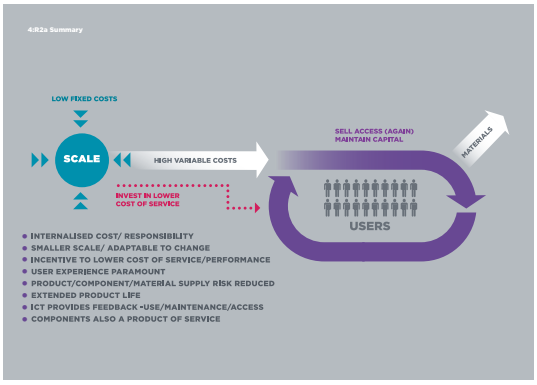


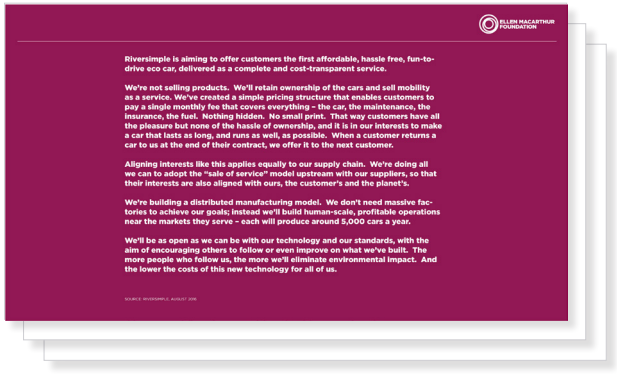

### 4:R1a ‘Selling and scale’ summary slide




### 4:R2a ‘Defeating selling and scale’ summary slide




### 4:R3 PPT Riversimple case study - slide set




### 4:R4 Riversimple video clip

### 4:R3a Riversimple business model - 2 visuals