



A NATIONAL PROGRAM  
FOR THE SHARING  
ECONOMY IN CITIES

# Business Models and Sharing Cities

# Developing business models for the sharing economy

**ViableCities**<sup>TM</sup>  
Smart, sustainable and attractive.



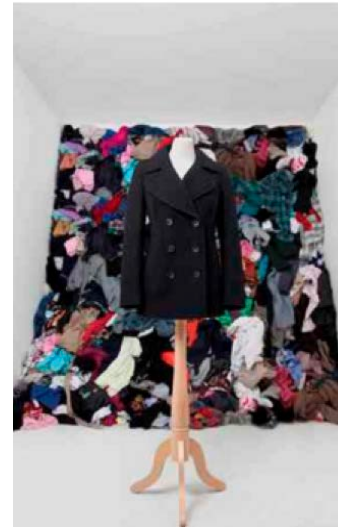
Nancy Bocken, Karolina Södergren, Alexandra Jonca & Jenny Palm

10 October 2019

# Sharing Economy

- Leveraging the idling capacity of goods and services

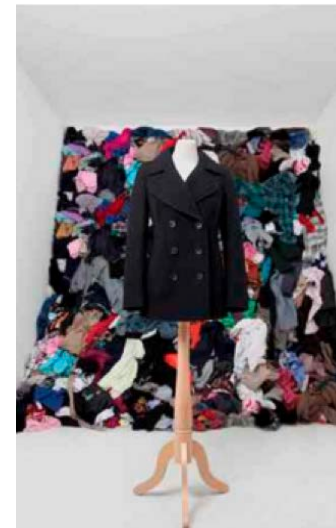
What is it?



- Source: Curtis & Lehner (2019) Defining the Sharing Economy for Sustainability . Sustainability. 11, 567.

# Sharing Economy

- Leveraging the idling capacity of goods and services
- Offering access over ownership



What is it?



- Source: Curtis & Lehner (2019) Defining the Sharing Economy for Sustainability . Sustainability. 11, 567.

# Sharing Economy



RINS – a clothing as a service concept



## What is it?



- Leveraging the idling capacity of goods and services
- Offering access over ownership
- **To reduce our overall consumption and resource use**



- Source: Curtis & Lehner (2019) Defining the Sharing Economy for Sustainability . Sustainability. 11, 567.

# Tough questions: resource use

To what extent does “sharing” reduce the total need for products?

e.g. Car sharing → number of cars ?

e.g. Clothing sharing → number of items sold ?



*Trends:*

*The global vehicle stock will be 2.5 times greater in 2030 than in 2002 and new car registrations are on the rise*

*In the past 15 years clothing production doubled*

- Ellen MacArthur Foundation (EMF). 2017, A new textiles economy
- Boons & Bocken. 2018. Towards a sharing economy.



# Ecologies of Business Models

A new way of investigating the real impact of sharing business models is the 'ecologies of business models' approach

→ analyses the symbiotic and competitive relations between new and existing business models.

→ Helps us understand the patterns of business models in a context (here, a city) rather than single business models.

→ To understand how these trends might contribute to sustainable development.

- Bocken, N.M.P., Boons, F., Baldassarre, C. 2019.. J. Clean. Prod.
- Boons, F., & Bocken, N. 2018. Technological Forecasting and Social Change.



# The impact of sharing on non-sharing

Relations between sharing and non-sharing

1. Impact of sharing vs. non-sharing

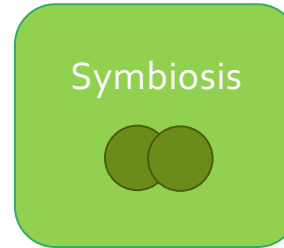
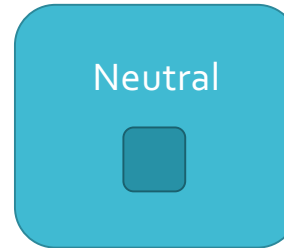


2. Dependencies



Analyse dependencies

3. Nature of dependencies?



4. Modify, destroy or create through partnerships



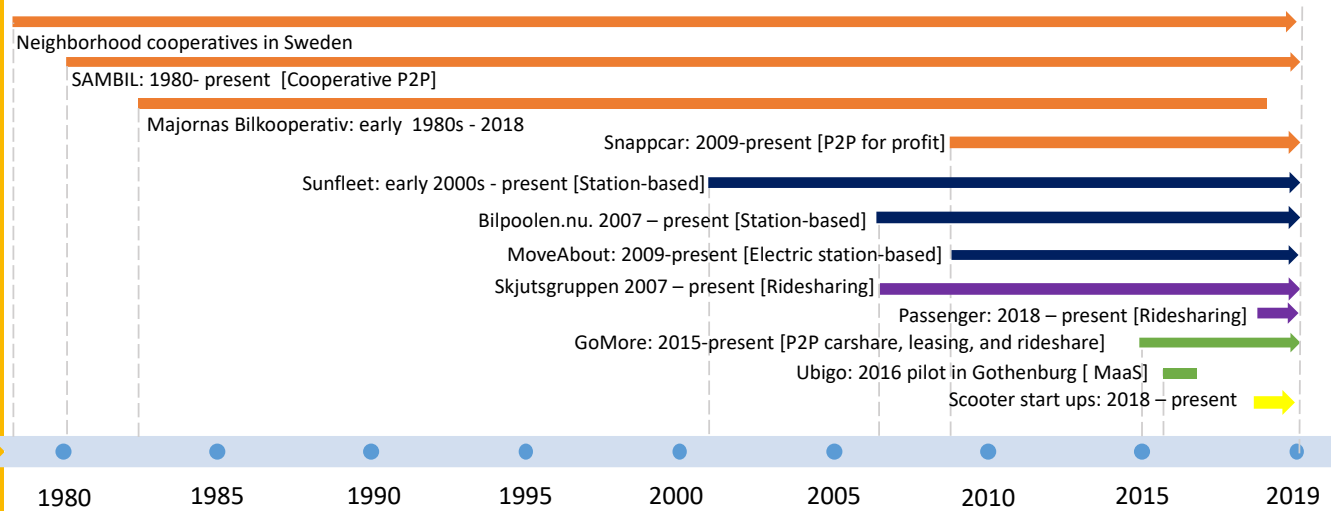
Increase positive impact and reduce negative impact





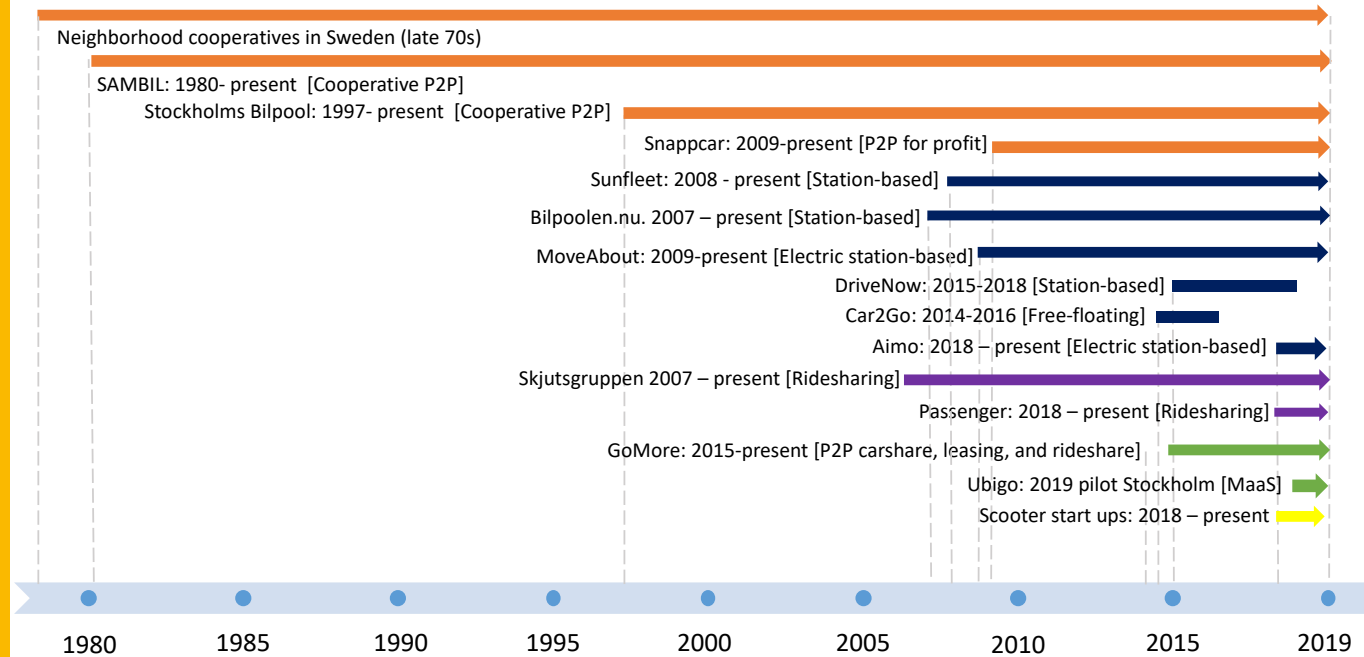
# Results

## Gothenburg Timeline



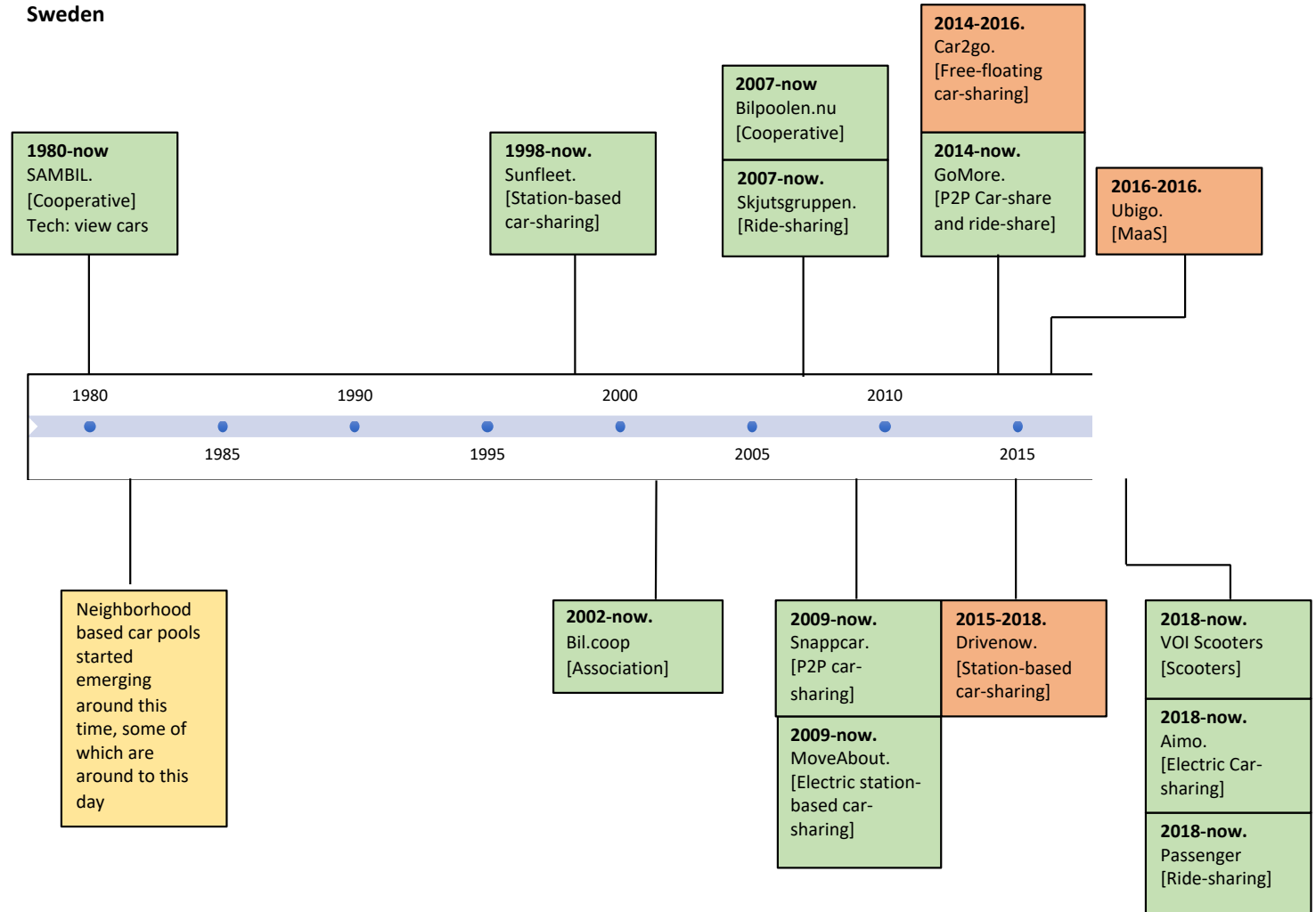
# Results

## Stockholm Timeline

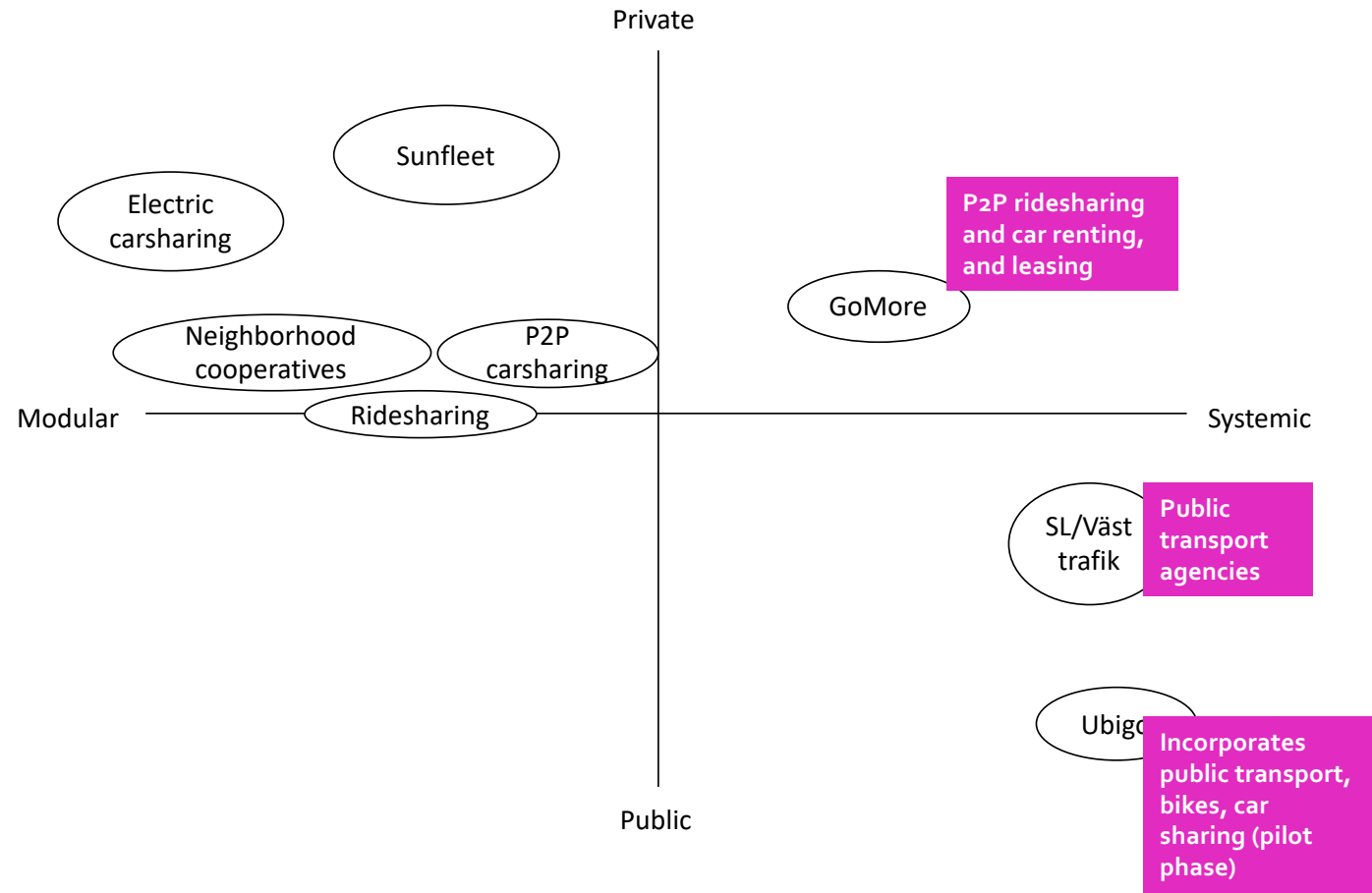


**Sweden**

# Timeline of car sharing in Sweden



# Examples of organisations



Developed from ongoing work by Mike Hodson, Andy McMeekin, Frank Boons, Manchester University



## Findings & developments

- Long-standing **experimentation** and piloting with car sharing in Sweden, by individuals (since the 70's), cities and companies
- .. but the sharing economy did not gain popularity in the common language until 2015 and is **far from mainstream**
- Overall journeys by **public transport went down** from 2014-2016 (Trafik Analys 2016, 2017 ).
- Sunfleet has emerged as a major carsharing player in Sweden, but **car ownership** is still the predominant mode of transport and is increasing
- In 2018, there were **4.8 million private vehicles** on roads, a number that has only **gone up** in recent years (Trafik Analys 2019)

# Role of cities

	Self-government, provider and authority	Governing by partnership and enabling	Citizens / volunteer
<b>Initiator</b>	Cities; Local government/ authorities	Cities; Local government together with others	Citizens or NGOs
<b>Decision made by</b>	Cities; Local government	Shared between involved partners	By the initiator
<b>Activities run by</b>	Cities; Local government	Cities; Local government and partner	By the initiator
<b>Cities have a</b>	Steering role	Cooperative role	Role that when needed stimulate and facilitate implementation

Developed from: Bulkeley, H.; Kern, K., Local government and the governing of climate change in Germany and the UK. *Urban Studies* 2006, 43, (12), 2237-2259.

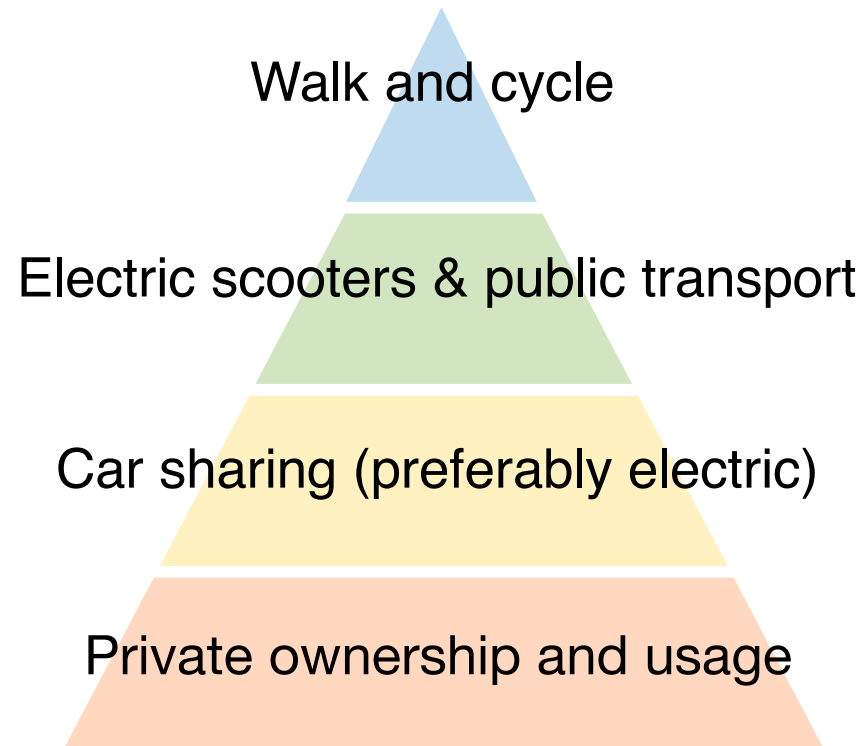
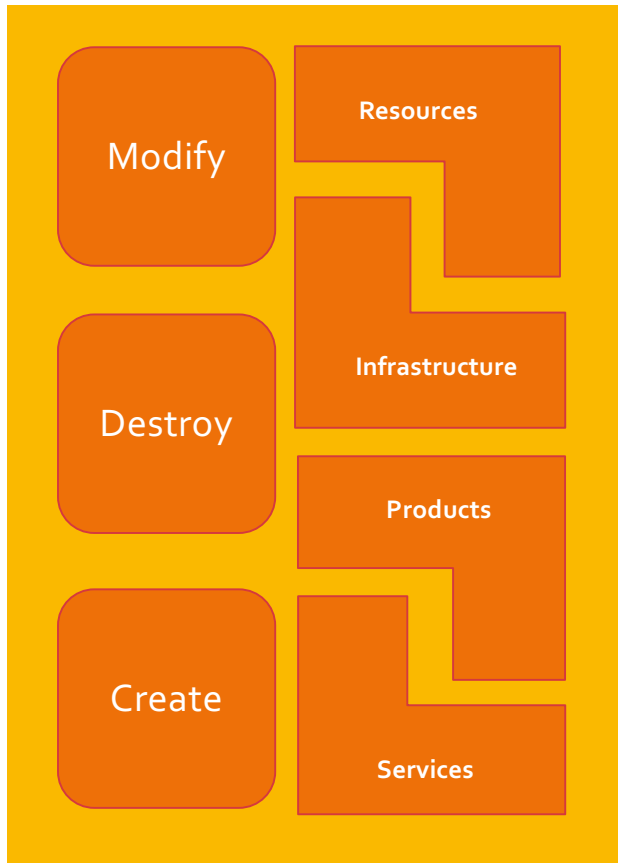
# Role of cities

	Self-government, provider and authority	Governing by partnership and enabling	Citizens/ volunteer
Initiator	Cities; Local government/ authorities	Cities; Local government together with others	Neighbourhood coops in 70's and 80's
Decision made by	Cities; Local government	Shared between involved partners	By the initiator
Activities run by	Cities; Local government	Public procurement of car sharing services e.g. Sunfleet	By the initiator
Cities have a	Steering role	Cooperative role	Role that when needed stimulate and facilitate implementation

Systemic innovations – mobility solutions that really lower environmental impact and reduce car dependencies

Developed from: Bulkeley, H.; Kern, K., Local government and the governing of climate change in Germany and the UK. Urban Studies 2006, 43, (12), 2237-2259.

# Ecologies of Business Models - recommendations



- Walking and cycling infrastructure top priority; not harmed by below developments
- Solutions part of systemic offering
- Car sharing to replace private ownership

Picture: own development of a 'mobility hierarchy'





## Concluding thoughts

- Long-standing experimentation and piloting with car sharing in Sweden ... but sharing economy is far from mainstream
- Worrying trends of rising car ownership and declining public transport usage (and perhaps less walking and cycling)
- Non-systemic handling and lack of integration of new initiatives (e.g., scooters)
- Ecologies of business models – modify, destroy or creating new dependencies – and 'mobility hierarchy' - might facilitate thinking about new pilots
- Successful examples emerge from support through public procurement; cities as enablers
- Various roles of cities: more steering, cooperative, or stimulating and facilitating on a needs-basis
- Need to remain critical about real environmental impact reductions



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Questions /  
Feedback?

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