



**TPR**

Department of Transport and Regional Economics  
University of Antwerp

09/09/2020

# Business Modelling Public-Private Partnerships For The Shared Mobility Market

The Case Of The Shared Mobility Hub

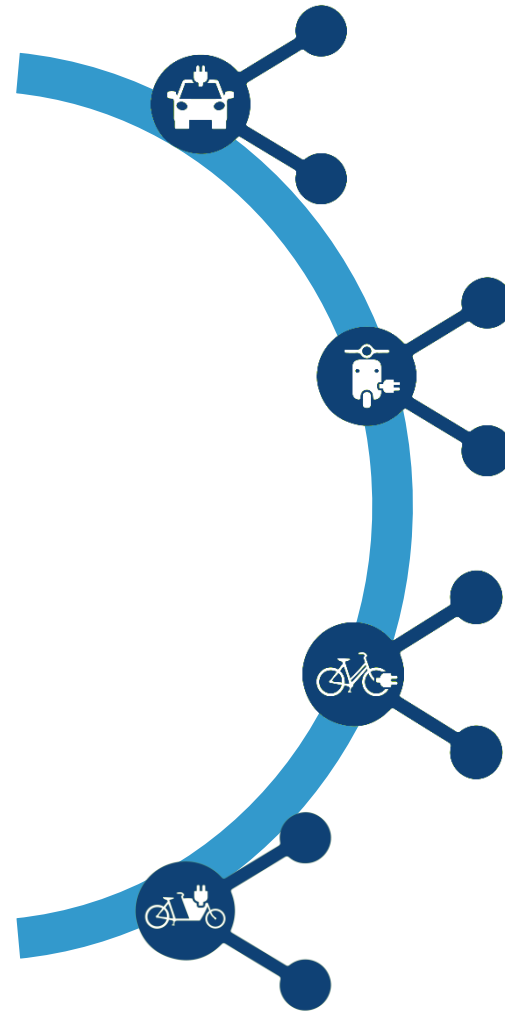
*Elnert Coenegrachts*

*Dr. Joris Beckers*

*Prof. Dr. Thierry Vanelslander*

*Prof. Dr. Ann Verhetsel*

***University of Antwerp***



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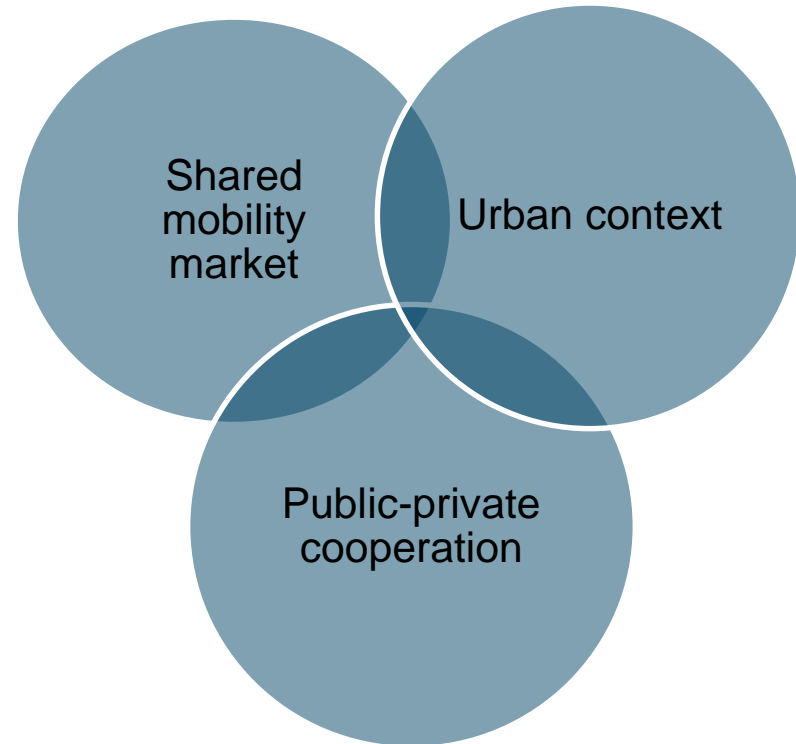
BIO



Elnert Coenegrachts

Phd Researcher  
Applied Economics

## Research Topics



# Introduction – Shared mobility market

## Public actors



## Private actors



# Introduction – Barriers of shared mobility

## Public actors

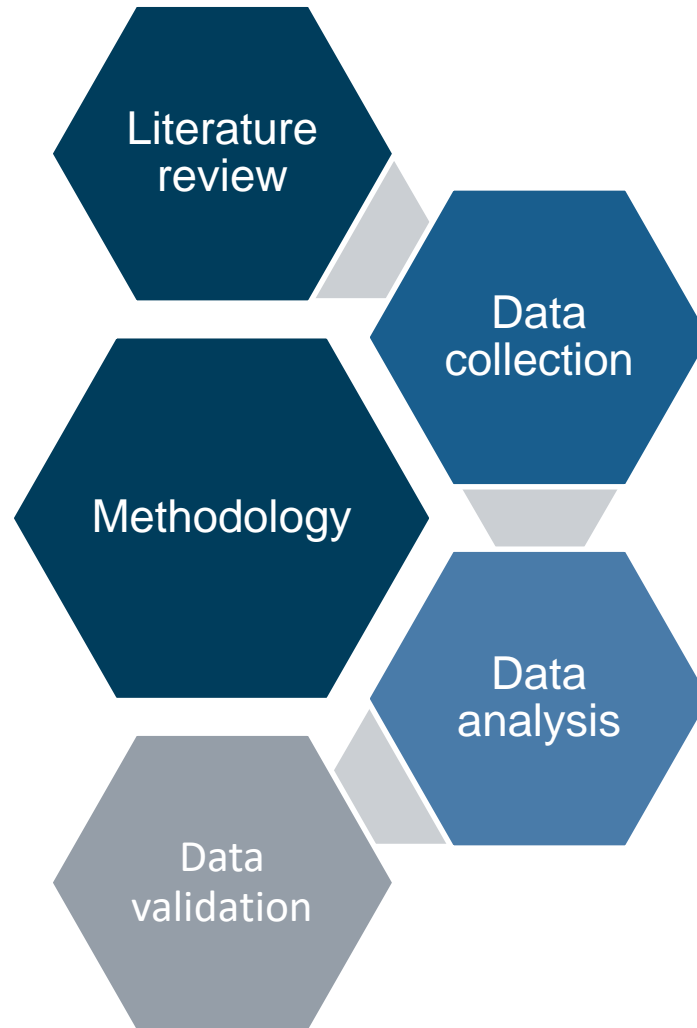
- Level playing field?
- Management of public space?

## Private actors

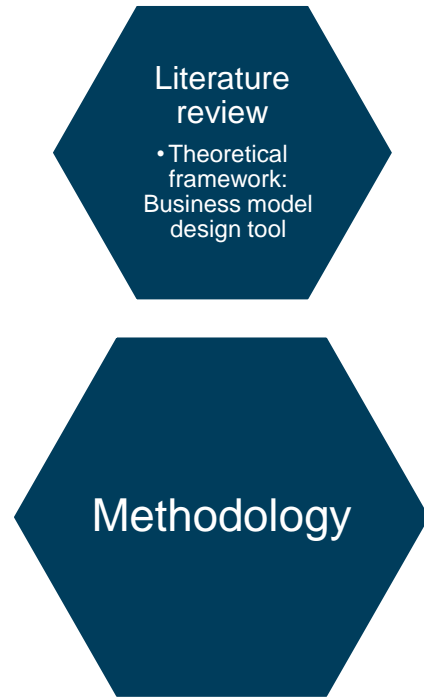
- Profitability?
- Sustainability?



# Methodology

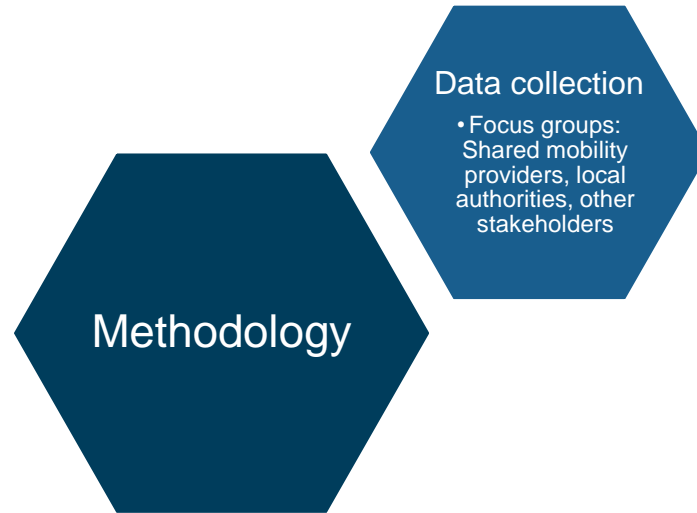


# Methodology

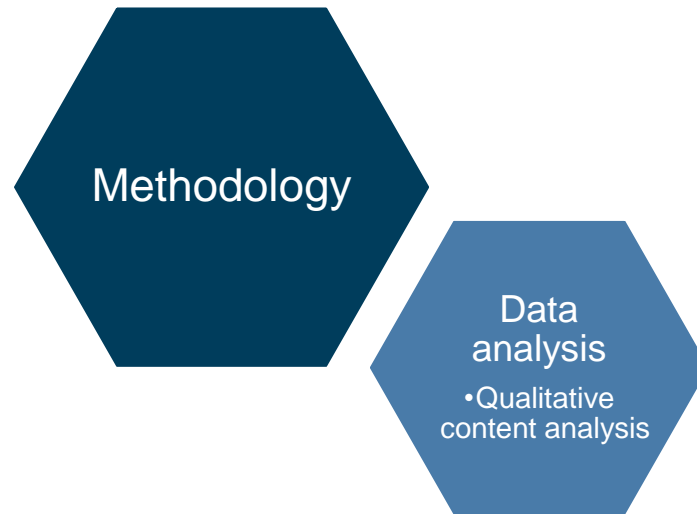




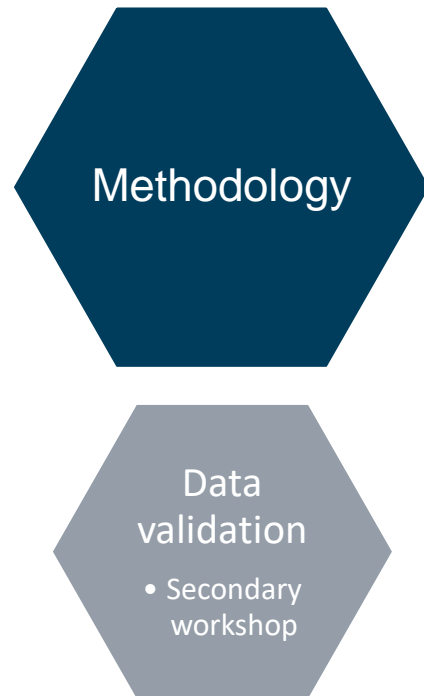
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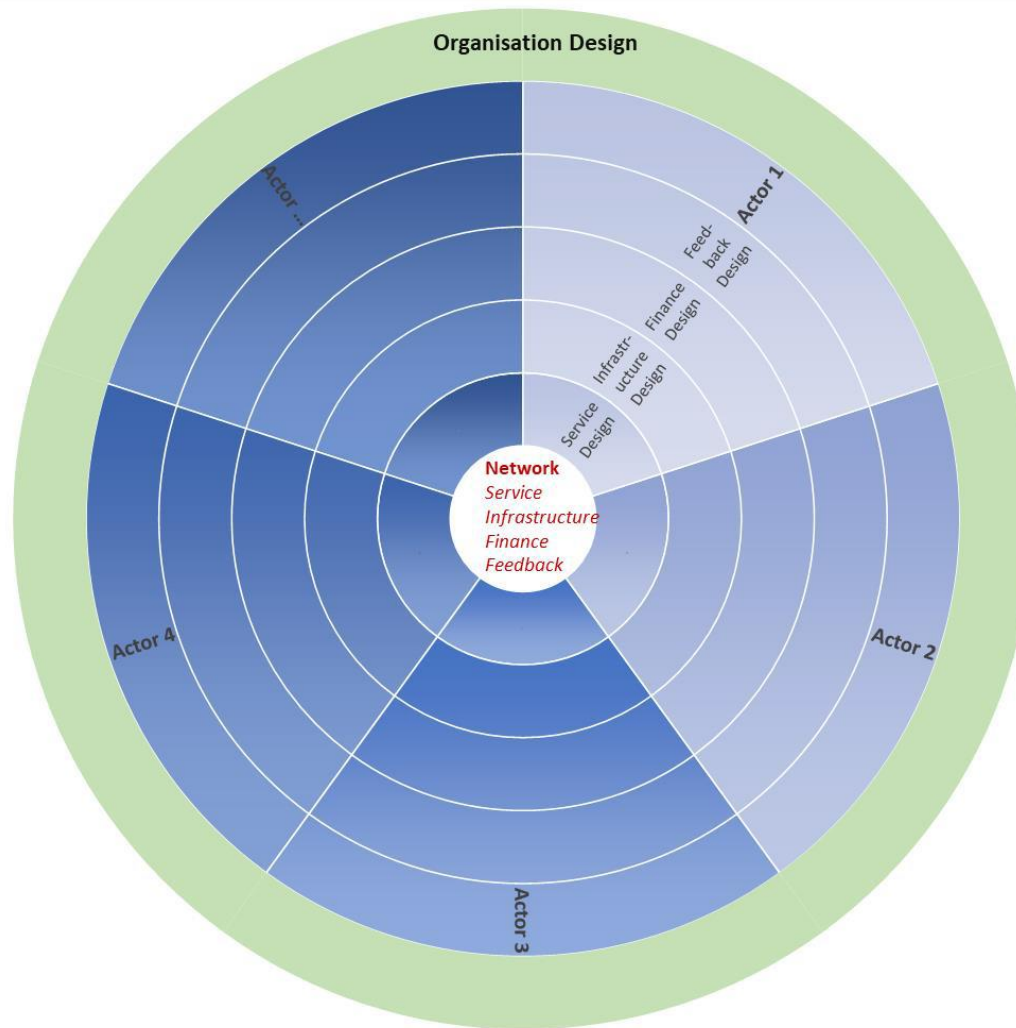
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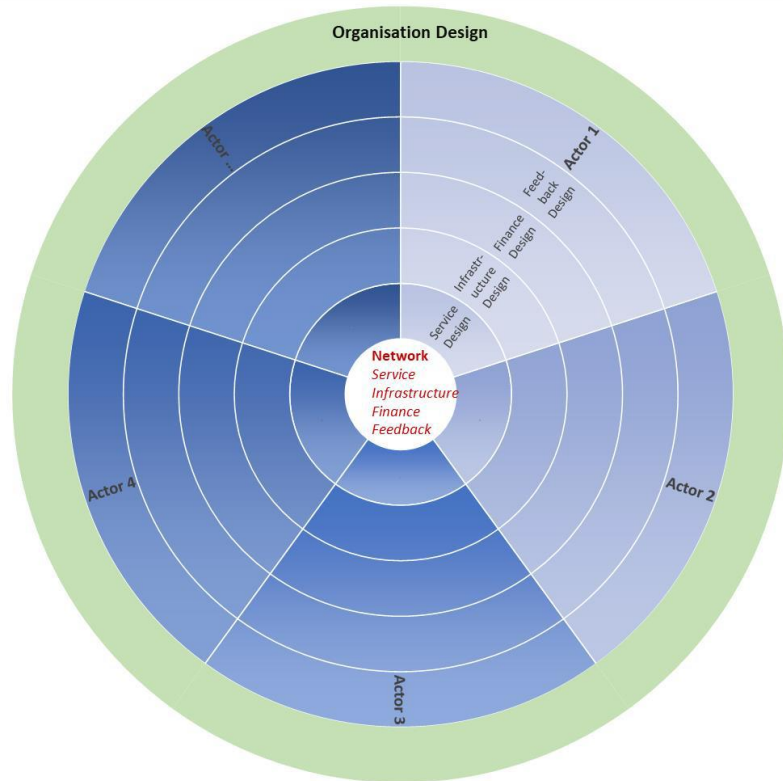
# Theoretical Framework



**Figure 1: Conceptual Network-based Business Modelling Design Tool**

Source: Own composition based on Lindgren et al. (2010) and Turetken et al. (2019)

# Theoretical Framework

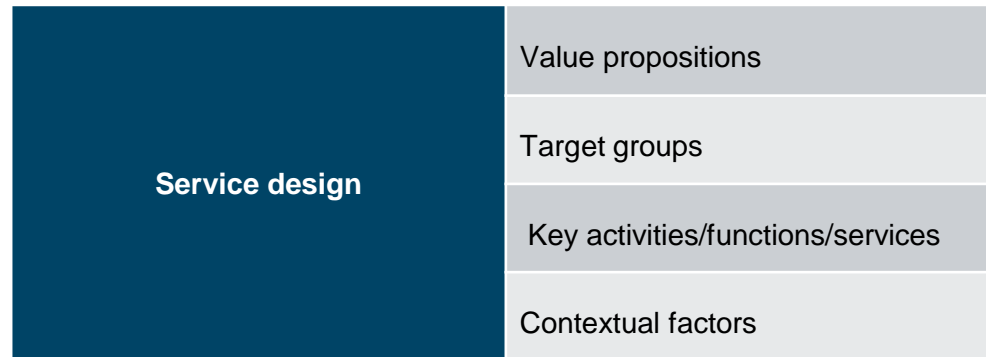
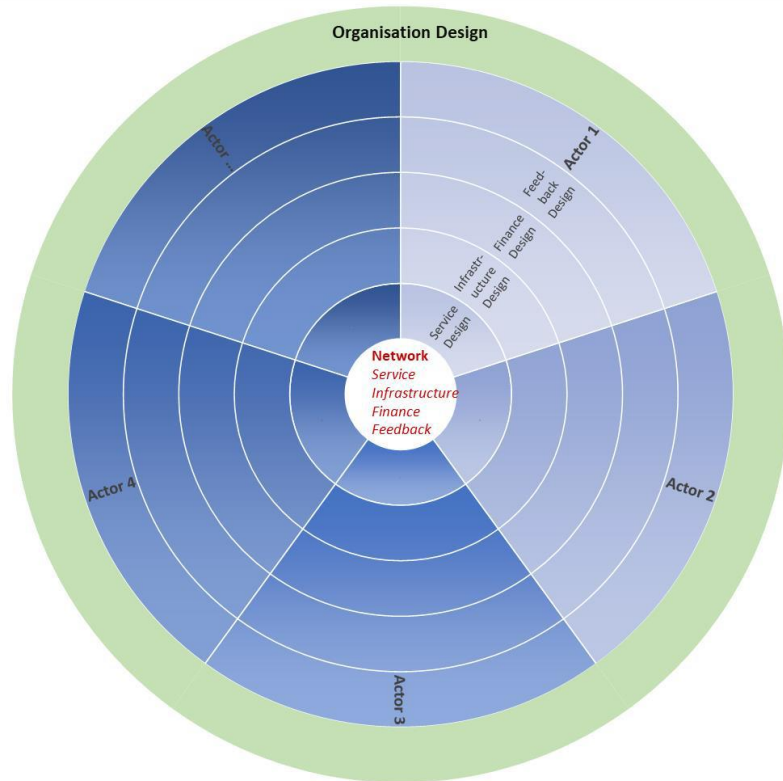


<b>Organisation design (defining the network)</b>	Key actors
	Key roles
	Responsibilities
	Key relationships

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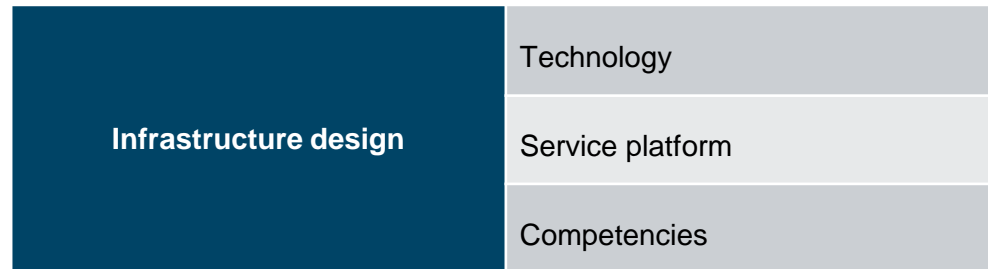
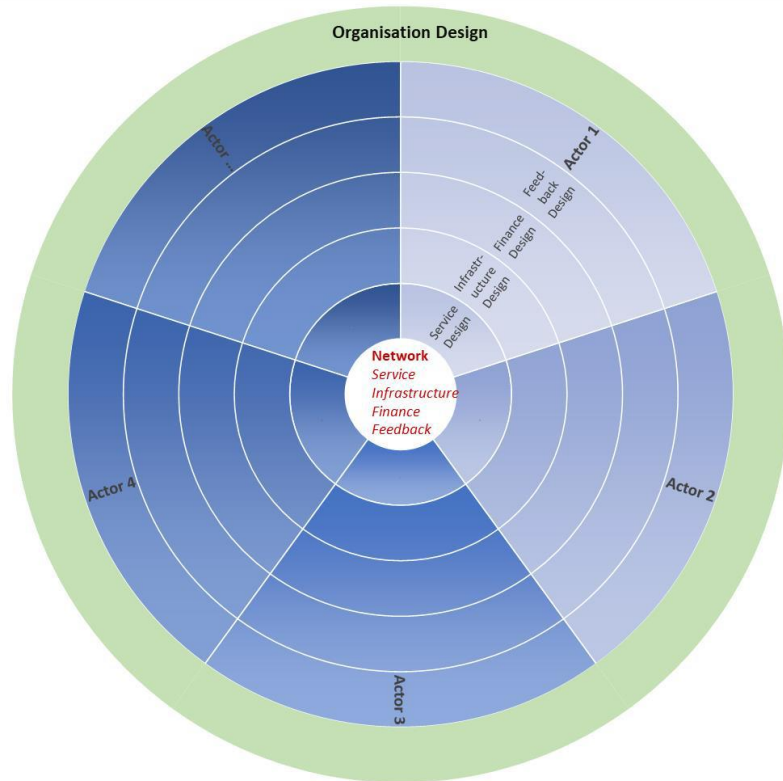
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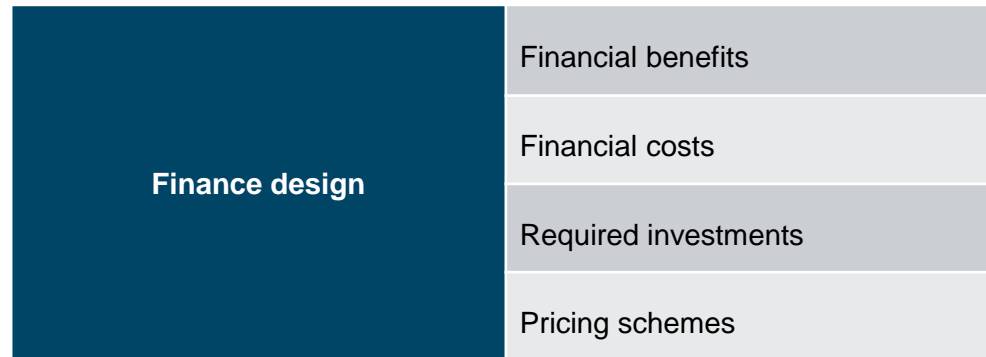
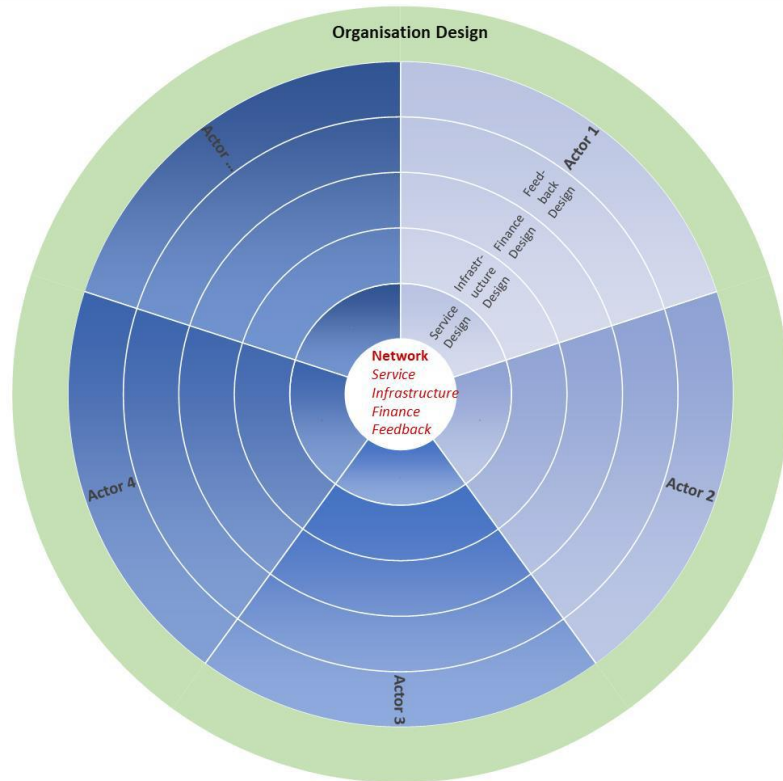
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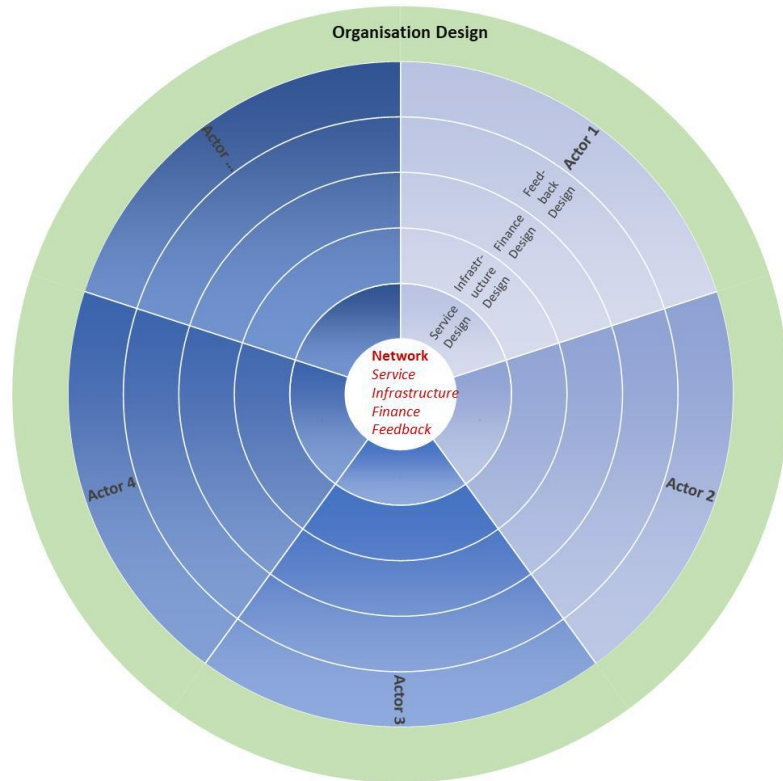


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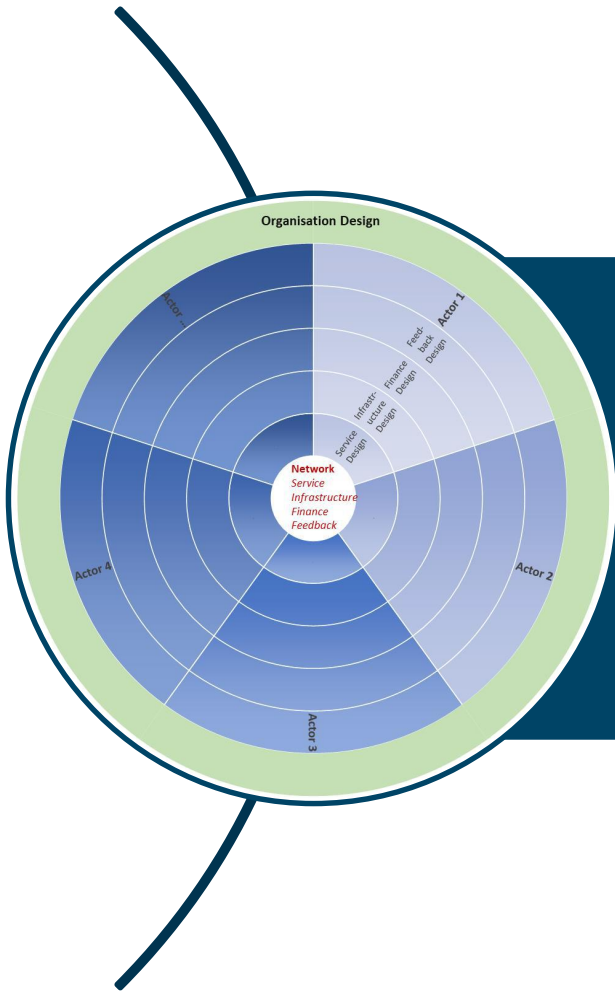
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# Results – Five business models prototypes



## Five BM prototypes

- First-/last-mile HUB network
- Clustered shared (e-)mobility network
- Hybrid HUB network
- POI-HUB network
- Closed HUB network

# Results – Prototype of BM Shared mobility HUB

## First-/Last-mile HUB network

- Integration with public transport
- Reliability is key
- Dense network
- Target group: Daily commuters
- Subscription model
- Barrier: low reliability

## Clustered shared (e-)mobility network

- Centralise shared mobility
- Unfavourable environment
- Target group: residents
- Flexible and additional infrastructure
- Barrier: Insufficient use

# Results – Prototype of BM Shared mobility HUB

## POI HUB network

- Integration with public transport
- Increase POI attractiveness
- Cooperation with POI-owners/real estate
- Target group: visitors and commuters
- Integrated fee
- Barrier: low reliability

## Hybrid HUB network

- Free floating and station-based
- Increased area covered
- Centralise fleet management/maintenance
- Target group: commuters & tourists
- Subscription model
- Barrier: curb management & competition

# Results – Prototype of BM Shared mobility HUB

## Closed HUB network

- Ensured availability
- Cooperation with real estate/business parks
- Opportunity: additional services
- Target group: residents
- Access technology
- Barrier: disconnected network

# Data validation

## Second 'focus group' workshop

### Combined models:

- Clustered + POI HUB network

### Standalone HUB:

- POI-HUB network

### High requirements:

- First-/Last-mile HUB network

# Discussion

## **Limitations**

Theoretical models

Subject to focus groups' composition

## **Further research**

Empirical and quantitative validation

# Bibliography

- Cohen, B., & Kietzmann, J. (2014, 2014/09/01). Ride On! Mobility Business Models for the Sharing Economy. *Organization & Environment*, 27(3), 279-296. <https://doi.org/10.1177/1086026614546199>
- Lindgren, P., Taran, Y., & Boer, H. (2010, 08/01). From single firm to network-based business model innovation. *International Journal of Entrepreneurship and Innovation Management - Int J Enterpren Innovat Manag*, 12. <https://doi.org/10.1504/IJEIM.2010.034417>
- Turetken, O., Grefen, P., Gilsing, R., & Adali, O. E. (2019). Service-Dominant Business Model Design for Digital Innovation in Smart Mobility. *Business & Information Systems Engineering*, 61(1), 9-29. <https://doi.org/10.1007/s12599-018-0565-x>



# Interreg



EUROPEAN UNION

## North-West Europe

### eHUBS

European Regional Development Fund

THEMATIC PRIORITY:



PROJECT AREA



Project objectives: eHUBS will demonstrate that shared and electric shared mobility (e-bikes, e-scooters, e-cargobikes, and electric cars) are affordable and attractive alternatives to private cars. eHUBS will contribute to less emissions, less car use, and to the critical mass needed for the business case of electric and shared mobility

Total budget received from Interreg North-West Europe (2019-2021)

**€ 5.3 million of ERDF**

Total project budget:  
**€ 8.8 million**

[www.nweurope.com/ehubs](http://www.nweurope.com/ehubs)

More information regarding eHUBS-project:  
<https://www.nweurope.eu/projects/project-search/ehubs-smart-shared-green-mobility-hubs/>

Thank you for your attention!



Questions?



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