

# Workshop 4 - Access requiring physical mobility

22 June 2021 – 1400-1700 CET (1300-1600 BST)

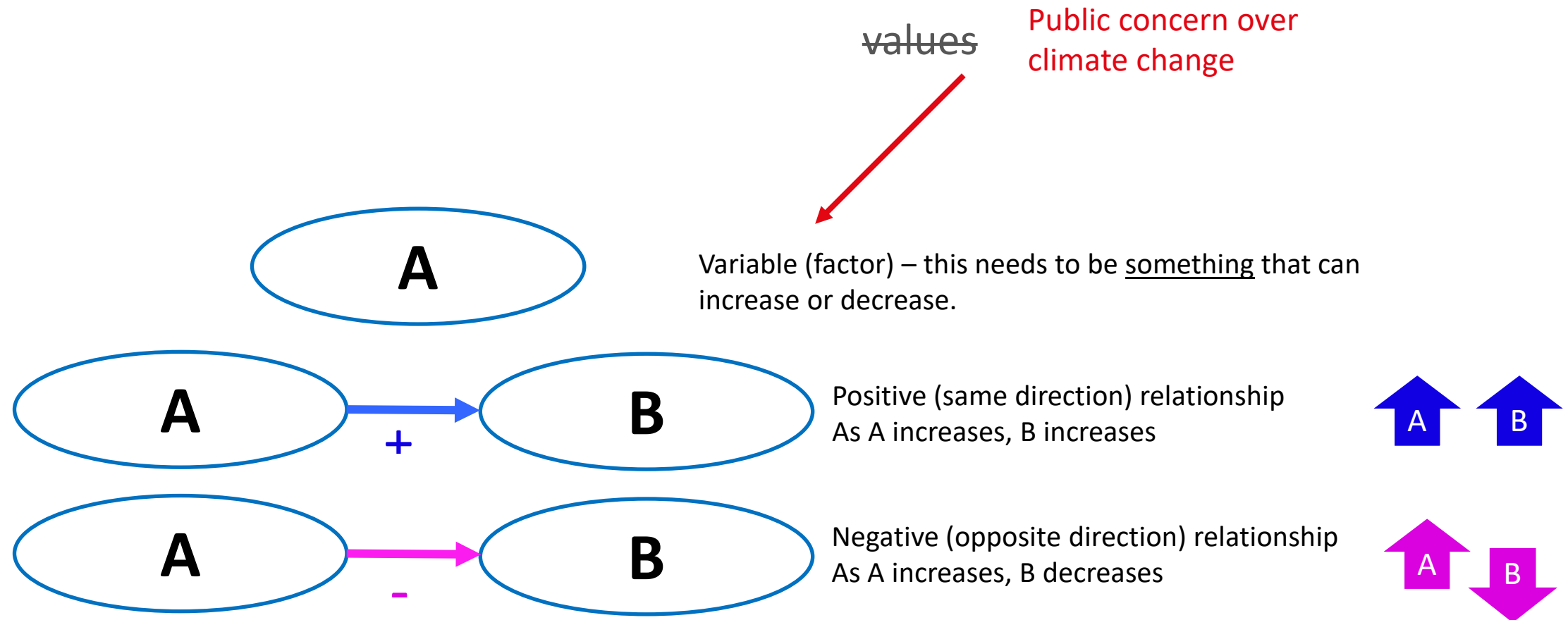
# Agenda (1400-1700 CET)

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- 1400 Introduction and scene setting
- 1415 Review of our variables
- 1430 Breakout groups round 1 - creating Causal Loop Diagrams centred upon physical mobility
- 1520 **Break**
- 1540 Quickfire feedback from groups
- 1555 Breakout groups round 2 – Causal Loop Diagrams review and revision
- 1625 Reflections and discussion
- 1655 Next steps
- 1700 Close

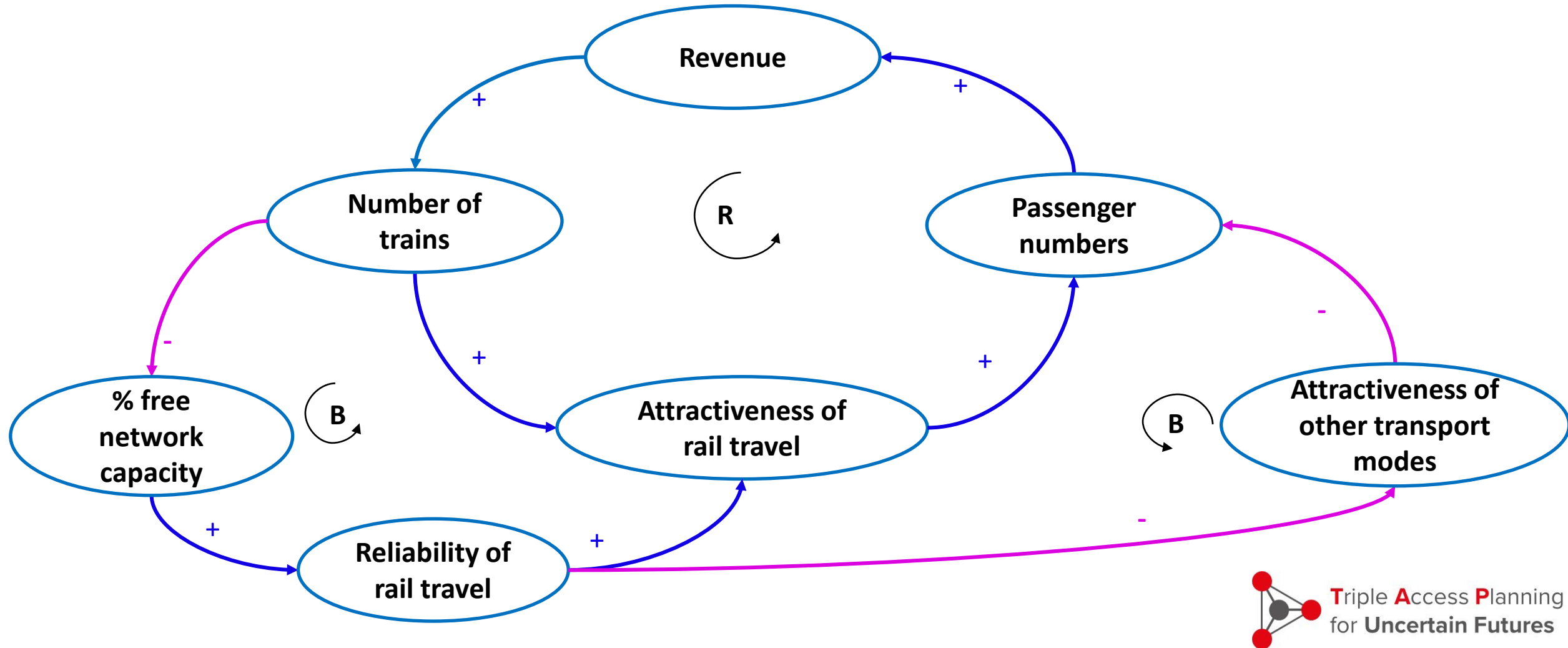
# Introduction and scene setting

## 1400-1415



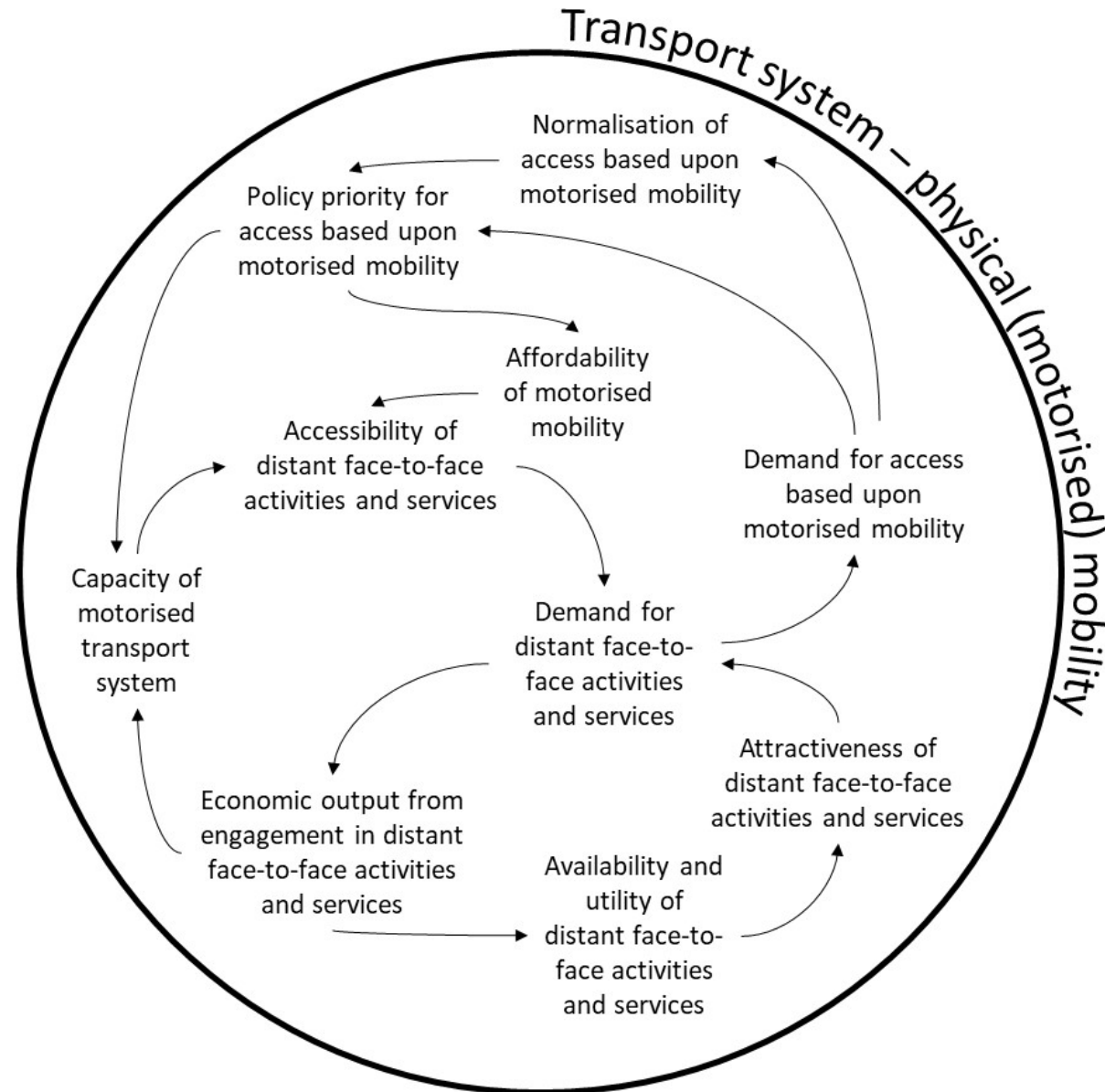
# A simple example of a causal loop diagram

## *What Drives Revenue for a Rail Company?*



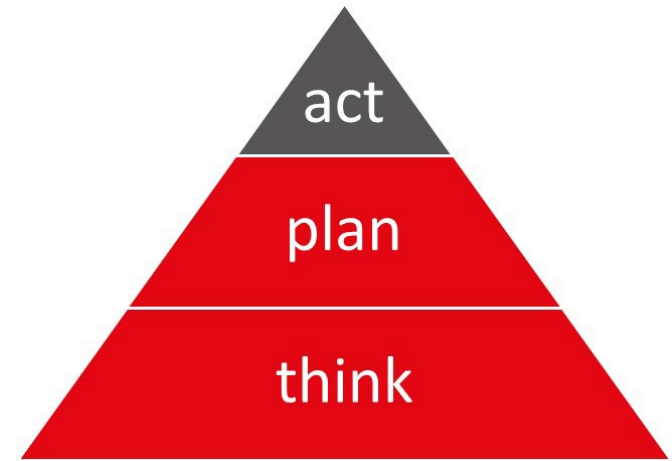
# Indicative sub-system Causal Loop Diagram for TAS

## Physical mobility

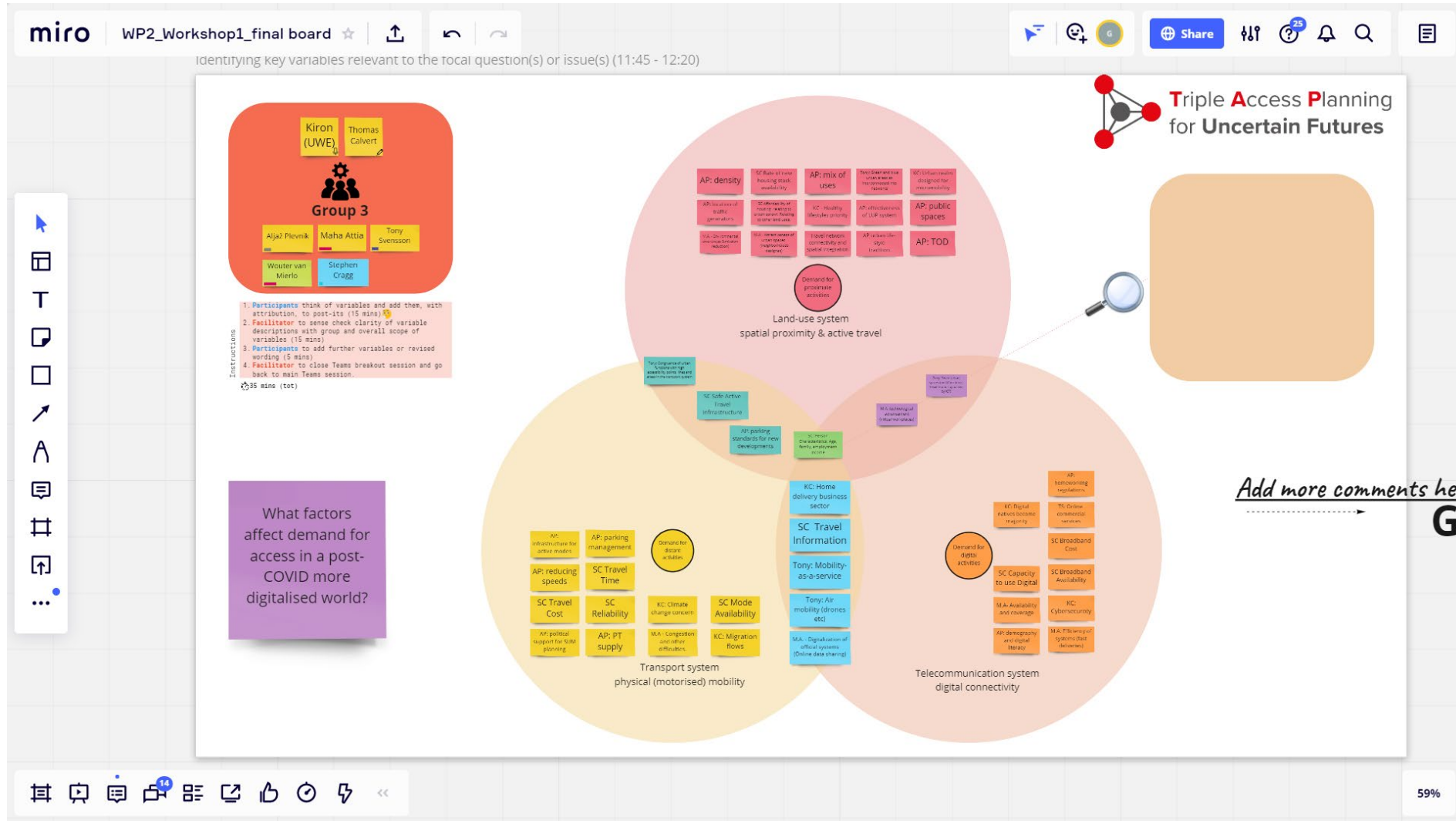


# Why?

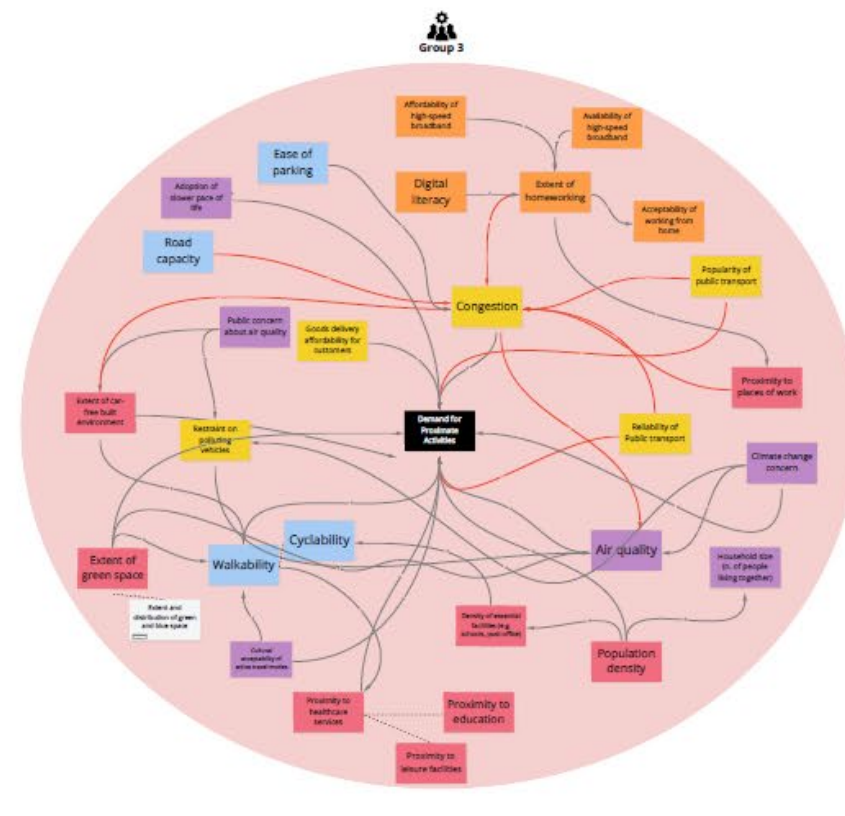
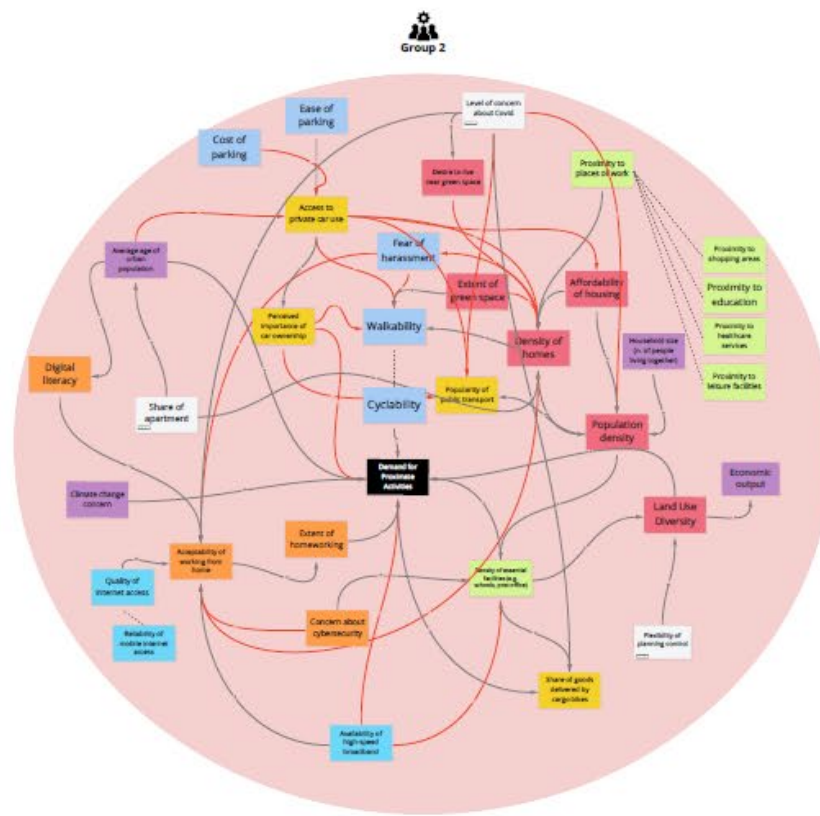
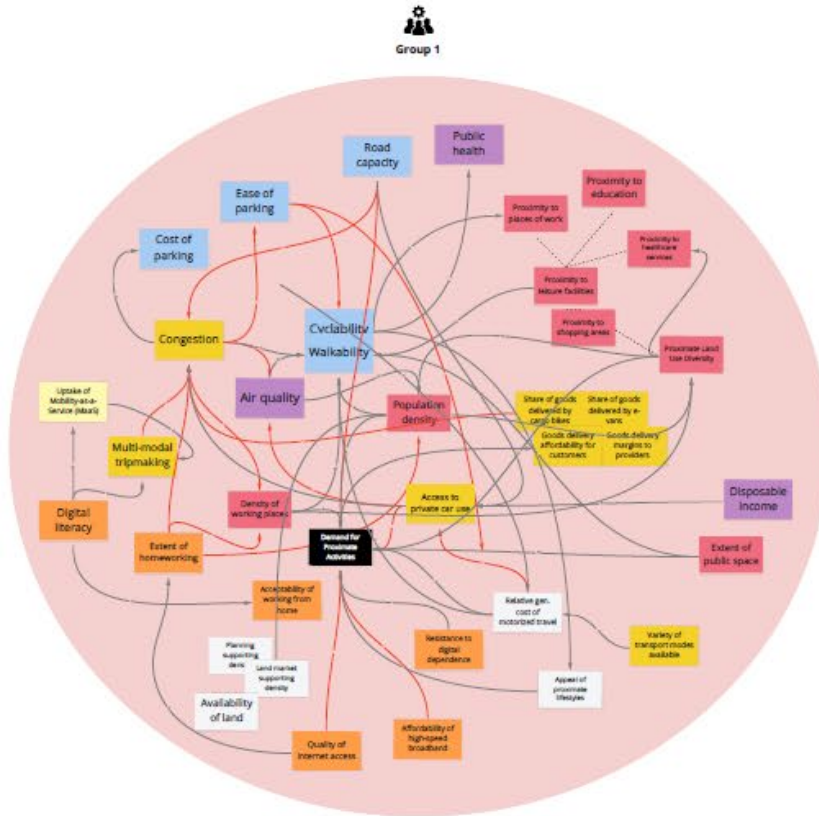
- The **urban system is complex** and to plan for urban mobility means we must first have a **better mental model of the system** we are seeking to support and shape
- Systems thinking helps us focus our later attention on **getting better at being approximately right** instead of precisely wrong
- Systems thinking helps us identify the variables we consider to be most important to triple access as a basis for **creating plausible triple access scenarios for the future**
- Our better mental model of the urban system of access helps us **better identify and judge candidate interventions** to shape a better urban future



# Where we finished workshop 1

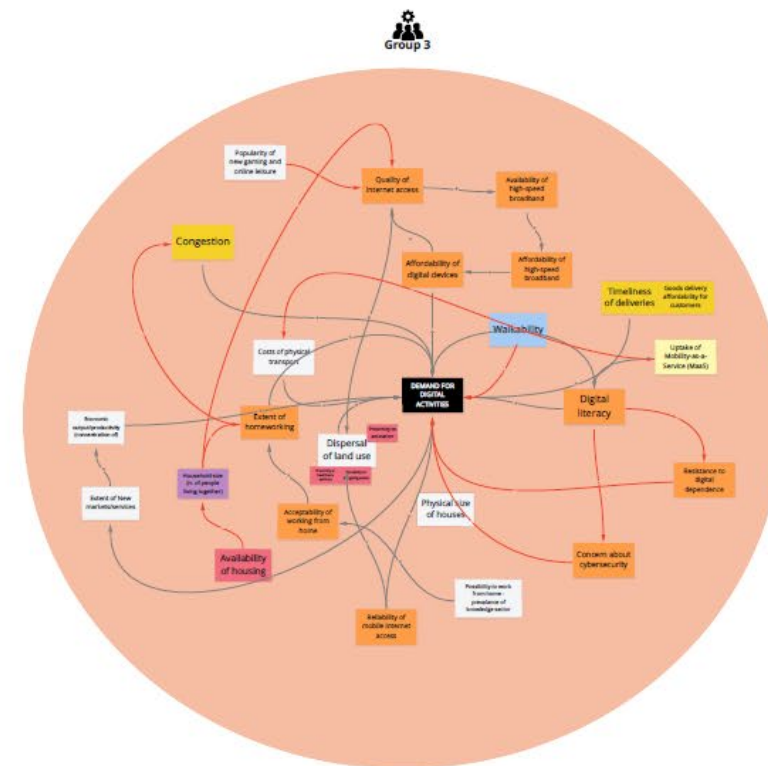
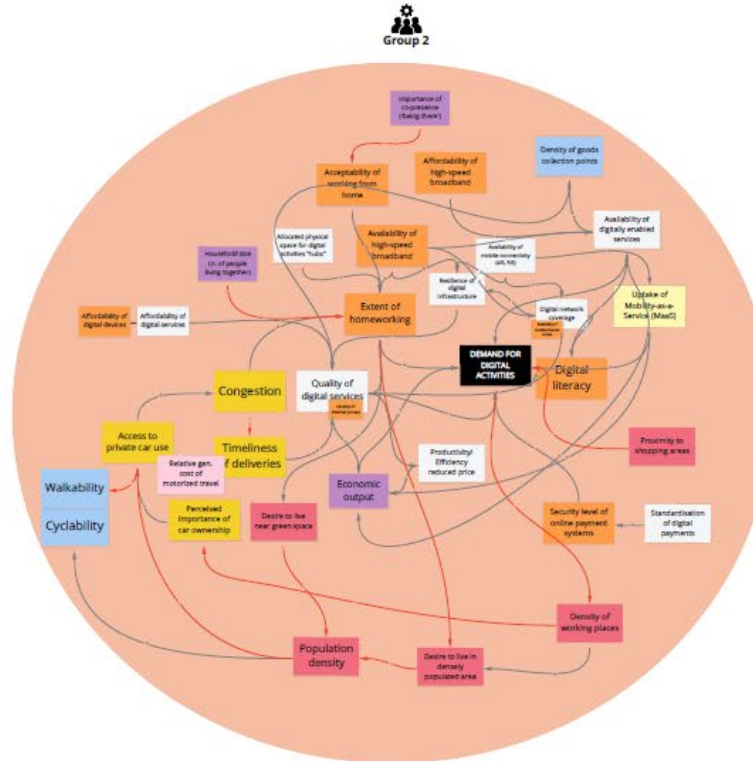
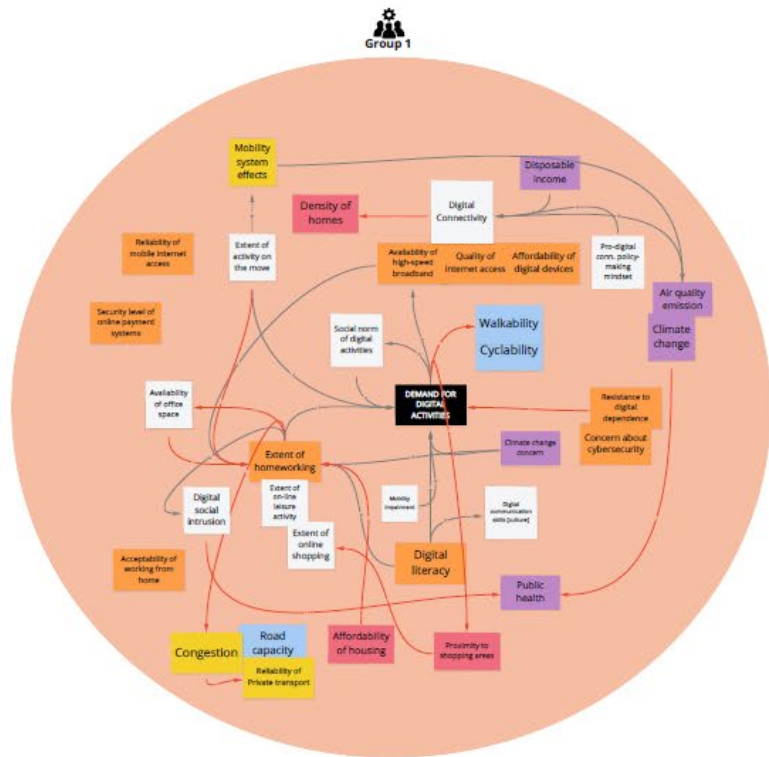


# Where we finished workshop 2



What factors affect demand for spatial proximity <<in urban areas>>in a post-COVID more digitalised world?

# Where we finished workshop 3



What factors affect demand for digital connectivity <<in urban areas>>in a post-COVID more digitalised world?

# Our focal question

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What factors affect demand for access  
in a post-COVID more digitalised world?

Demand for distant face-to-face activities

Our starting point

# Terms of engagement

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- Be active not passive (this is a **workshop!**) – ensure your views are captured
- Listening (not just hearing) is important as well as talking
- Keep an open mind and beware of unconscious biases
- Do challenge but in a constructive manner
- Allow yourself to be facilitated
- Highlight ambiguity but don't seek perfection
- Please respect the Chatham House Rule
- Have fun

Review of our variables  
1415-1430

Telecom  
municati  
on

Extent of homeworking    Acceptability of working from home    Concern about cybersecurity    Security level of online payment systems    Reliability of mobile internet access    Affordability of digital devices    Digital literacy    "Owning a smartphone indicates success"    Resistance to digital dependence    Affordability of high-speed broadband    Availability of high-speed broadband    Quality of internet access

Land  
Use

Affordability of housing    Proximity to education    Proximity to healthcare services    Proximity to leisure facilities    Proximity to shopping areas    Proximity to places of work    Density of essential facilities (e.g. schools, post office)    Density of homes    Extent of car-free built environment    Extent of public space    Density of working places    Desire to live in densely populated area    Desire to live in historic areas    Desire to live near green space    Density of mobility hubs (n. mobility hubs per sqm)    Availability of housing    Population density    Priority of healthy lifestyles    Land Use Diversity    Retail floor area (sqm)

Telecommu  
nication &  
Transport

Social anxiety around meeting in person  
Uptake of Mobility-as-a-Service (MaaS)

Land Use  
&  
Transport

Walkability    Cyclability    Density of goods collection points    Seggregated capacity for cycling/micromobility    Public acceptance of roadspace reallocation to active travel    Road capacity    Ease of parking    Cost of parking    Fear of harassment

Transport

Congestion    Access to private car use    Perceived importance of car ownership    Share of car fleet electrified    Safety of private motorised travel    Restraint on polluting vehicles    Speed limits on motorised transport    Reliability of Private transport    Safety of active travel modes    Multi-modal tripmaking  
Reliability of Public transport    Public transport crowding    Popularity of public transport    Variety of transport modes available    Share of goods delivered by cargo bikes    Timeliness of deliveries    Goods delivery affordability for customers    Goods delivery margins to providers    Share of goods delivered by e-vans

Land Use &  
Transport  
&Telecom  
munication

Public concern about air quality    Cultural acceptability of active travel modes    Climate change concern    Air quality    Average age of urban population    Disposable income    Household size (n. of people living together)    Sharing of household roles between adults    Cultural acceptability of private motorised transport    Importance of co-presence ('being there')  
Economic output    Trend toward slower pace of life (slow city movement)    Educational focus on active travel and climate change    Adoption of slower pace of life    Public health    Immigrant share of population

New  
Variables  
from W2

Availability of land    Planning supporting density    Relative gen. cost of motorized travel    Flexibility of planning control    Land market supporting density    Share of apartment    Appeal of proximate lifestyles    Level of concern about Covid

DEMAND FOR  
DISTANT FACE-TO-  
FACE ACTIVITIES

New  
Variables  
from W3

Dispersal of land use    Physical size of houses    Availability of office space    Allocated physical space for digital activities "hubs"    Productivity/ Efficiency reduced price    Extent of online shopping    Extent of on-line leisure activity    Extent of activity on the move    Extent of New markets/services    Popularity of new gaming and online leisure    Standardisation of digital payments    Resilience of digital infrastructure    Pro-digital conn. policy-making mindset  
Mobility impairment    Possibility to work from home - prevalence of knowledge sector    Costs of physical transport    Social norm of digital activities    Digital communication skills [culture]    Digital social intrusion    Affordability of digital services    Quality of digital services    Availability of mobile connectivity (4G, 5G)    Digital network coverage    Availability of digitally enabled services    Digital Connectivity

Breakout groups round 1 - creating Causal Loop Diagrams  
centred upon physical mobility  
1430-1520

# Building the diagrams

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- Three breakout groups with two facilitators
- The facilitators will 'hold the pen' in Miro
- Don't think too much (ironically!) – approximate not perfect
- Each breakout groups starts with the same variables
- Take turns to add a variable, and consider what other variables it links to and how (+/-/?)
- If 'missing' variables come to mind add them in chat when you like – remember something that goes up or down and is unambiguous
- Prioritise 'important' variables (considering what makes them of interest)
- You have 50 minutes

**This is it! Good luck!!**

Break  
1520-1540

Quickfire feedback from groups  
1540-1555

# Looking for inspiration from the other groups

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- Each group in turn displays their draft Causal Loop Diagram on screen
- Others to make notes at their desks as they look at the diagram (while someone from that group offers overview commentary)
- 5 minutes only for each group

Breakout groups round 2 –  
Causal Loop Diagrams review and revision  
1555-1625

# Review and revision

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- If you've done well in round 1, keep working hard please!
- Incorporate any inspiration drawn from the other two groups
  - this may lead to groups' Causal Loop Diagrams converging more (but this is not the objective)
- Bring remaining variables into the Diagram if appropriate
- Consider new connections if appropriate
- Move variables within the diagram (their connections will follow)
- Consider the wider set of variables from Workshops 1-3 (if you have time!)
  - Go into the Miro Board yourselves to do this and move a variable 'onto the board' if you think its relevant – but let your facilitator build it into the diagram

# Reflections and discussion 1625-1655

# How did we do, what did we find?

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- We will display the three revised Diagrams while we have this discussion
- Were most of the variables from Workshops 1-3 used (and why or why not)?
- Were the connections obvious to make and judge?
- Did you spot any reinforcing or balancing loops?
- Did your Diagram feel as though it reflected PESTLE dimensions?
- How did this exercise compare to that for spatial proximity?
- What do you think of the systems thinking we've done together and what it might lead to?

Next steps and close  
1655-1700

# Just before we finish...

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## Thank you!

- We will share the three Diagrams with you and invite your comments
- The intention is to create a combined version of the three Diagrams
- Workshop 5: 'System of systems'
  - 29 June **1000-1300 CET**