Ruben D'Hauwers

Willingness to grant data control in a Solid mobility ecosystem

Ruben D'Hauwers
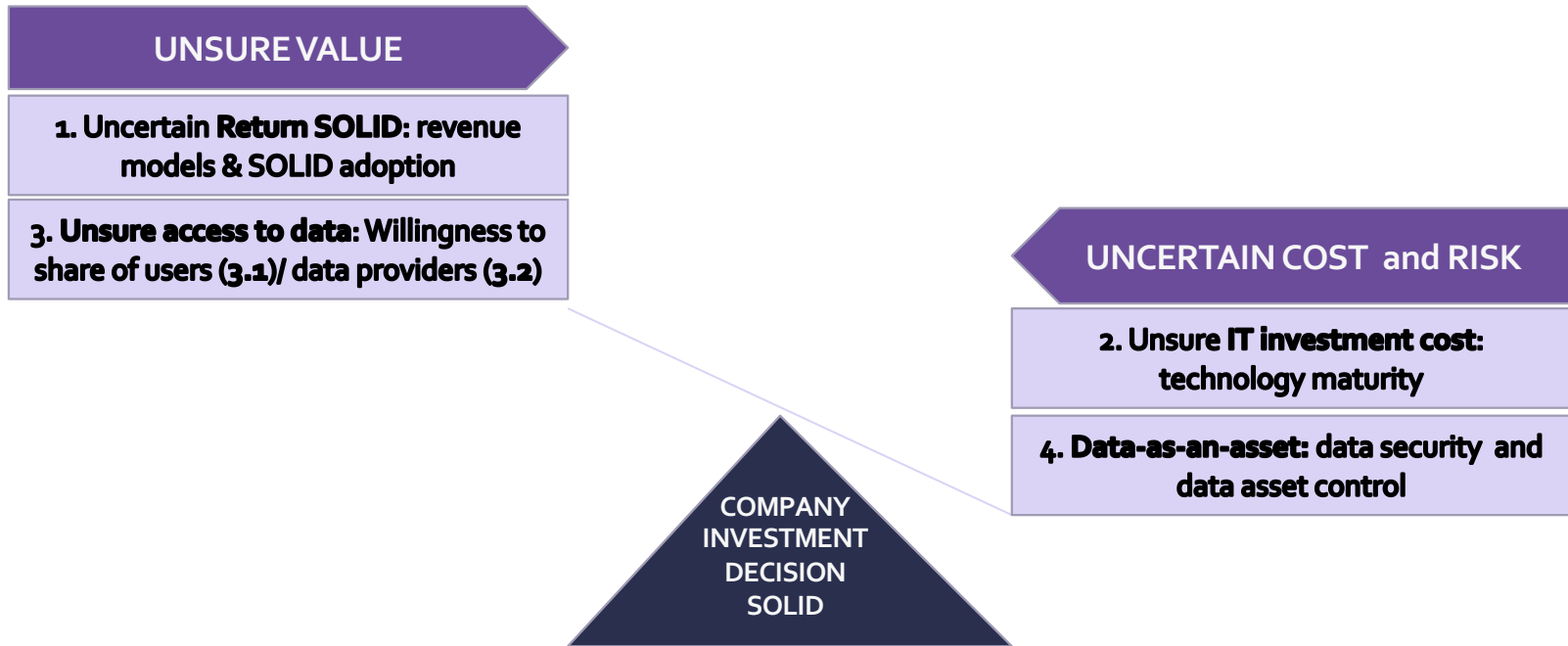
Barriers Organisations Solid Adoption

UNSURE VALUE

1. Uncertain **Return SOLID:** revenue models & SOLID adoption

3. **Unsure access to data:** Willingness to share of users (3.1)/ data providers (3.2)

UNCERTAIN COST and RISK

2. Unsure **IT investment cost:** technology maturity

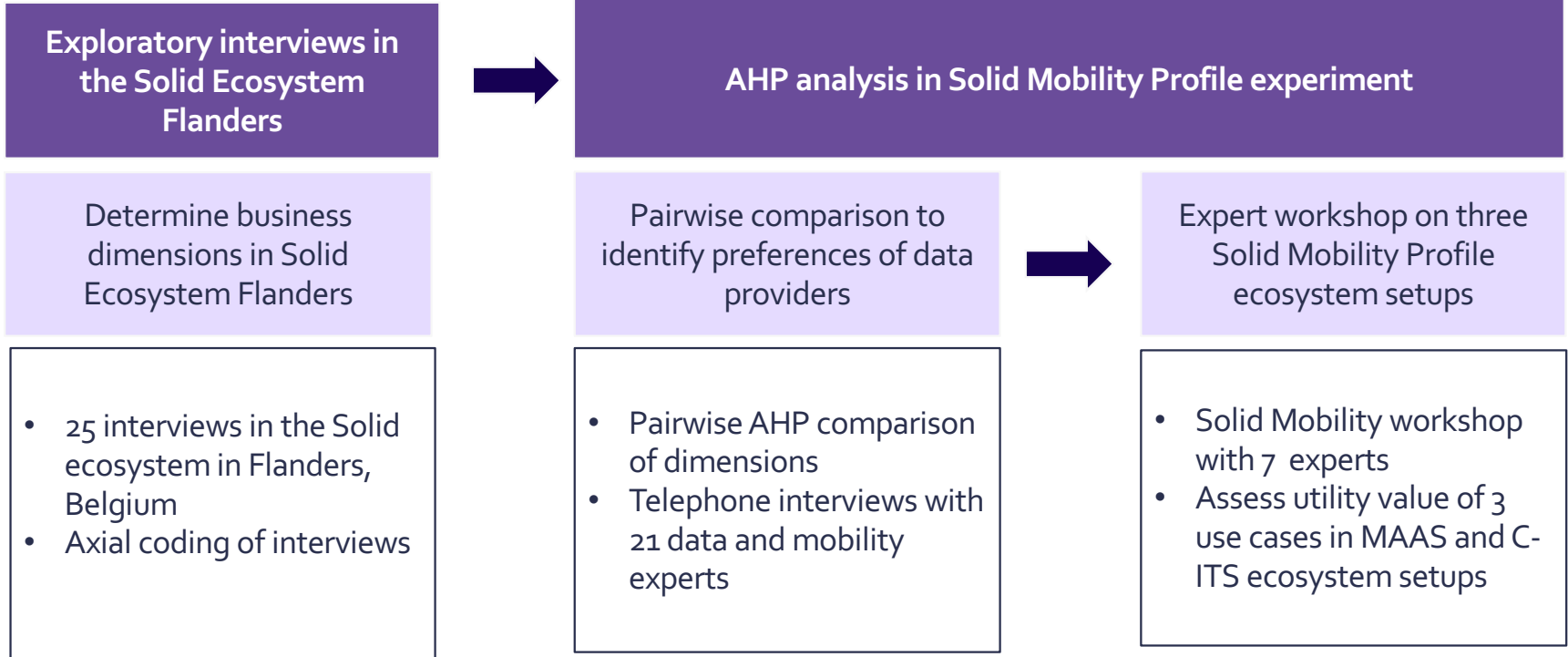4. **Data-as-an-asset:** data security and data asset control

COMPANY
INVESTMENT
DECISION
SOLID

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Research Question

- What are the **business dimensions** influencing data providers' willingness to grant access control to data subjects?

  o What are the **relative preferences of data providers** for this decision in a mobility personal data ecosystem?

  o How can these insights be applied to i**nform MAAS and C-ITS use case data ecosystem setups**?

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METHODOLOGY

Exploratory interviews in the Solid Ecosystem Flanders

AHP analysis in Solid Mobility Profile experiment

Determine business dimensions in Solid Ecosystem Flanders

Pairwise comparison to identify preferences of data providers

Expert workshop on three Solid Mobility Profile ecosystem setups

- 25 interviews in the Solid ecosystem in Flanders, Belgium
- Axial coding of interviews

- Pairwise AHP comparison of dimensions
- Telephone interviews with 21 data and mobility experts

- Solid Mobility workshop with 7 experts
- Assess utility value of 3 use cases in MAAS and C-ITS ecosystem setups

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Business (sub)Dimensions Granting Data Control

VALUE

Value Creation
- Ecosystem Value (+)
- User Value (+)

Value Capturing
- Value Capturing (+)

CONTROL

Actor Relationship
- Level of Competition (-)
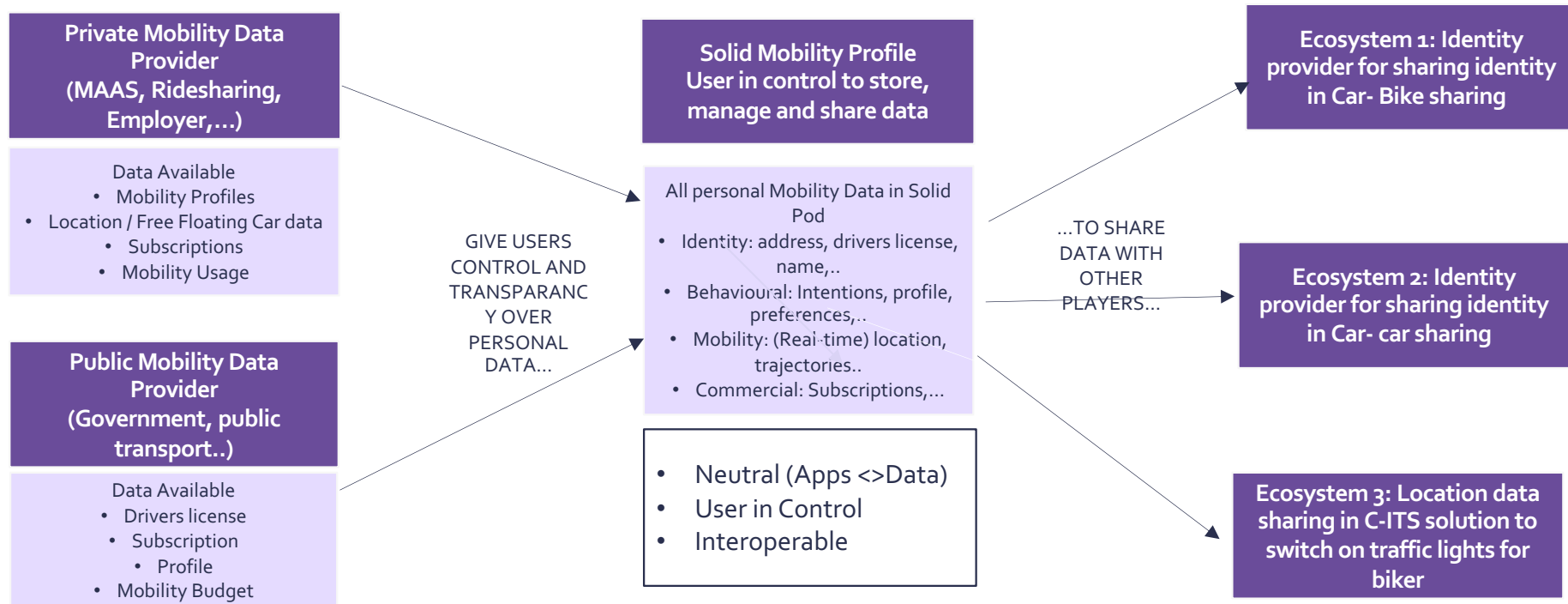- Level of Collaboration (+)

Level of Data Competitiveness
- Coreness (-)
- Level of Processing (-)

Privacy Risk
- Privacy Risk (-)

SOLID MOBILITY PROFILE

Private Mobility Data Provider (MAAS, Ridesharing, Employer,…)

Data Available
- Mobility Profiles
- Location / Free Floating Car data
- Subscriptions
- Mobility Usage

Public Mobility Data Provider (Government, public transport..)

Data Available
- Drivers license
- Subscription
- Profile
- Mobility Budget

GIVE USERS CONTROL AND TRANSPARANCY OVER PERSONAL DATA...

**Solid Mobility Profile
User in control to store, manage and share data**

All personal Mobility Data in Solid Pod
- Identity: address, drivers license, name,..
- Behavioural: Intentions, profile, preferences,..
- Mobility: (Real-time) location, trajectories..
- Commercial: Subscriptions,…

- Neutral (Apps <>Data)
- User in Control
- Interoperable

...TO SHARE DATA WITH OTHER PLAYERS...

Ecosystem 1: Identity provider for sharing identity in Car- Bike sharing

Ecosystem 2: Identity provider for sharing identity in Car- car sharing

Ecosystem 3: Location data sharing in C-ITS solution to switch on traffic lights for biker

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STATIC PREFERENCES (dimensions)

VALUE	CONTROL

Value Creation
25,96%

Value Capturing
22%

Level of Data Competitiveness
20%

Actor Relationship
17,87%

Privacy Risk
14%

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STATIC PREFERENCES (subdimensions)

VALUE 48%
Value Capturing 22,37%
End-User Value 14,8%
Ecosystem Value 11,15%

CONTROL 52%
Coreness Data 14,05%
Privacy Risk 13,98%
Level of Competition 9,49%
Level of Collaboration 8,18%
Level of Processing 5,98%

Sample: 21 respondents, Consistency Ratio 0,026

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STATIC PREFERENCES (sector difference)

MAAS	TRAFFIC DATA	AUTOMOTIVE
Value Creation 26%	Value Creation 27,5%	Actor Relationship 36,6%
Value Capturing 22%	Privacy Risk 21%	Value Capturing 22,6%
Level of Data Competitiveness 22%	Value Capturing 19%	Value Creation 17,4%
Actor Relationship 16,77%	Level of Data Competitiveness 19%	Level of Data Competitiveness 14,3%
Privacy Risk 15%	Actor Relationship 13,3%	Privacy Risk 9,1%

MAAS Sample : 12 respondents, Consistency Ratio 0,05
Traffic Data Sample : 5 respondents, Consistency Ratio 0,049
Automotive Sample : 3respondents, Consistency Ratio 0,0,096

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Orchestrator Strategies – Ecosystem set up

Dimension	Strategy	Weight
Value creation & Capturing	New revenue models Use Case development Enable reciprocity	48%
Level of data competitiveness	Trustworthy aggregators Shared control competitive data	20%
Actor Relationship	Determine which actors to include Ecosystem Collaboration Strategies Ecosystem agreements	18%
Privacy Risk	Decentralized and interoperable storage solutions	14%

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Thank you

Ruben.dhauwers@vub.be