

Work Package of PATH2ZERO: 4.2 and 4.3

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Starting date: 01.01.2024

- PhD research topic:

Technology Development and Adoption for Zero-emissions in Inland Shipping



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Part of PATH2ZERO Project:

<https://www.tudelft.nl/en/2022/citg/path2zero-transition-to-zero-emission-inland-shipping>

Problematization Within Work Package 4.3:



UN Goal for sustainable development: Revitalize strong global partnerships for sustainable development

❖ Research Question: *Why do many partnerships fail?*

Dynamic of Partnerships!



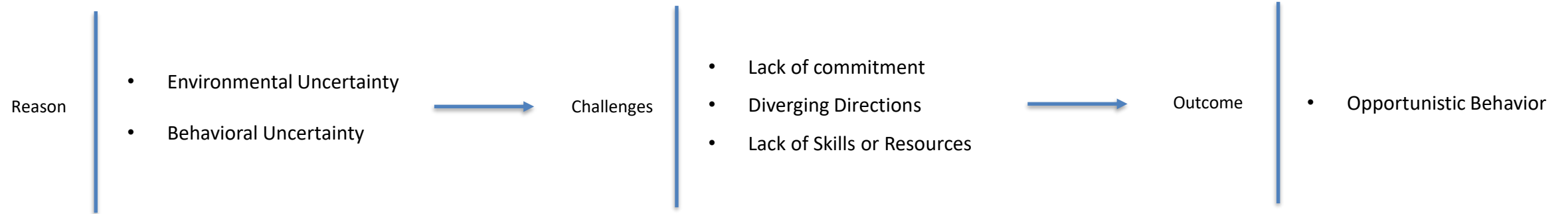
Advantages

- Complementary Skills
- Shared Responsibilities
- Increased Financial Resources
- Expanded Network
- Enhanced Credibility

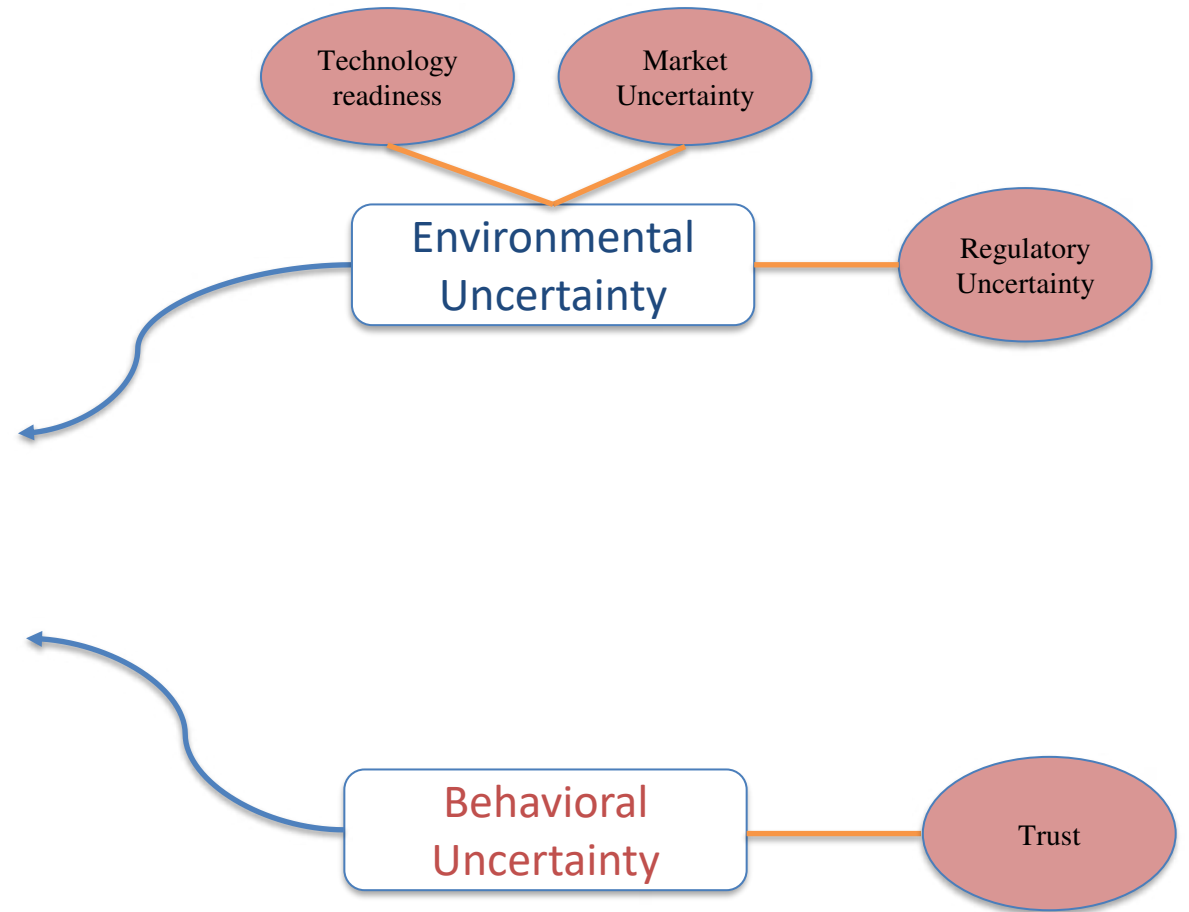
Challenges

- Lack of commitment
- Diverging Directions
- Lack of Skills or Resources

Reason Behind Failure!



Research Question-2



❖ Research Question: How do we ensure cooperative behaviour from partner(s) in the alliance?



How to Boost the cooperation:

Important Factors

- Complementary Skills
- Task interdependency
- Alliance effectiveness



Propositions

- 1.a: In an uncertain environment, high resource complementarity leads to higher investment,
- 1.b: In an uncertain environment, higher perception about alliance effectiveness leads to higher investment.

- 2.a: Under lack of trust, high resource complementarity leads to lower investment,
- 2.b: Under lack of trust, higher task interdependency leads to lower investment.

Measurement:

- ❑ Resource complementarity Measurement:

- Variety of knowledge and expertise

- ❑ Task interdependence Measurement

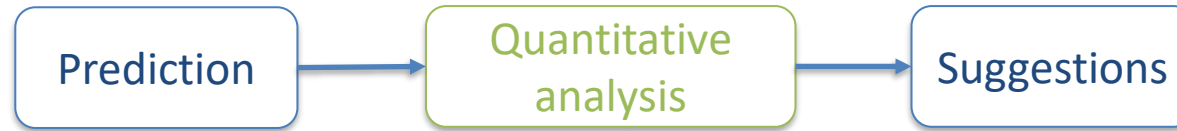
- Reciprocal Interdependence
- Sequential Interdependence
- Pooled interdependence

- ❑ Alliance effectiveness Measurement:

- Quality of resources

Analysis and Result

- Analysing 953 research and development partnerships (1962-2024).



- Result will include suggestions regarding alliance formation and formal/informal agreements among partners.

Thank you!