

Nevi Procurement Day 2022

Data-deling en transformatie binnen samenwerkende partners

Science meets practice – Deel 2

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Tilburg University

Understanding Society

Tom Aben en zijn onderzoek

SAP Fieldglass

SAP Ariba

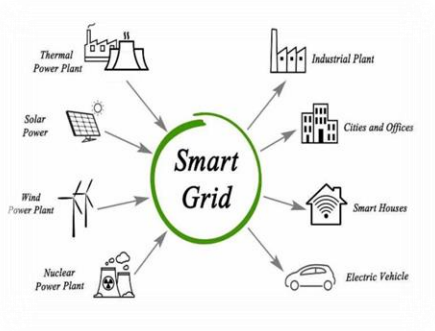


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Vertrekpunt voor vandaag

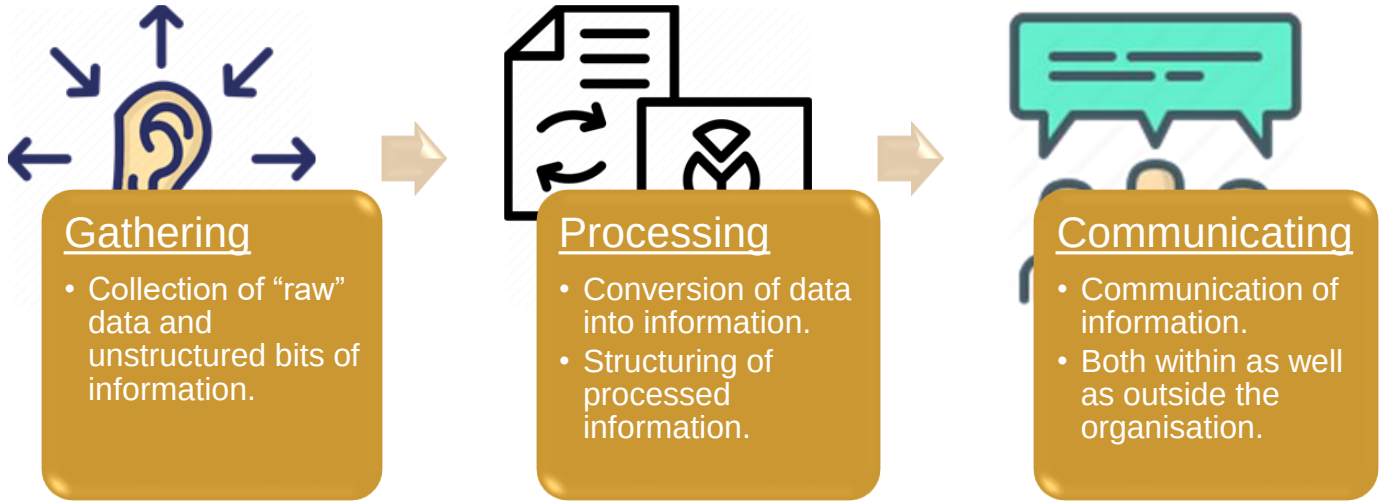
How do contractual and relational governance mechanisms address information asymmetry in public–private relationships undergoing digital transformation?

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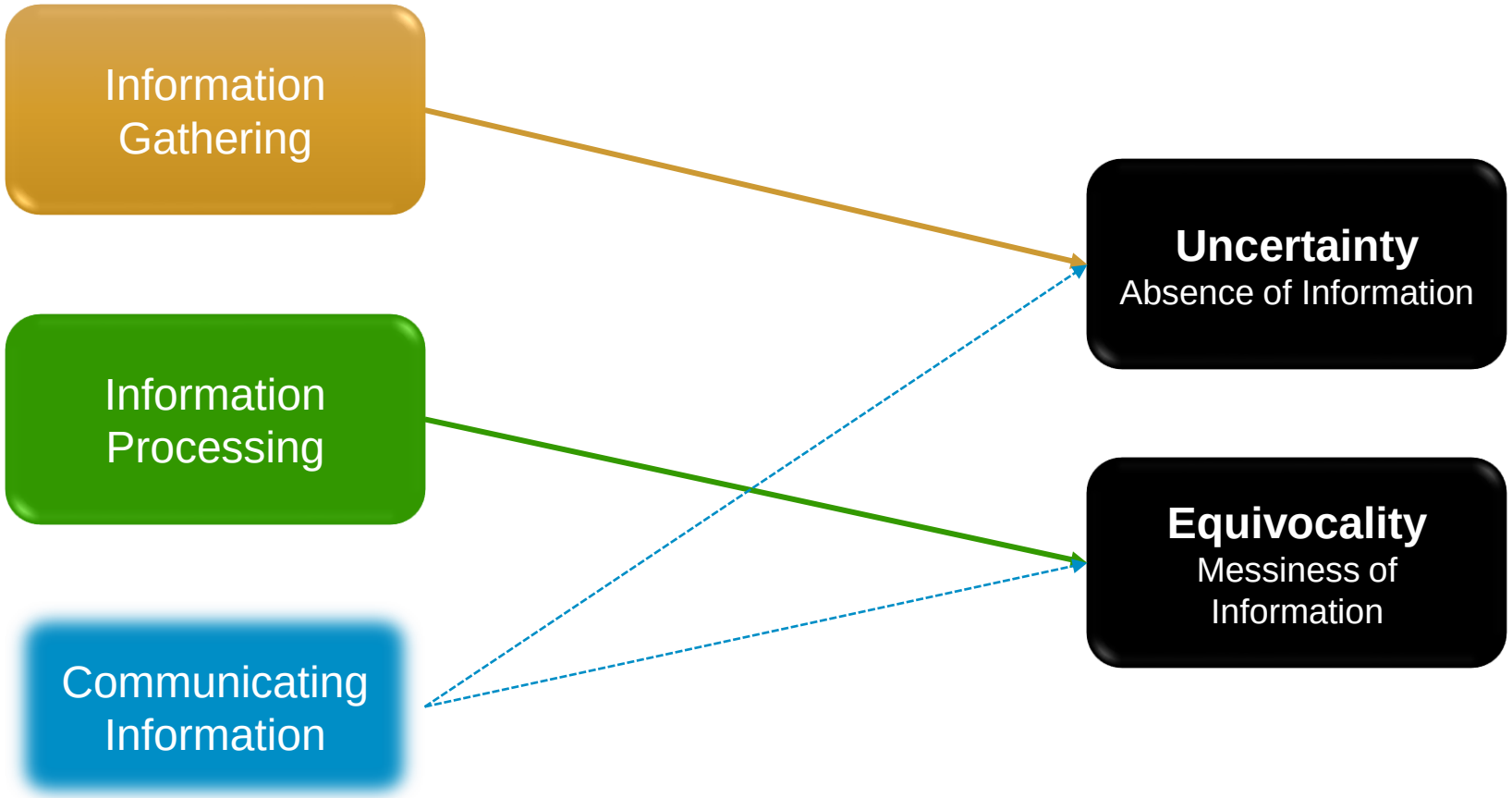
Informatie asymmetrie en informatie verwerking

- Organisational Information Processing Theory (OIPT) on information asymmetry: (Daft & Weick, 1984; Feger, 2014; Galbraith 1973)
  - Absence of information ('uncertainty')
  - Messiness of information ('equivocality')

- Three information-processing activities to address information asymmetry: (Galbraith, 1973)



Informatie verwerking vs. Asymmetrie



Samenwerken met partners

- Reliable information is crucial in IORs
  - DT provides increasing amounts of data but also poses challenges related to collection and processing!
  - Governance mechanisms might influence information-processing activities (Lumineau, 2017; Thompson, 1967)
    - However, the question remains how and when contractual and relational mechanisms need to be used…

- Contractual governance
  - Written, legally enforceable contracts (Luo, 2002)
  - Explicit rules and operating procedures (Lumineau, 2017)

- Relational governance
  - Fostering a joint approach through flexibility (Poppo et al., 2008)
  - Trust, relational norms and social processes (Inkpen & Tsang, 2005; Heide & John, 1992; Poppo & Zenger, 2002)

Voordat we verder gaan…

Hoe zouden jullie (of doen jullie) de twee verschillende informatie activiteiten organiseren in jullie samenwerkingen met partners?

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Waar heb ik onderzoek gedaan?

Exploratory Research Stage

March – September 2018

Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

Pilot interviews (8)
Site visits (10)
Secondary data (6 docs)

ProRail

In-Depth Research Stage

November 2018 – December 2019

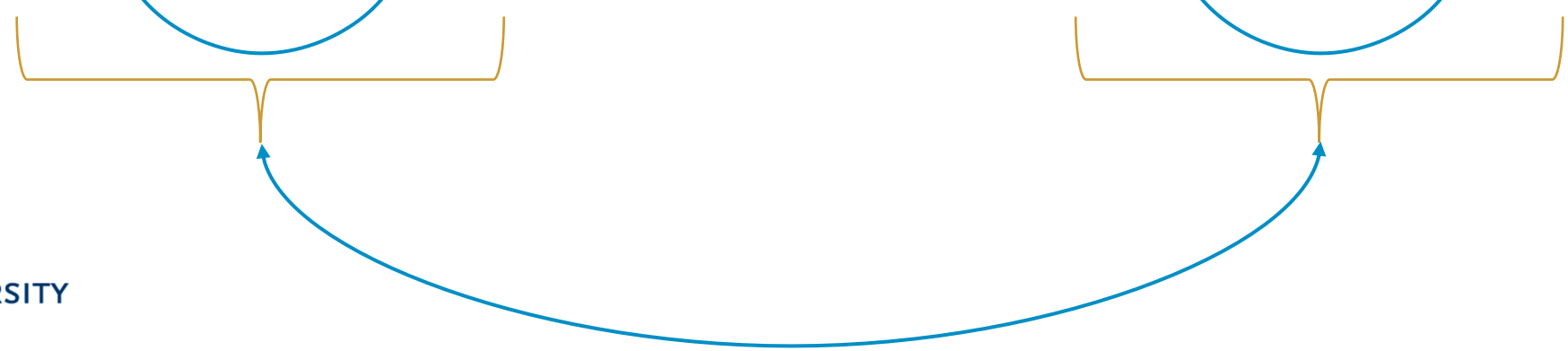
Road A

Road B

Interviews (20)
Contract Documents (973 pages)
Secondary data (19 docs)

Rail A

Rail B



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Bevindingen bij Rijkswaterstaat

- Information acquisition at Road
  - Contract stipulate that Road ‘owns’ maintenance data
  - Trust was build

- Information transformation at Road
  - Basic agreements that act as a framework
  - Focus on collaboration

“*The **contractor must deliver area data** once maintenance is completed, so that Road can perform proper management of its area*”

*“If the contractor does not want to transfer it, the contractor does not meet the contract requirements. Then you get a **penalty or even a breach of contract**”*

“*They do get a penalty, but that is sometimes **much less than what they can save if they do nothing***”

“*What does the contractor need and what do we need? That is how we collaborate. **It is no longer about point fingers to each other***”

“*The Principal **organises one or more meetings** per period to discuss the evaluation reports*”

*“What I would also like to see is that market parties **realise that by jointly working** on this type of information, they can also organise maintenance process much more efficiently”*

“*We look at the asset in the field. Is it properly maintained, and does it [the information in the system] match the current state of the asset? And that **you then assess together***”

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Bevindingen bij ProRail

- Information acquisition at Rail
  - Contract specifies the data needed
  - Almost no relational governance

- Information transformation at Rail
  - Specific transformation tasks described in contracts
  - Rail started to invest in open communication with contractor

"*There is a **certain clause in the PBC contract** that clearly states that this and this must be reported by [contractor] to [Rail], and then [Rail] must act on it*"

"*Only **enforcing it needs to tightened**, because the department that enforced it has been halved*"

"*Certain things that might put the organisation in a bad, or in a less good, daylight… the **contractor try to cover this a bit***"

"*I especially think **deviations should not be used for all that is not good**, because if you impose a deviation for everything that is incorrect, a contractor will be paid nothing*"

"*They have to **demonstrate on a monthly basis**, by means of data, that the requirements we set in the contract, **that they meet them***"

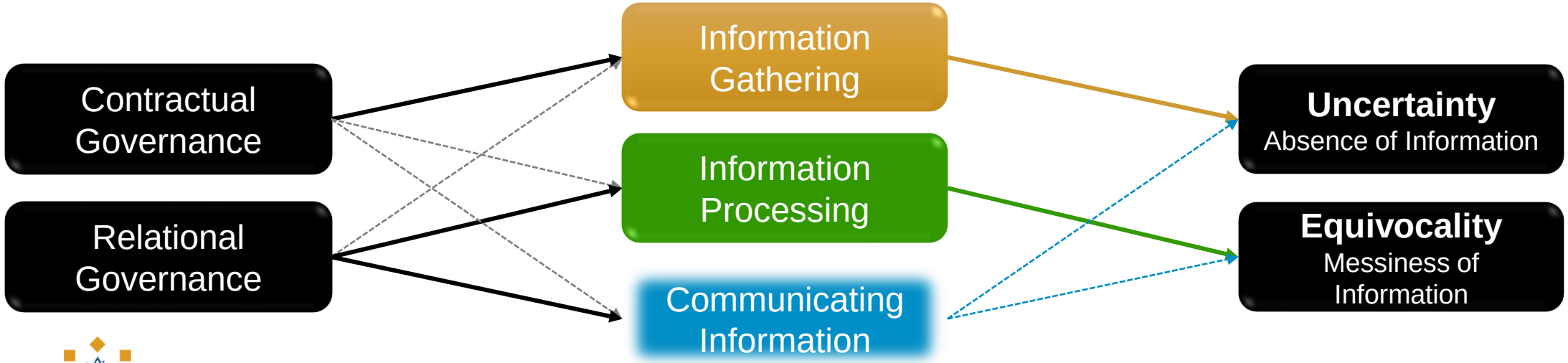
"*It is about **procedural matters**, but also just **whether the information is good***"

"*The management of such a contractor **are sent to bring a certain message**. They try to make things more beautiful than that they are*"

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Samenvattend

	Rijkswaterstaat	ProRail
Level of Uncertainty	Medium to high • Current contractual agreements too vague or incomplete • Difficulty with determining its data needs	Low • Strict control on gathering data and information • Collects a lot of data by itself. • Clear contractual agreements
Level of Equivocality	Low • Focus on collaboration • Common interpretation • Difficulty with determining information needs	High • Focus on its in-house capabilities • Verification of incoming data insufficient • Difficulty with determining information needs



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Implicaties voor de praktijk

- Availability of information is not the problem…
  - Access to the right information is the challenge!

- Transformation of information is a challenge…
  - Organisations should first determine the different information needs!

- Governance mechanisms needed to manage data processing activities:
  - Information gathering → Contractual control supported by trust
    - Clear agreements that stipulate the explicit information gathering and sharing activities
    - Proving that data is used for improvements rather than ‘punishing’ each other
  - Information transformation & dissemination → Relational governance mechanisms
    - Collaboration, trust and joint goal setting supports information transformation and dissemination activities
    - Contract mainly provides a basic agreement

Vragen?

- Contact details:

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- Verder lezen?
  - Aben, T.A.E., Van der Valk, W., Roehrich, J.K., & Selviaridis, K. (2021). Managing information asymmetry in public-private relationships undergoing a digital transformation: The role of contractual and relational governance. *International Journal of Operations & Production Management, 41*(7), 1145-1191.
  - Aben, T.A.E. (2021). Digitale transformatie en het uitbesteden van onderhoud: Hoe de infrabeheerders samen met de aannemers de informatie asymmetrie kunnen terugdringen. *NGinfraMagazine, 10*(1), 44-46.

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