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Physical Internet: Stakeholders Mapping

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Physical Internet (π)

- is “a global logistics system based on the interconnection of logistics networks by standardised set of collaboration protocols, modular containers and smart interfaces for increased efficiency and sustainability.” (Ballot et al., 2014, loc. 555).

Stakeholder

- “is an individual or group influenced by — and with an ability to significantly impact (either directly or indirectly) — the topical area of interest” (Engi & Glicken, 1995, p. 11).

- Industry stakeholders are important to strategic implementation of π (Alice, 2015)
 - Providers
 - Enablers
 - Users

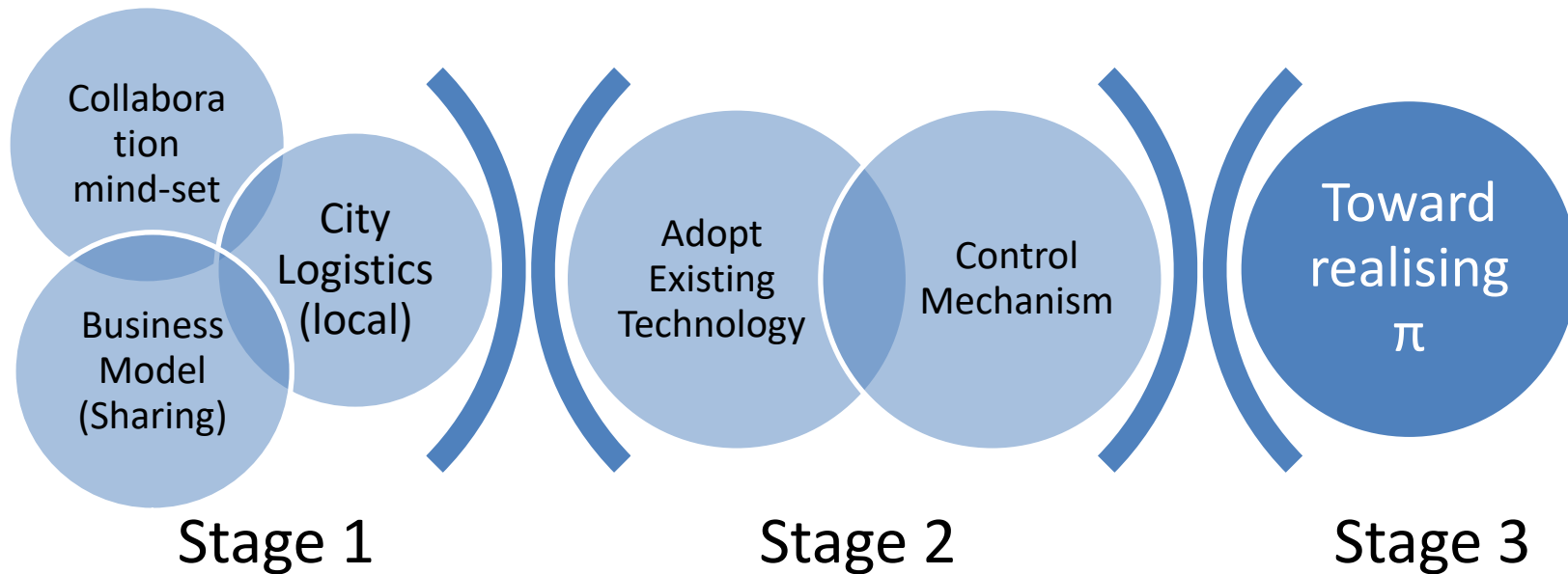
(Crainic & Montreuil, 2016)

- Nature of their business models is more private than collaborative.

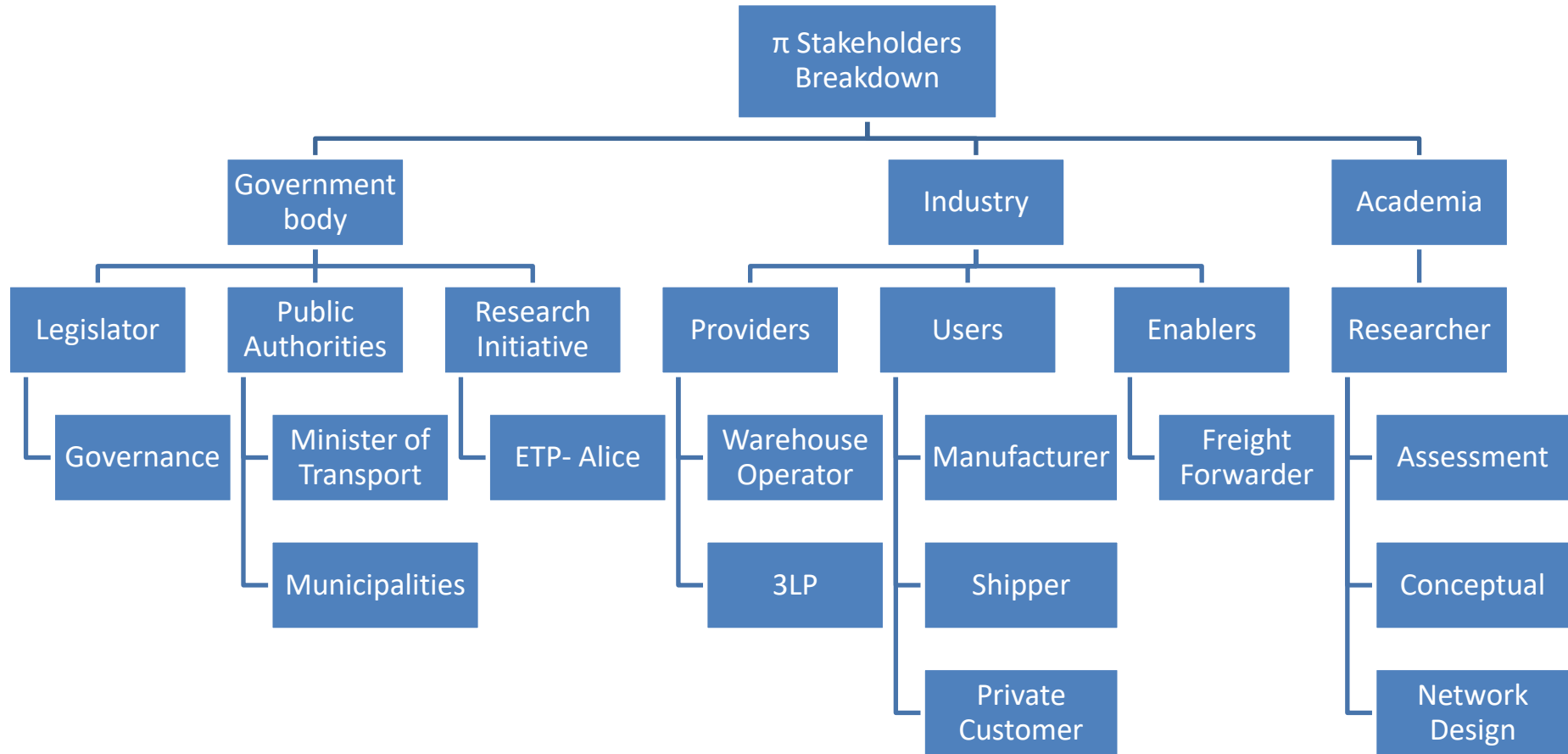
- Sternberg and Norrman (2017) argue that most of π publications assume that commercial stakeholders will act rationally in the favour of themselves or follow a central optimisation that would benefit their rivals as well.

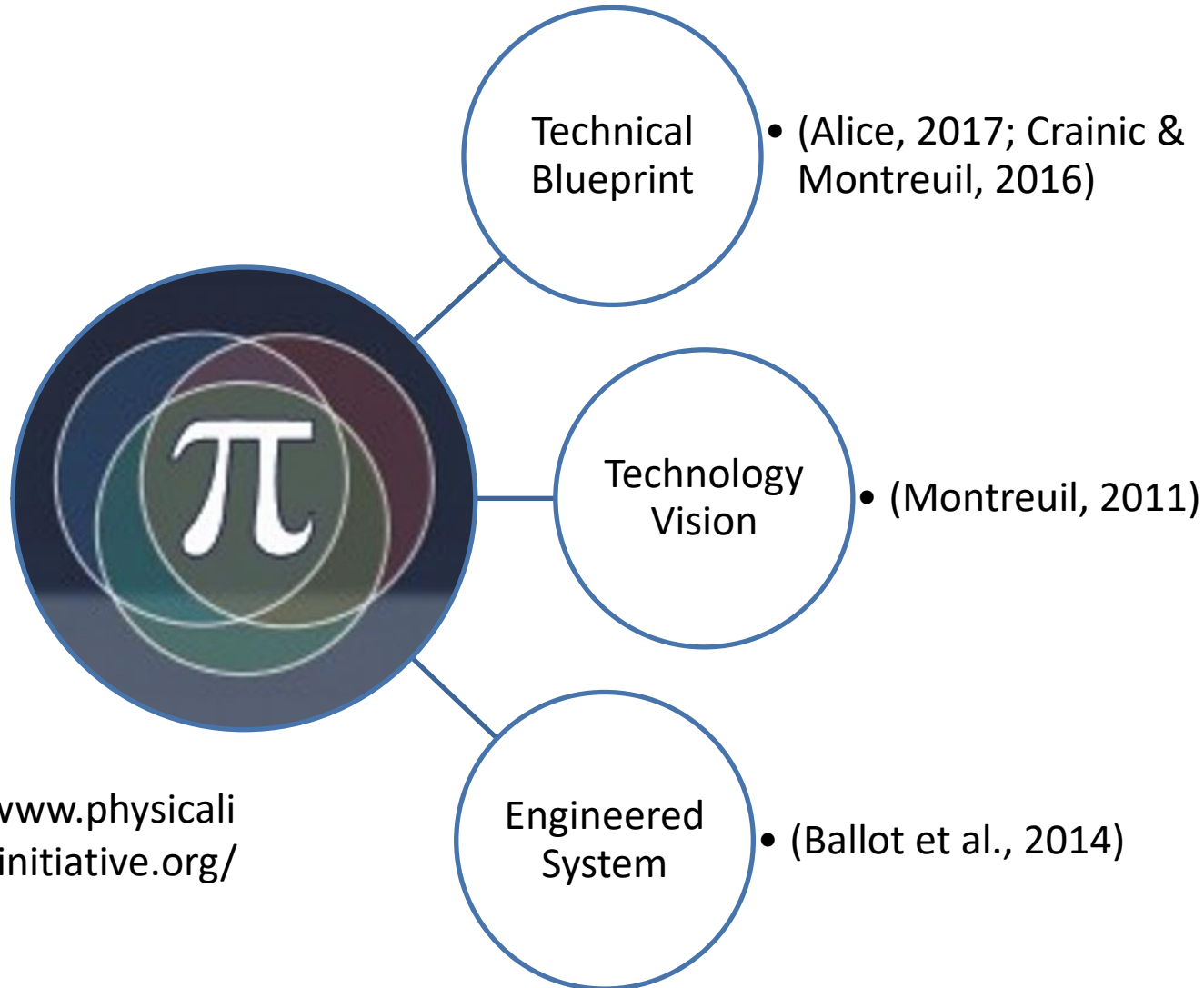
- Legislator as governance of π (Cimon, 2014; Crainic & Montreuil, 2016)

- ETP-Alice (European Technology Platform - Alliance for Logistics Innovation through Collaboration in Europe) Roadmap (Alice, 2017)



Based on interview with Prof. Dr. J. Rod Franklin conducted by (Shaposhnikova, 2017)
<http://transmetrics.eu/blog/interview-with-prof-rod-franklin-physical-internet-shaping-the-future-of-global-logistics/>



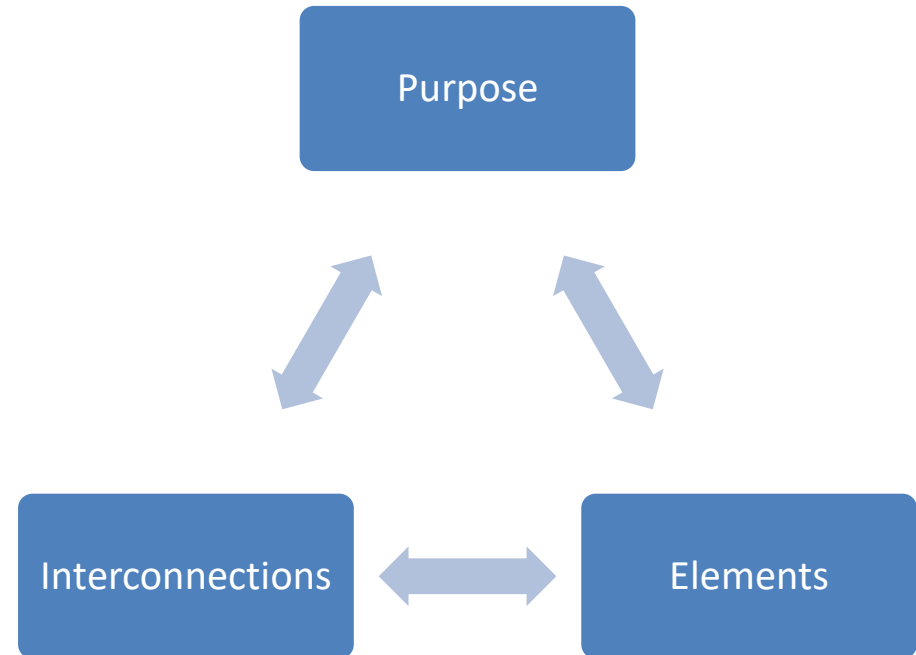


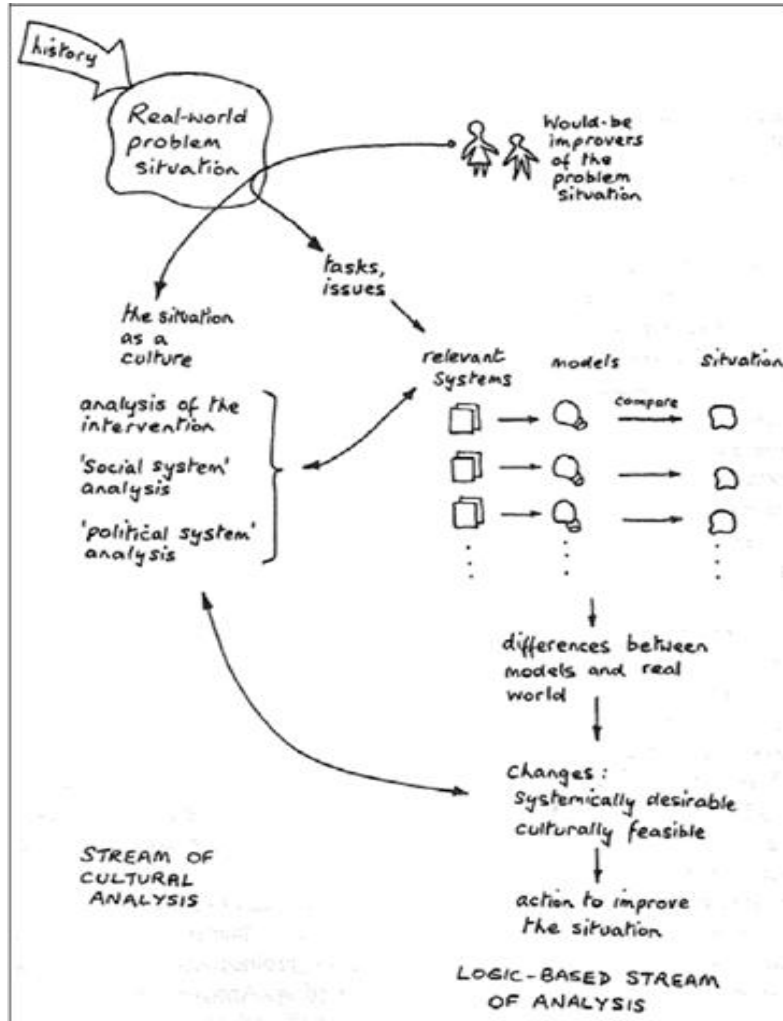
<http://www.physicalinternetinitiative.org/>

System Test

➤ Following systems approach adopted in
(Mourhrib et al., 2018)

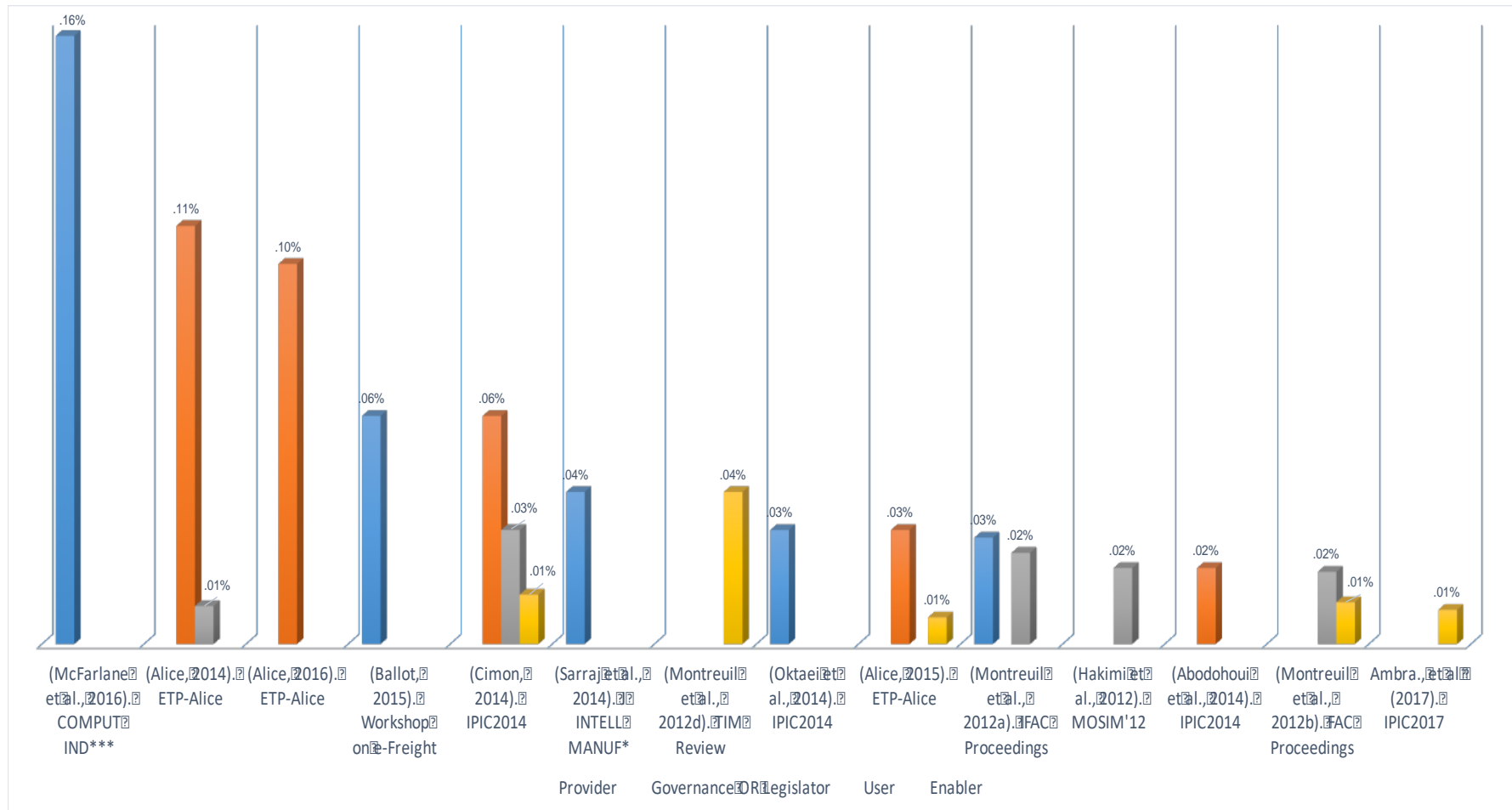
- Control Mechanism as Interconnections
- π hubs, π modular boxes as elements
- Global optimization of logistics process as purpose



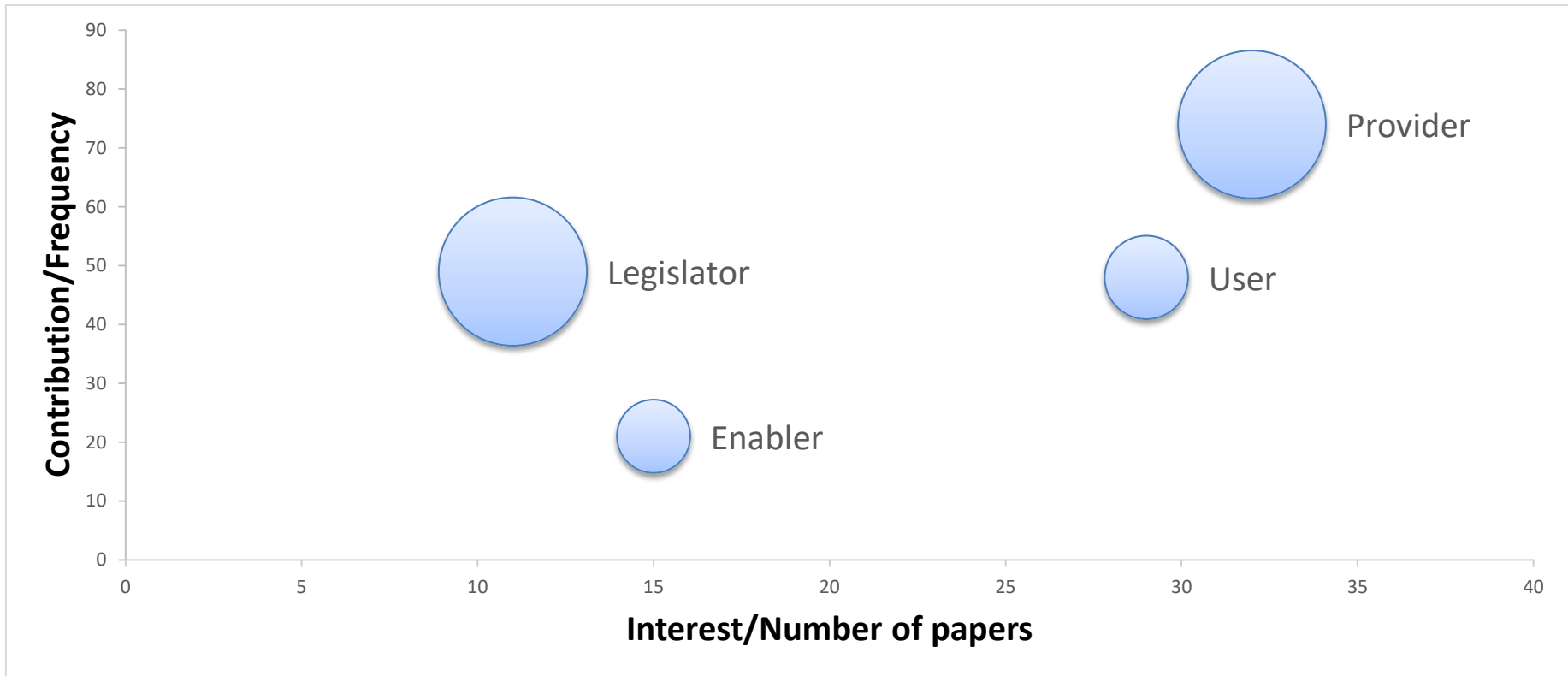


(Checkland, 1999)

- Alternative to hard system methodology
- Solve issues that involve subjective views
- Systems Thinking vs Real World

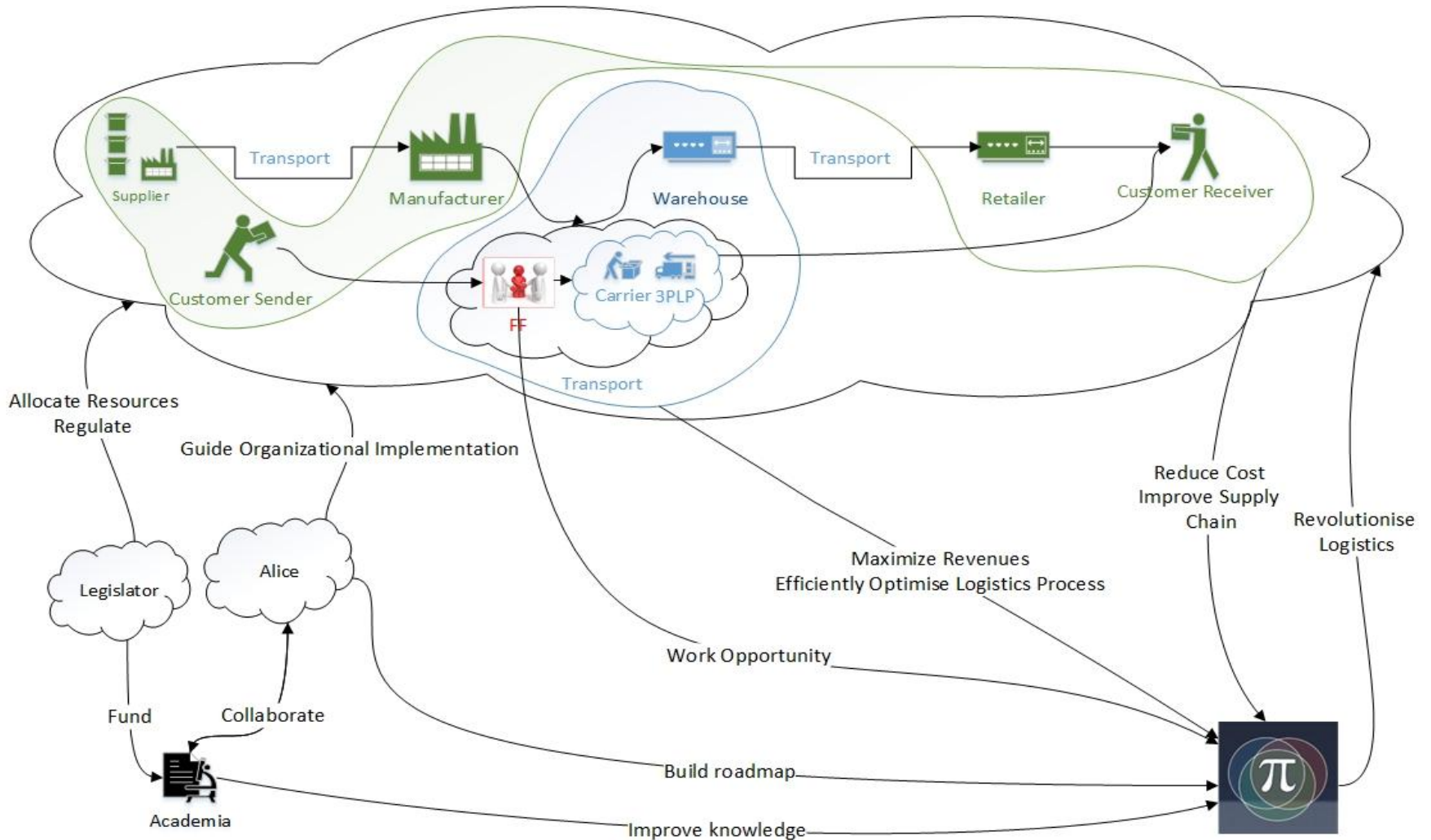


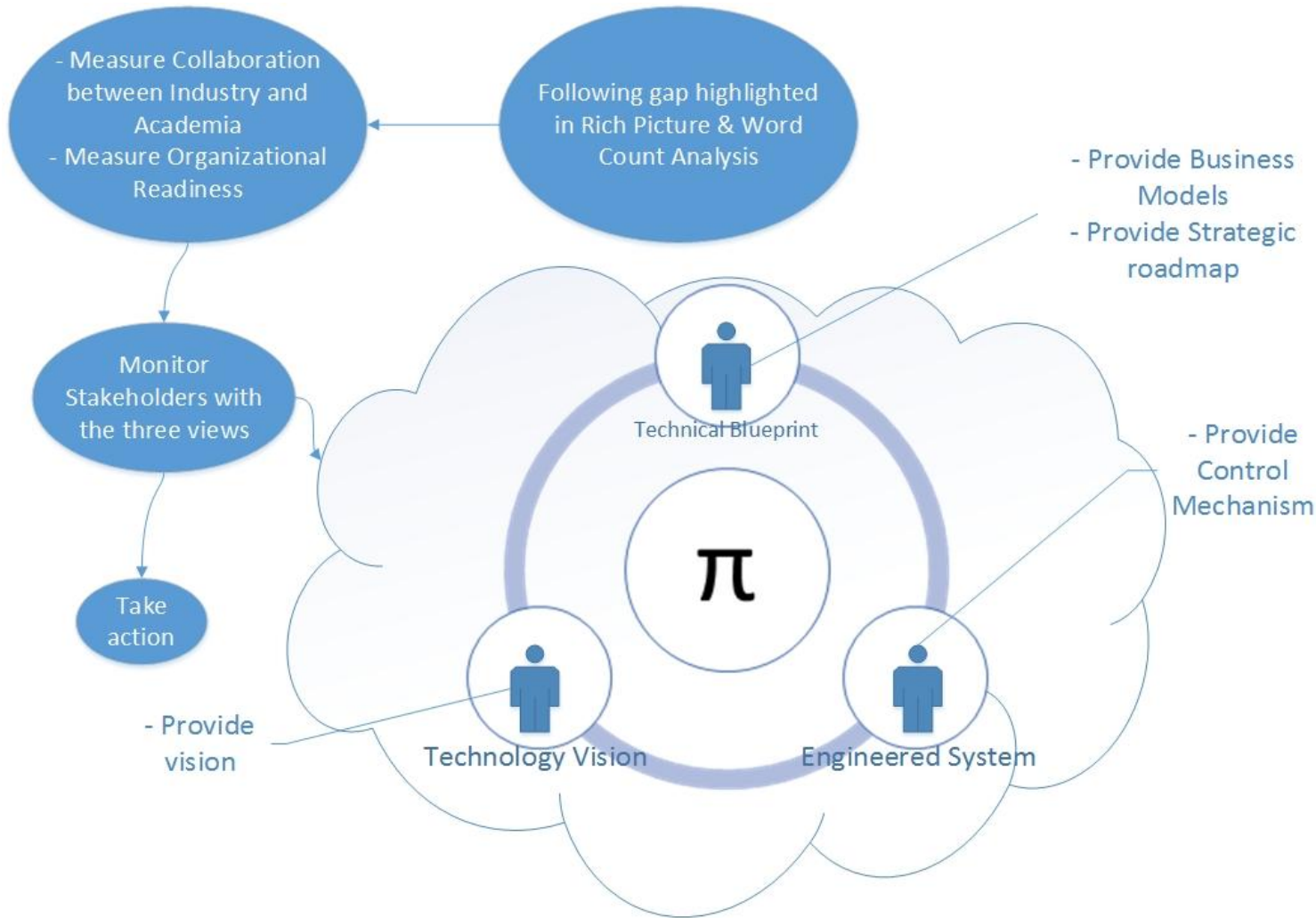
➤ Percentage coverage = average percentage of characters coded and page area



(Adapted from Mendelow, 1981)

- Interest refer r to how many papers have mentioned the stakeholder term
- Contribution refer to how many times term was repeated
- Size of the stakeholder = Average of the percentage coverage of the top 5 counted sources





➤ Where Enablers & Users fit?

➤ How the three stakeholders work together towards implementation of π ?

- Consensus about π views between its key stakeholder is reached by
 - Categorisation of π key stakeholders
 - Measuring their interest and contributions
 - Advocating a circular flow of knowledge between them using SSM
- ➔ A Consensus is one important challenge to the implementation of π .
- Future research should be
 - Synergies between logistics, government, and governance of innovative technology such IoT.
 - Importance of Enablers
 - Qualitative Data with SSM

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Thank you for your Attention

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