Governance in smart cities' mobility systems: a responsible framework for smart universities campuses in France and Brazil

Laboratoire Génie Industriel

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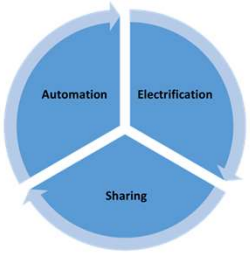
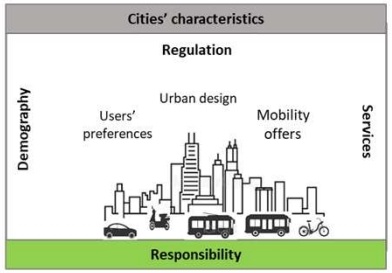
online version

Project's overview and definitions

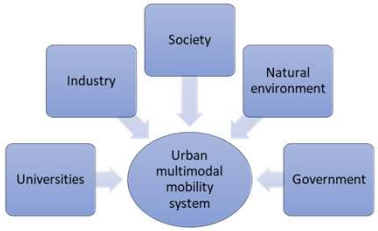
1 Innovation in urban mobility is related to three trends that are characterized as revolutions [1]



2 Specific characteristics of a city must be considered to promote these innovations in a responsible manner.

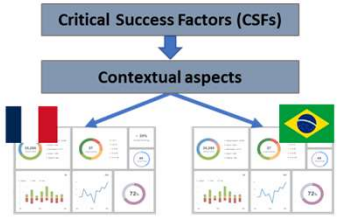


3 Different stakeholders are involved. These are related to the Quintuple Helix Model [2]



4 To manage this scenario is required a governance system. This will be based on a responsible innovation approach.

5 Dashboard for the governance of responsible urban mobility systems considering the contexts of university campuses in Brazil and France as urban cutouts.



Which critical elements should be considered in a governance system that results in a responsible urban mobility system?

To propose and apply a dashboard for the governance of a mobility innovation system oriented by responsibility taking universities' campuses in Brazil and France as urban systems cutouts.

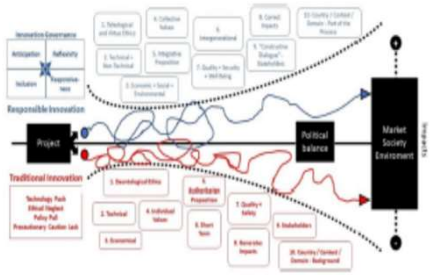
Conceptualize responsible urban mobility systems based on governance definitions	Identify Critical Success Factors (CSFs) and propose a dashboard model as a tool for the governance of a mobility system oriented by responsibility, using the context of universities' campuses in Brazil and France as urban systems cutouts	To characterize and discuss the concept of governance of a responsible mobility system by the measurement of Key Performance Indicators (KPIs) expressed in the proposed dashboard.

Preliminary results

"A conceptual proposal for Responsible Innovation"

EGOVIS Proceedings 2020 (International Conference on Electronic Government and the Information Systems Perspective).

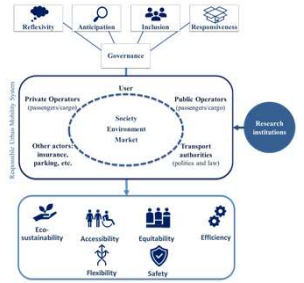
Contribution: A theoretical framework was proposed to fill the gaps in the Responsible Innovation concept, comparing its perspectives with a traditional innovation, establishing a concept capable of yielding the expected benefits.



"Responsible urban mobility systems from a governance approach"

Submitted to ACIEK 2021 (Academy of Innovation, Entrepreneurship, and Knowledge Conference)

Contribution: A responsible mobility system is resulted from a governance system based on the RI's premises [3], being founded by technical and non-technical principles in a contextualized manner, resulting in eco-sustainability, accessibility, efficiency, accessibility, equitability, and safety.



Expected results

It is expected to provide insights to larger/complex realities such as cities. The dashboard can allow and support:

- Benchmarks: indicators guiding decision making to draw attention to positive and negative results (critical factors). To analyze the practices, it is essential to highlight contextual specificity.
- Solutions' search: the bottlenecks' identification enabling actions' definitions that result in cohesive and appropriate solutions;
- Decision-making process (suitable governance model).

References

[1] Sperling, D. (2018). *Three revolutions: steering automated, shared, and electric vehicles to a better future*. Island Press.

[2] Carayannis, E. G. & Campbell, D.F. (2010) Triple Helix, Quadruple Helix and Quintuple Helix and how do knowledge, innovation and the environment relate to each other? A proposed framework for a trans-disciplinary analysis of sustainable development and social ecology. *International Journal of Social Ecology and Sustainable Development*; 1 (1), 41–69.

[3] Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. *Research Policy*, 42(9), 1568-1580.

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