Expanding the reach of active mobility through the promotion of sustainable transport and inclusive infrastructure development in the living lab of the University City of Federal University of Rio de Janeiro

Session 8: Track 5. Triple Helix Model in Practice around the world – Implementing the Triple Helix Model for Real World Impact

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TRIPLEHELIX association   ACEEU   USP

Introduction

Project: Expanding the reach of active mobility in the living lab of University City of UFRJ.

2021	2022	2022	2023	2024
• FAPERJ call for urban mobility projects	• Begning of the project operation in october	• Diagnosis of the first challenges and adequation of the operation	• Operation with the new model and data collection	• Begning of the data analysis after 1 year of operation
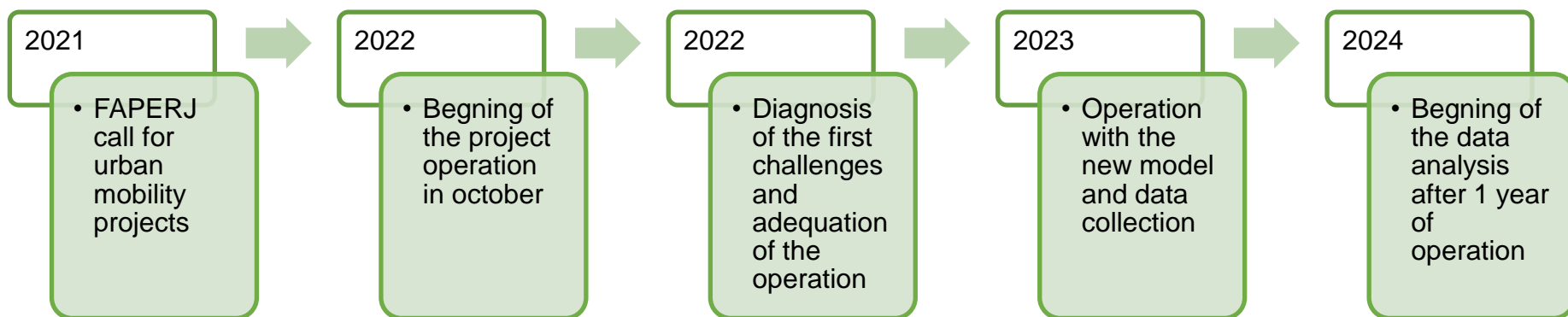
In Brazil, the Federal University of Rio de Janeiro plays a leading role, for this reason, a living urban laboratory was established, for the implementation of an active and sustainable mobility project through a *dockless* system of shared bicycles, prioritizing the social point of view in the measures implemented on campus.

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Introduction

Figure 1: Logo of the Project Integra UFRJ.

Source: Authors.

Figure 2: Photo of the bicycle.


Source: Authors.

Figure 3: App interface.

Source: Authors.

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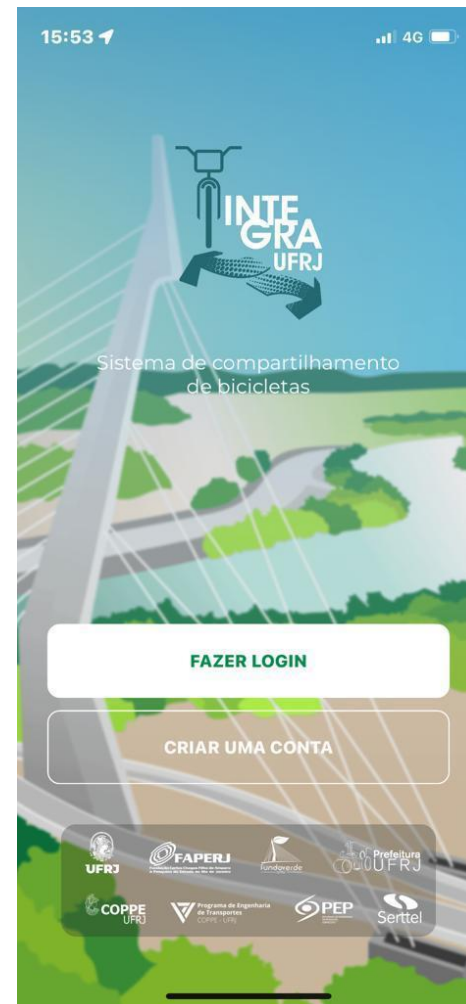
Purpose

The pilot project in the living lab of the Federal University of Rio de Janeiro aims to promote active and sustainable mobility in the area, through the implementation of a bicycle-sharing system without the need for fixed stations. The project includes developing and evaluating the system in a controlled environment, intending to identify problems and opportunities before its full-scale implementation.

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Methodology

The study, through an evaluation of the practical project, is intended to discuss the identification of opportunities, user acceptance, challenges and critical issues for the use of bike sharing-systems, and the promotion of active mobility to achieve the Sustainable Development Goals, especially the 9 and 11.
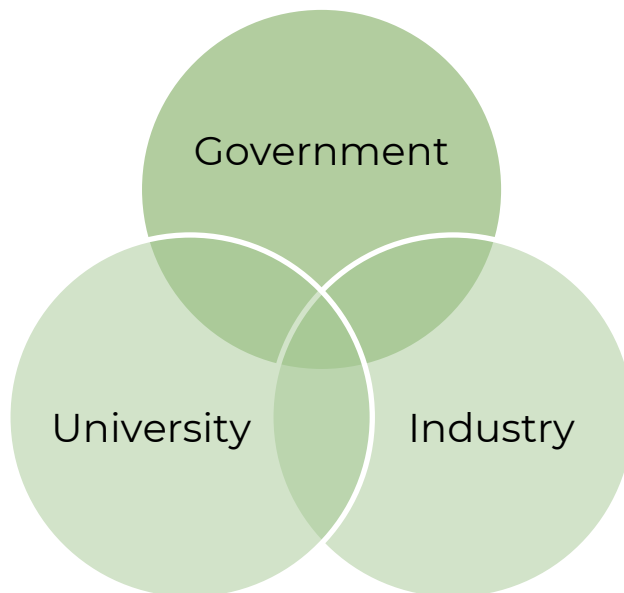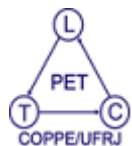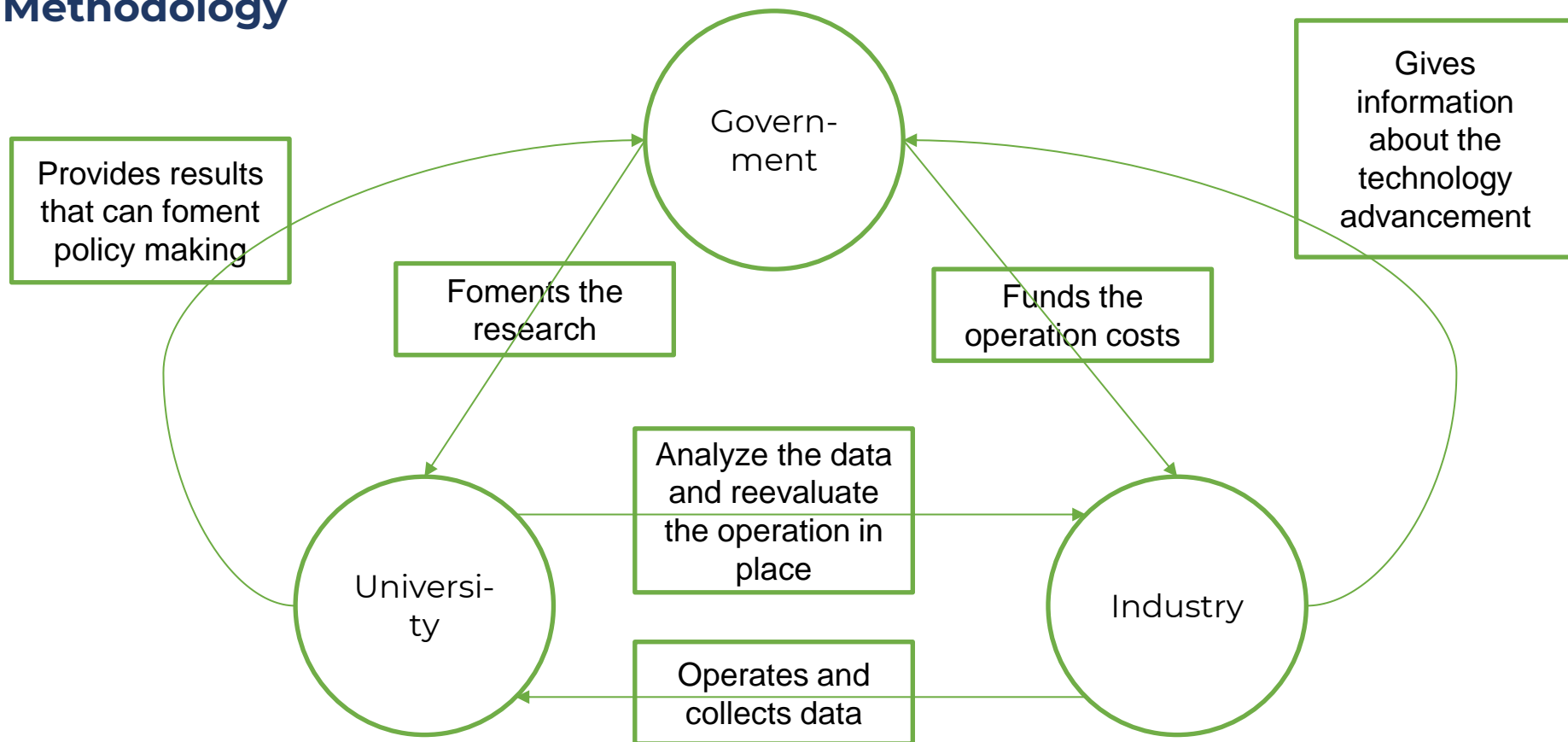

Funding of the projtect

Research and analysis of the operating system

Company that provide the system and bicycles

Government

University

Industry

Methodology

Government

University

Industry

Provides results that can foment policy making

Gives information about the technology advancement

Foments the research

Funds the operation costs

Analyze the data and reevaluate the operation in place

Operates and collects data

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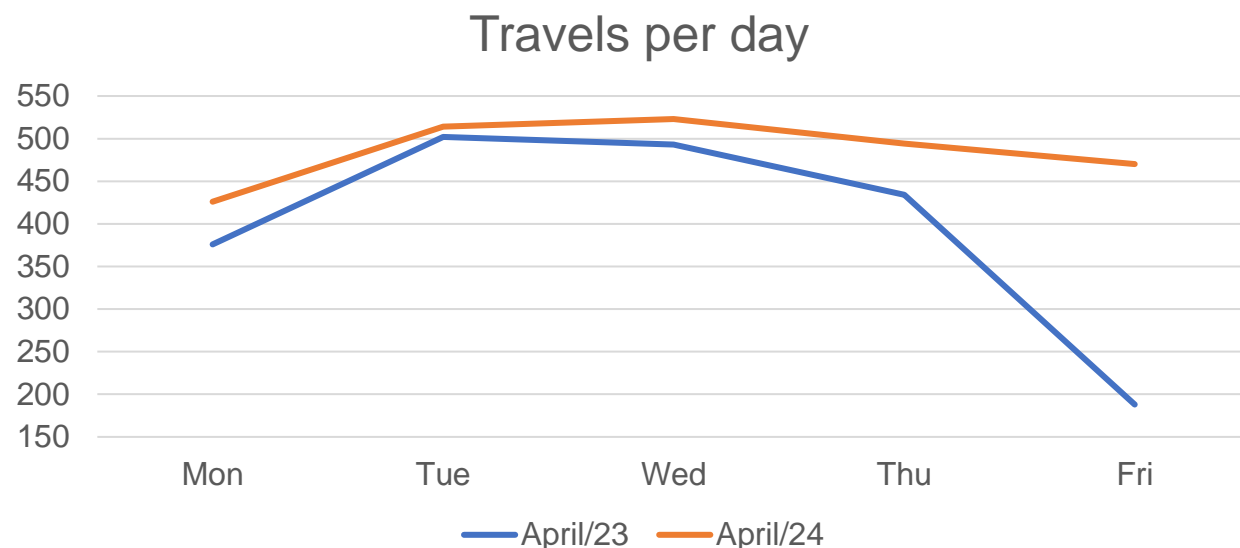
Findings and expected outcomes

The results show that the system has been successful in promoting active and sustainable mobility, but also points to some areas for improvement, such as the need to improve the usability and availability of bicycles. The project has been carried out with the collaboration of the university community and was designed as an experimental environment to assess the viability and adaptability of the system in the urban context of University City.

Travels per day

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Findings and expected outcomes

Achieve a decrease in the use of motor vehicles to short distances within the campus to contribute to a more sustainable and healthier environment for the society that circulates in University City. In addition to stimulating the integration between means of transportation to improve access within the travel generating hubs areas of the University City, in this way, promoting active transport and improving means of transport availability for the users. Between the challenges faced during the implementation of the projects the main one was the security of the vehicle, so the solution to reduce the risks of theft was the creation of areas for virtual dock stations in the campus, furthermore there were some adjustments made between the needs company providing the service and academic research group for the co-creation of the operating system.

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Future research and limitations

One of the main limitations of this project is that the geographic location of the university, being an island with limited access, including the lack of multimodality and with difficult transport integration, leads to very specific characteristics that cannot easily be found in other universities cities, which leads to a need to apply the bike sharing-system in other scenarios for a better understanding of its replicability.

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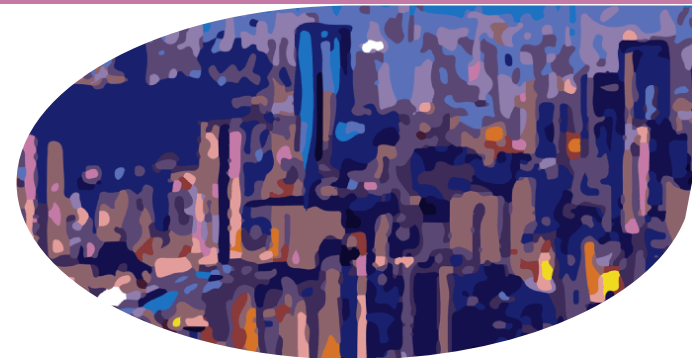
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