The TRIPS project

Co-production of knowledge for designing inclusive digital mobility solutions – the methodological approach and process

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Agenda

- Transformation of the transport system
- Project objectives
- Fact sheet of the project
- Methodology
- Phase 1 – Prepare
- Phase 2 – Co-product
- Next steps
Transformation of the transport system

• The transport system is currently undergoing a rapid transformation with new mobility models (e.g. vehicle sharing schemes) and transport-related digital solutions (e.g. Augmented Reality) emerging at an increasingly pace.

• This is an opportune moment to design future mobility systems to be more inclusive from the very beginning.

• Participatory approaches are a promising way to engage users with access needs to become active participants in open innovation.
Project objectives

**Objective 1**
Understand disabled citizens’ divergent needs and attitudes towards future mobility as a means for designing inclusive mobility solutions.

**Objective 2**
Review the state of the art and future trends in mobility, assistive technologies and digital trends relating to mobility to identify gaps.

**Objective 3**
Develop and test a Co-design-for-All methodology to enable equal access to open innovation to all citizens.

**Objective 4**
Engage disabled citizens and institutional actors in developing policy recommendations, research priorities and an industry roadmap.
Fact sheet of the project

- TRIPS stands for TRansport Innovation for vulnerable-to-exclusion People needs Satisfaction
- 10 partners and 7 European cities are engaged in the project
- The project is funded for 3 years (02/20 – 01/23) by the EU
Methodology

1. Identification of barriers and derivation of user requirements
2. Review of mobility trends, assistive systems, information and communication
3. Assessment of inclusive mobility challenges and creation of the Mobility Divide Index
4. Development and application of Co-design-for-All methodology
5. Case study pilots
6. Policy and industry recommendations
Methodology

1. Identification of barriers and derivation of user requirements
2. Review of mobility trends, assistive systems and digital technology
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5. Case study pilots
6. Policy and industry recommendations
Methodology

The project develops and applies a participatory approach that aims to …

• co-product knowledge on existing barriers in transport
• co-create solutions for making transport more accessible
• co-evaluate the resulting prototypes and services in the seven cities
Methodology

• The methodology of the TRIPS project can be described in four phases of collaborative work

**Phase 1: Prepare**
- Team building
- Role definition
- Challenge description
- Common task definition
- Capacity building

**Phase 2: Co-Produce**
- Local challenge definition
- Stakeholder involvement
- Qualitative and quantitative user-led research

**Phase 3: Co-Create**
- Method development
- Co-creation workshops
- Stakeholder management
- Development of priorities and roadmap

**Phase 4: Co-Evaluate**
- Pilot team building
- User-centered testing and evaluation
- Derivation of recommendations
Phase 1 - Prepare

• Forming of local working groups of 10-15 people, including persons with different access needs, transport providers and representatives of city municipality

• Coordination by European Network on Independent Living (ENIL)

• Nomination of Local User Lead (LUL) for each working group

• Preparation of a document for a joint understanding of co-production in practice.

Picture: Local working groups and LUL in the seven cities coordinated by ENIL
Phase 2- Co-produce

Social media content analysis

= a method to analyze social media content that serves as a barometer for attitudes and opinions (Lai & To, 2015)

• used to identify barriers that people with access needs face before, during and after their travelling with public transport

• 30 entries per city were researched by Local User Leads of working groups

Upper picture: Instagram post from Sofia showing stairs and a ramp
Lower picture: seven categories of barriers from social media content analysis
Phase 2- Co-produce

Interview study

• 7 disabled citizens per city ($N = 49$)

• Conducted to acquire in-depth information and insights concerning the knowledge and opinions of the interviewees

• Interview guidelines were prepared together with Local User Lead (LUL) based on open semi-structured questions regarding the four topics: 1) choice behavior 2) barriers, 3) assistance and 4) participation

• Interviews were conducted by LULs by phone or video chat
Next steps

In the upcoming months and years, we will ...

• ... conduct a survey study that aims for > 500 respondents from all over Europe

• ... develop and apply of a Co-design-for-All methodology for equal participation of persons with disabilities in open innovation

• ... develop the Mobility Divide Index (MDI) based on a set of comparable indicators to propose a new, user-centric standard available for researchers, policy makers and transport providers
Conclusions

The TRIPS project will help policy-makers to design appropriate regulatory frameworks by creating a comprehensive roadmap that distils the project’s findings into recommendations for policy-makers, transport authorities, regional authorities and operators.

The project will empower people with disabilities to play a central role in the design of inclusive digital mobility solutions.

TRIPS puts forward a co-design approach that underpins Mandate 473: *Design for All* to eliminate discrimination and improve *Access for All* to mobility services (European Commission, 2020).
Questions?

For more information please visit: https://trips-project.eu/

References:


Thank you for your attention

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