

# Mobility and digital transformation

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# Megachanges in digital mobility

Technological transformation



World Connectivity



New mobility modes



Social changes



Data



# Barcelona's ATM digital agenda

Pushing for incorporating innovation and digitalisation in all mobility modes

- T-Mobilitat Project
- P&R digital information
- LEZ platform
- Mobility observatory
- Maas project
- Multimodal mobility digital services



## Barcelona's ATM challenges:

Many actors in a bottom – up digitalization

Lack of mobility Data specifications

Complexity of some of the projects

Human resources training

Dealing with the aftermath of the pandemic

Financing in stormy times

**Teaming up  
and Learning from  
other organizations**



# Digital ticketing as a key tool

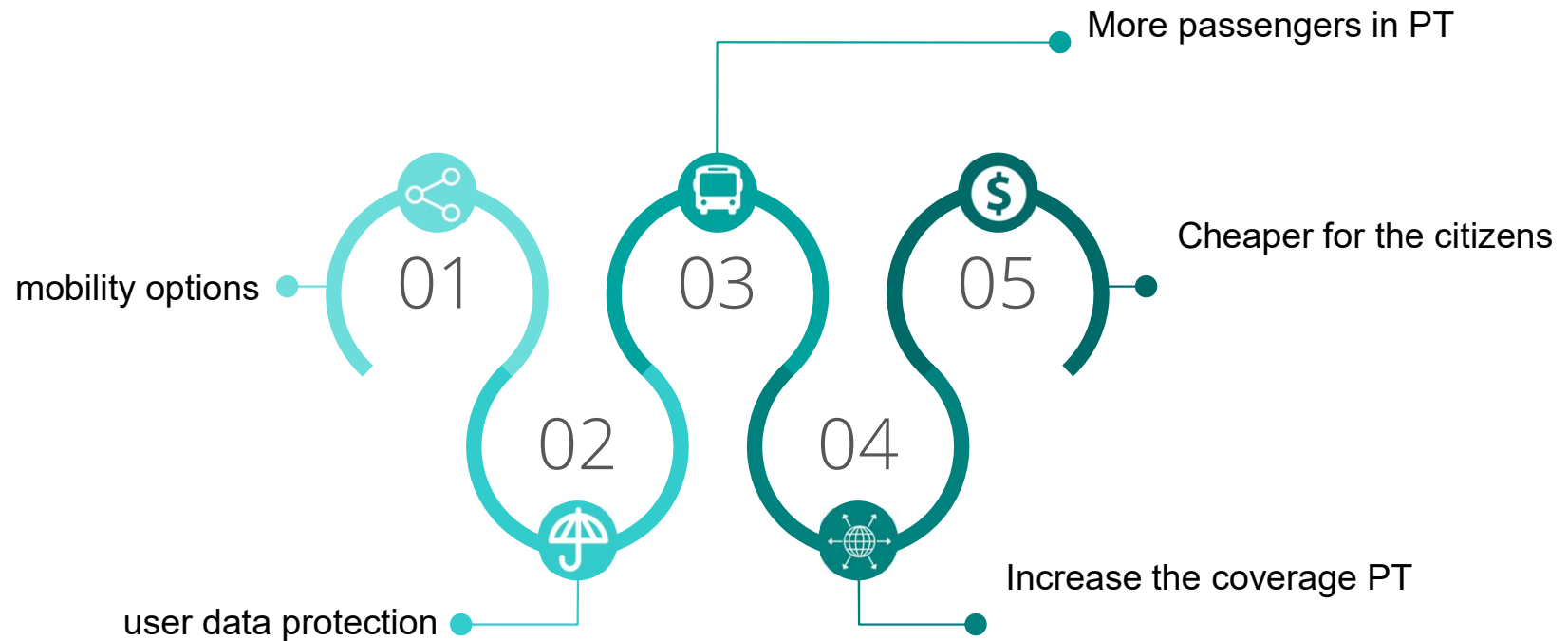
## Opportunities for innovation

T-Mobilitat: The platform that drives ticketing towards the Public Maas



# MaaS Project

A door-to-door trip with several modes and a single contract



so users can **organise and manage their travel** in a simple and integrated way

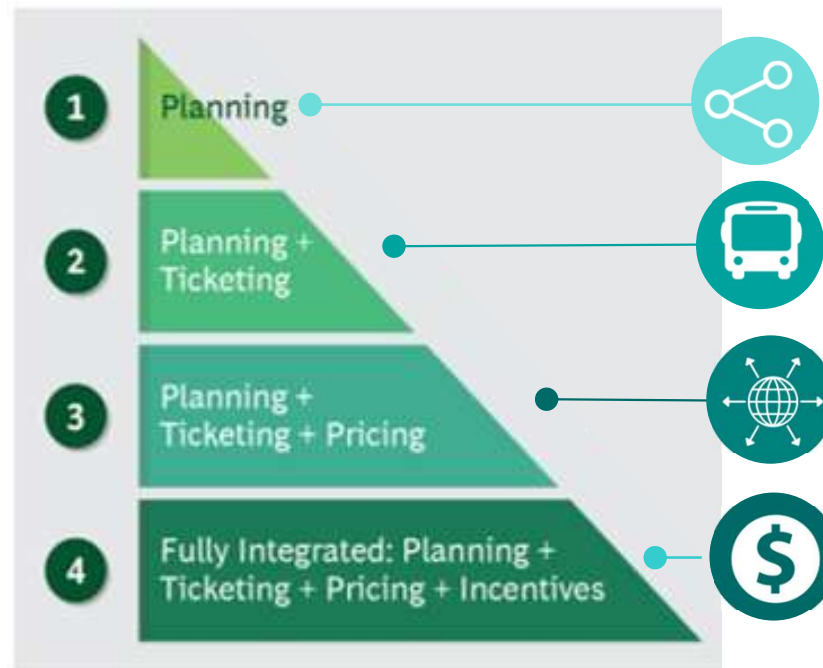
# Maas road map



as a catalyst and orchestrator of MaaS  
Data integration as a transformative driver

## Different levels of DATA...

- ... of service availability
- ... of use of services (mix modal)
- ... of costs / business model
- ... system efficiency (KPI)



MaaS integration levels (Source: Boston Consulting Group, 2019)





as a catalyst and orchestrator of MaaS

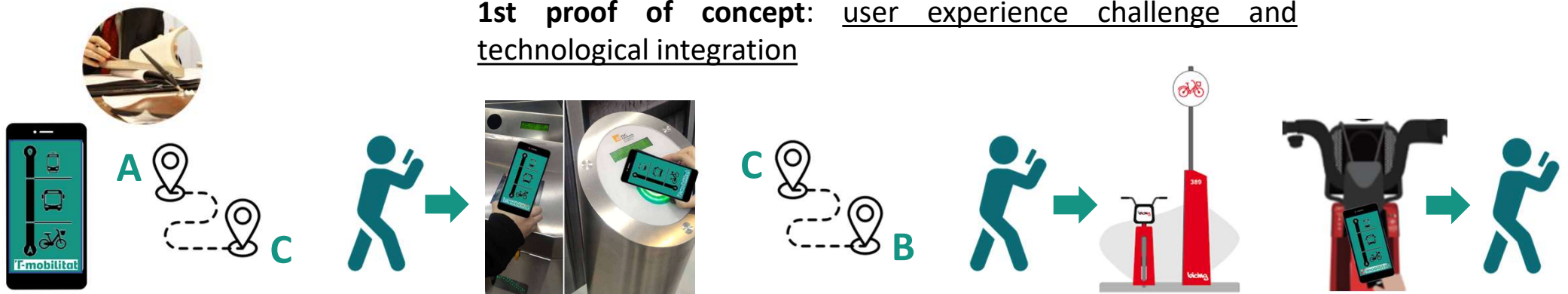
# Level 1



Offer more mobility possibilities to users and better cater for their needs

- "public MaaS routing" for third-party → MDS data integration
- Regulatory framework for MaaS operation

**1st proof of concept:** user experience challenge and technological integration





as a catalyst and orchestrator of MaaS

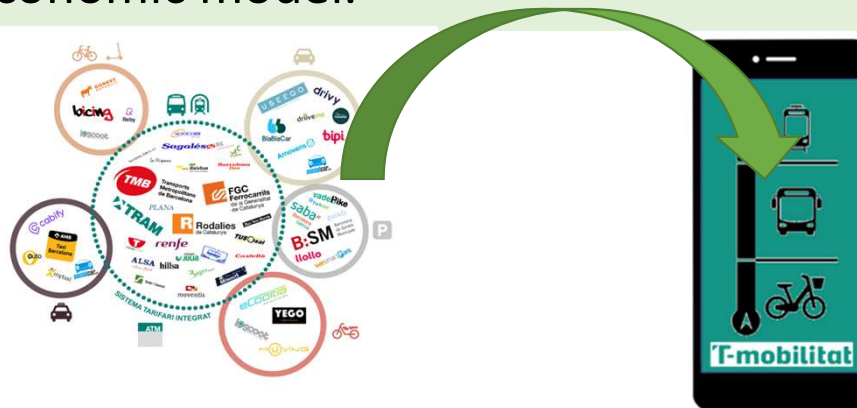
## Level 2



*Guarantee the protection of user data Bring more people to the public transport system*

- Prioritisation of the TP in algorithm routing options to encourage intermodality
- Promotion of a standardisation policy, data sharing
- Promote a Federation of platforms and the resolution of the economic model.

- **2nd proof of concept: inclusion of private operators** (service models challenge)





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as a catalyst and orchestrator of MaaS

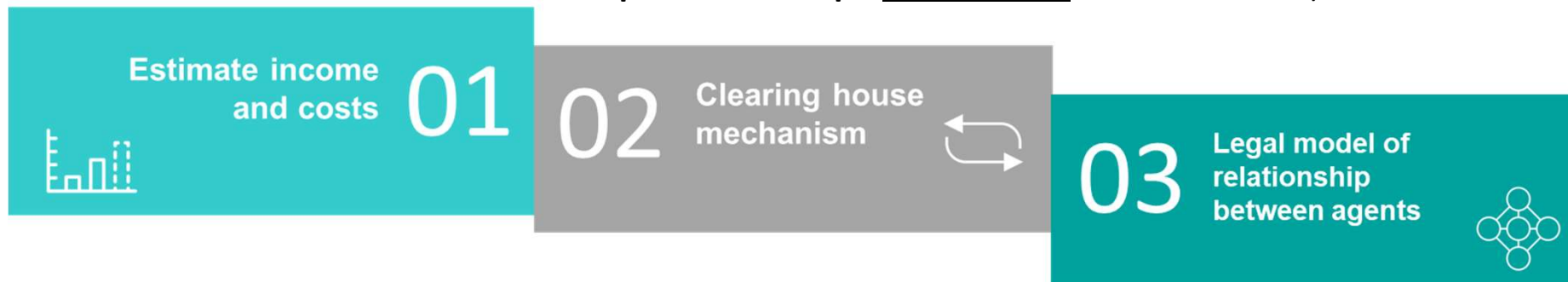
## Level 3



*Increase public transport coverage in the territory*

- Development of a MaaS data platform
- Integration of T-mobilitat in the public MaaS platform
- Regulation with sales and marketing by third parties.

**3rd proof of concept:** MaaS 'user' (business models)



## Diapositiva 11

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**U1** Regulació de la Normativa me parece redundante. Regulacion y Normativa son la misma cosa  
User; 3/10/2022



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## Level 4

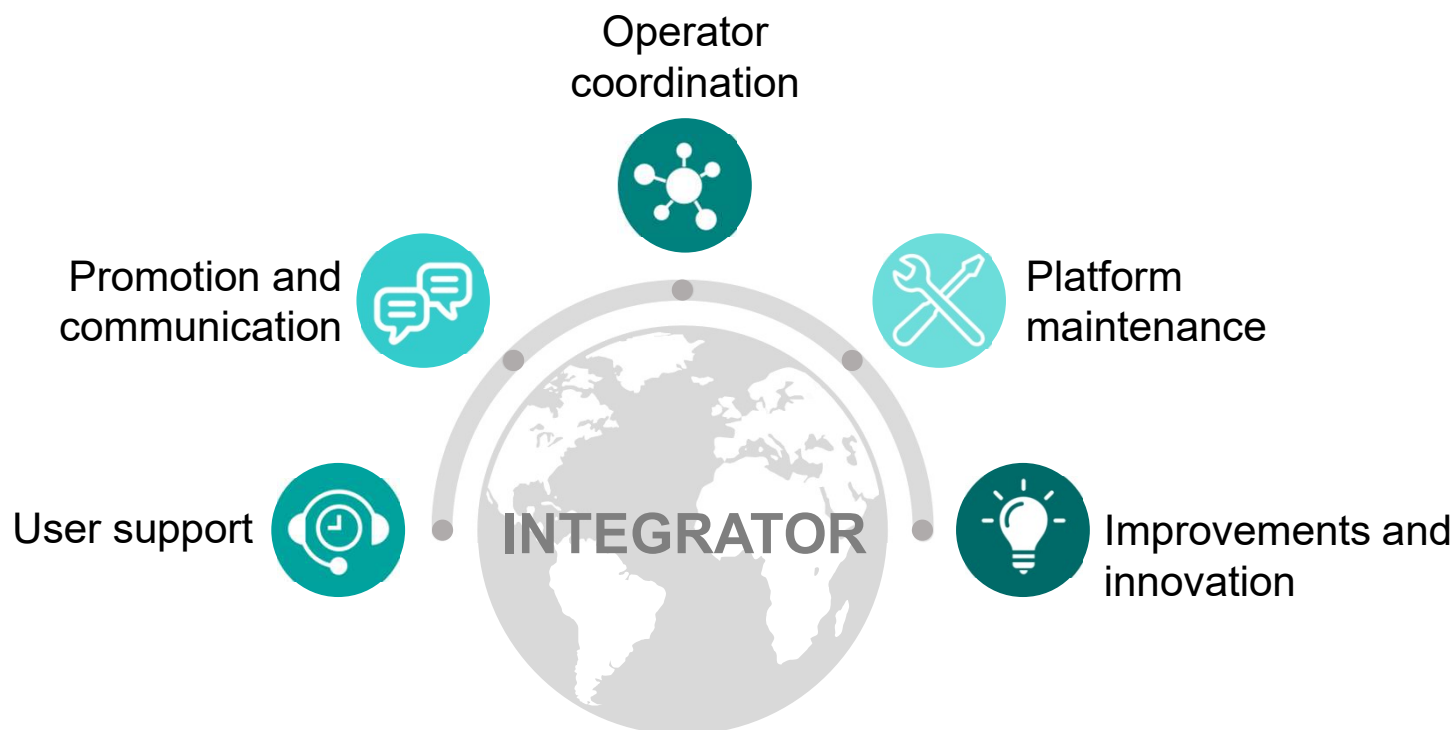


*Reduce the cost per journey unit of  
public transport*

- "Open" access to the public MaaS platform
- The Metropolitan Transport Authority [ATM in its initials in Catalan] manages critical elements of the MaaS platform and defines its governance,
- Implementation of data analytics processes with Artificial Intelligence techniques.



# MaaS project: management instrument



Needs to be trusted by all the participants, companies, public bodies and users  
Should manage the economic model and the regulatory framework

# Maas: citizen-centred project

/Maas ATM BCN



**Citizen Empowerment**

## Mobility and digital transformation

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