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**CIVITAS FORUM 2015**  
CIVITAS ANNUAL CONFERENCE | 7-9 OCTOBER 2015 | LJUBLJANA



## SESSION 4: HOW OPEN DATA CAN IMPROVE URBAN MOBILITY IN YOUR CITY

### *Open data and business opportunities in the public transport sector*

Claudio Mantero, Horarios do Funchal



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# Funchal and Madeira Island



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**Funchal**

**CIVITAS CITY**

**CIVITAS PLUS**

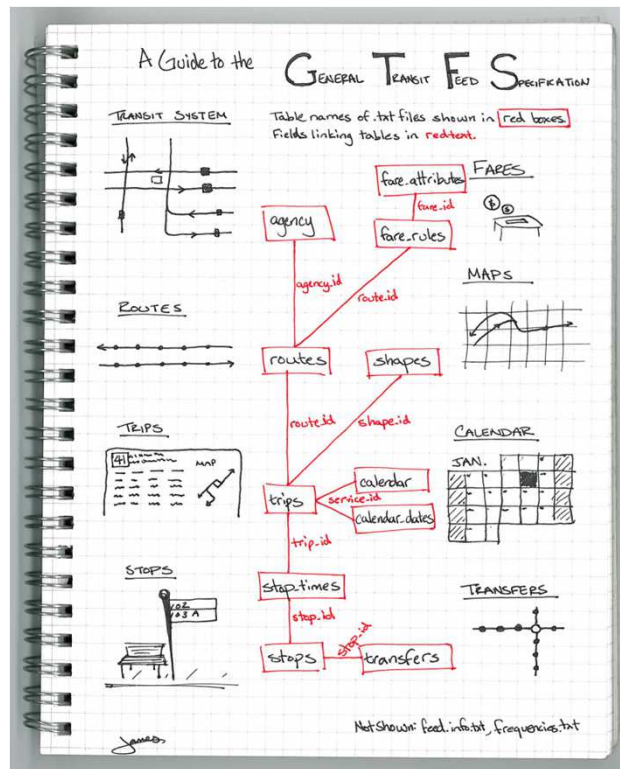


# OPEN DATA

- **Public transport companies collect relevant data about city living dynamic. This data are solely used to support exploitation and planning.**
- **Make available this data to people and platforms change the way consumers perceive public transport and open public transport service to different non core business.**
- **New actors and services are emerging to use open dataset to develop innovative mobility and commercial solutions.**
- **Partnership with different commercial actors maximize positive external effects of open data to develop win-win solutions.**

# We need to be everywhere...

Many travel information platforms and tools already exists.  
It is important to be present is as much as possible of them.  
Don't develop one more internal tool !!



ROME2RIO

MOOVIT

TRAVIC

NOKIA HERE

GOOGLE TRANSIT

...more to come...

# OPEN DATA AND INNOVATIVE COMBINATION



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The image illustrates the integration of open data into public transport services. On the left, a hand-drawn data model titled "A Guide to the GENERAL TRAVEL FEES" shows relationships between tables like "TRAVEL SYSTEM", "ROUTES", "TRIPS", "STOPS", "FARES", "MAPS", "CALENDAR", and "TRANSFERS". In the center, a smartphone displays a "Próximas viagens Estimated arrivals" app with a table of bus arrivals. Above it is a bus stop sign for "HORÁRIOS DO PUNHAL" and "NOS". Below the phone is a large "NOS" logo with a rainbow-colored arc. On the right, a Samsung SMART TV displays the "NOS" logo.

DESTINO TO	CARRERA ROUTE	HORA TIME	PARAGEM BUS STOP
Centro(via Viveiros)	15B	11:20	←h
Centro			
Centro			
Jamboto			
Ribeira Grande			

137 cm

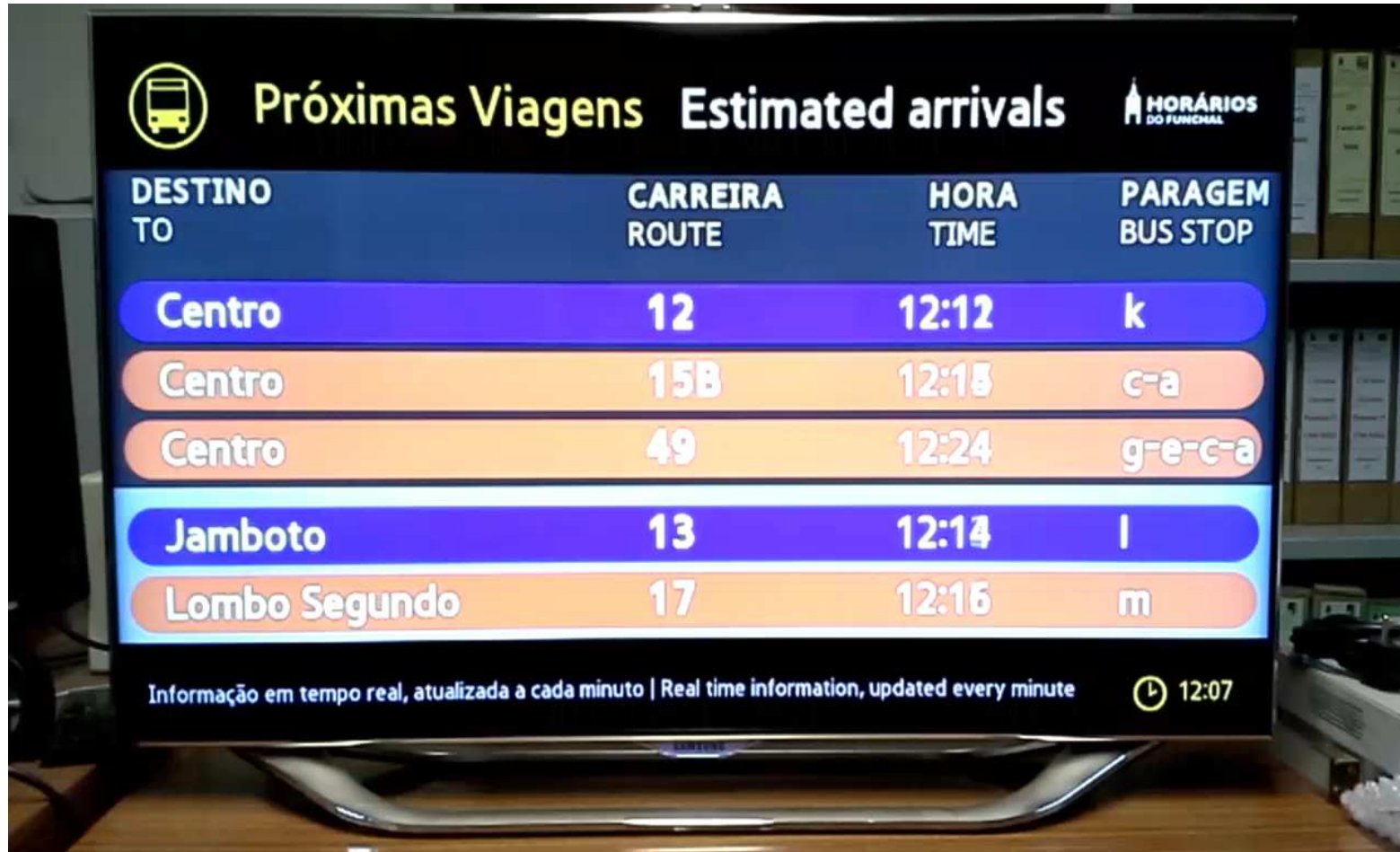


# OPEN DATA AND INNOVATIVE COMBINATION



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# The Pilot test



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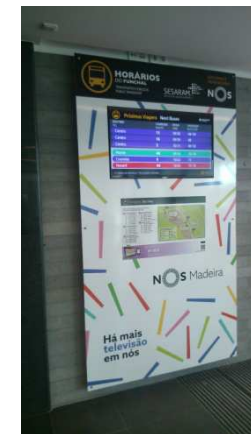
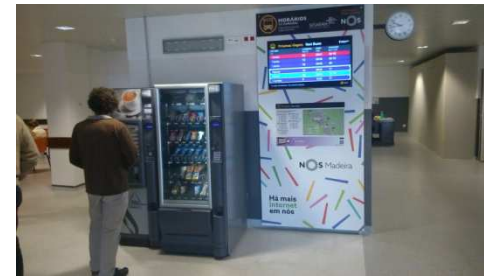
The University of Madeira was the test-bed for this experience. We used the same data that was included in the mobile app. that they have developed with us: HF Bus

This mix of Design, Utility and partnerships led to a full scale implementation

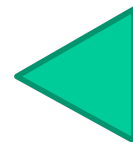
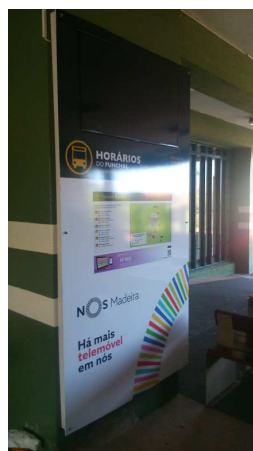


# “Real-time information” displayed in places where it matters

## HOSPITALS



## MALLS



## SCHOOLS





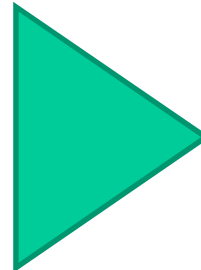
# PROBLEMS

## Lack of security of installations



# Potential

Natural up scaling for  
coffees, restaurants,  
hotel lobbies.....



# Pros and Cons - Schematic analysis



## Positive

## Negative

### Internal

- 1 – Low investment cost
- 2 – Low maintenance cost
- 3 – Use of already existing open data
- 4 – Chance to extend the solution in different places and with different partners

- 7 - Need to grant assistance in case of monitor interruption or damage
- 8 - Need to develop and strengthen the maintenance skills of internal staff

### External

- 4 - Tool to improve customer information in relevant demand generator location
- 5 – Partnership with a sponsor and local installation partners is a WIN-WIN solution
- 6 – Chance to improve public transport demand

- 9 – Risk of vandalism especially in schools
- 10 – Difficult to involve local partners to maintain the system. Include institutional information can improve the cooperation



# Cost analysis



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Activity	Cost per unit	Total cost to upscale the solution (11 stations)	Total cost (11 stations)
Solution development 2 PM of 1 Project Manager and 2 programmers	NA	0 €	5.016 €
Material Smart TV, PVC decoration, TV wall support	692 €	7.612 €	7.612 €
Installation	102 €	1.122 €	1.122 €
<b>TOTAL COST</b>	<b>794 €</b>	<b>8.734 €</b>	<b>13.750 €</b>



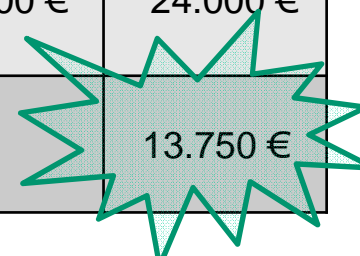
# Comparison with other promotional displays



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Communication campaign in displays	1 week	1 month	1 year	2 years
Urban Moopies in city centre (50 moopies)	6.250 €	25.000 €	-	-
Promotion in busses (25 busses)	-	2.500 €	12.000 €	24.000 €
MONITORS (11)	-	-	-	13.750 €



# Thank you!

Claudio Mantero

## Contact Details

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 **HORÁRIOS  
DO FUNCHAL**  
TRANSPORTES PÚBLICOS, S.A.

**NOS** Madeira



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