

Digital Inclusion in Barcelona

Best Practices and Takeaways from Barcelona's Digital Policies

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TECHNOLOGICAL HUMANISM

01

UNDERSTANDING THE PROBLEM

01.1

DIGITAL DIVIDE SURVEY

02

TAKING ACTION

02.1

CONNECTEM BARCELONA

03

BEING READY FOR NEW CHALLENGES

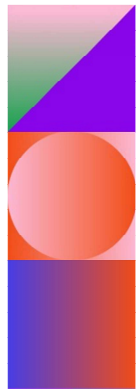
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AI STRATEGY

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TECHNOLOGICAL HUMANISM

A digital transition that puts people at the centre



1. Digital Rights

- Ethical use of technologies (AI, 5G) > [Government measure](#)
- International Alliance > [Cities Coalition for Digital Rights](#)
- Divulcation, awareness and engagement > [Barcelona Innova Week](#)

2. Digital Inclusion

- Evidence-based actions and programmes > [Connectem](#), IT Agents, Education [Pilot Project](#), [Vincles](#)
- Bottom-up policies > [Proactive City Grants](#)
- 4 helix approach for matching offer and demand > [Multidisciplinary WG](#)

3. Transformation

- Data driven policies and data as a public infrastructure > [Urban Data Desk](#)
- Fab Lab public network > [Ateneus de Fabricació](#)
- Legitimate physical space of urban and digital innovation > [Innovation Lab](#)

01 UNDERSTANDING THE PROBLEM

MEASURING THE DIGITAL DIVIDE: DIGITAL DIVIDE SURVEY



2.542 city residents



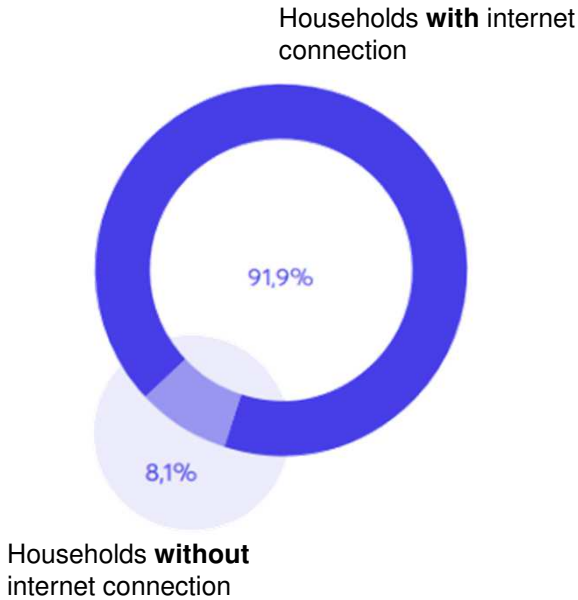
Analysing the evolution of the **digital divide** (since 2016) and the **impact of the pandemic in ICT use**

It was found out that...

01 MEASURING THE DIGITAL DIVIDE: DIGITAL DIVIDE SURVEY

ACCESS

- **91,9%** of households have an **internet connection**
- **8,1%** % of homes not connected, mainly people aged > 74
- Only **1%** of those surveyed do not have access for **economic reasons**
- **Age, gender, employment condition and education level** continue to condition ICT acces & use
- Income conditions **differences in device quality**



COVID-19 - USES

The health emergency has increased the use of ICT by **5.62%**

e-Government procedures
75.6% of the population (16-74 years) who have connected in the last 3 months have done a digital procedure.

Remote work
58.3% of the employed population have been able to carry out their work from home during this period.

Remote learning
73.2% of school-aged children under 16 have been able to follow their studies during lockdown.

01 MEASURING THE DIGITAL DIVIDE: DIGITAL DIVIDE SURVEY



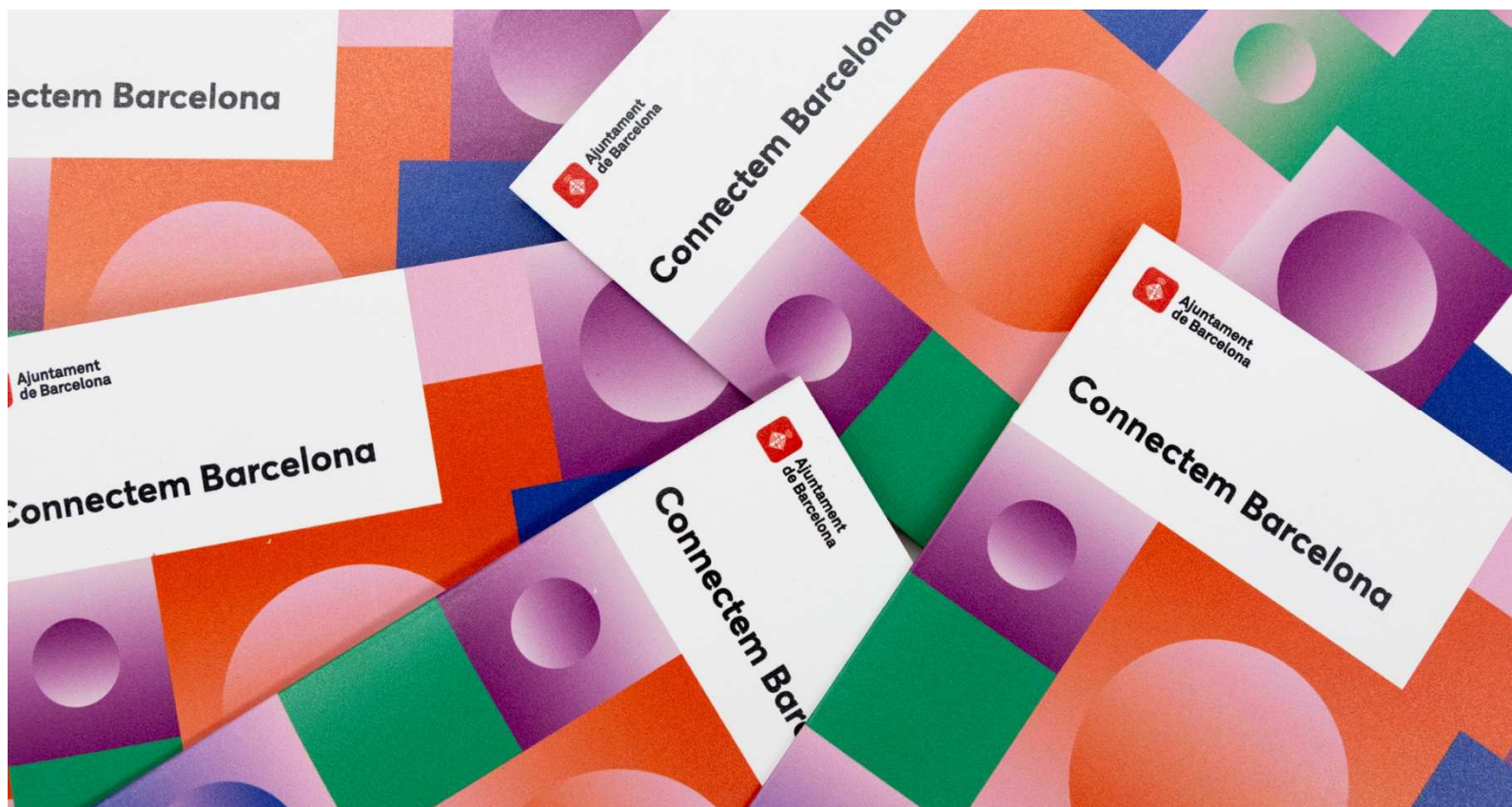
Key Takeaway

Even though the Digital Divide has been reduced overall, the **increase in internet use due to the Covid-19 pandemic and the digitalisation of basic services make it more necessary than ever to foster digital inclusion**, mostly in low-income areas and vulnerable populations (with poorer access, lack of skills or non-quality devices)

02

TAKING ACTION

CONNECTEM BARCELONA POLICY PILOT



02 CONNECTEM BARCELONA POLICY PILOT

OVERVIEW

- 1 It responds to a **specific social issue**: the need to address the digital divide to ensure an inclusive digital transition in a **multi-dimensional way**:



Connectivity: access to a quality connection



Devices: access to suitable devices for specific uses adapted to each reality



Skills acquisition: to gain necessary knowledge for IT use

- 2 It's a pilot project designed with **experimental methodology** to assess how the digital divide can be tackled in an effective and efficient manner.

- 3 It will **generate evidence** about the needs for skills acquisition programmes that complement connectivity and the devices so as to reduce the digital divide

Control group: All beneficiaries receive devices and connectivity, but only the control group gets support from ICT Agents

02 CONNECTEM BARCELONA POLICY PILOT

MULTISTAKEHOLDER APPROACH

The pilot test is lead by Barcelona City Council, but has involved several actors through a public-private-community partnership:

- **Private telecommunications operators** > Quality internet connection
- **The IT sector** > Devices
- **The Third sector** > Building synergies and rooting the programme in the neighbourhood
- **The Public sector** > Synergies with ongoing programmes

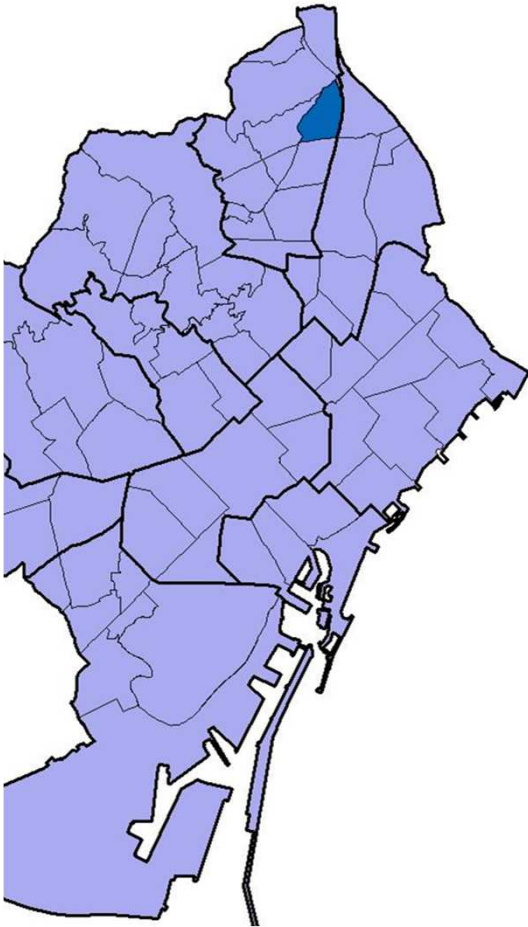
PARTNERS

Càritas
Taula del Tercer Sector
Fundació Catalana de l'Esplai
Cocarmi
Creu Roja
Fundació Pere Tarrés
Insercoop
Punt Zero
Associació de Veïns i Veïnes de Trinitat Nova
Punt Òmnia Trinitat Nova
Institut Tecnològic de Barcelona
Taula Oberta Trinitat Nova
Institut Escola Trinitat Nova
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Fundació Pare Manel – Punt Òmnia
Verdum
Centre Cruïlla
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Vodafone
Orange
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Lenovo
Toshiba
Hewlett-Packard
Microsoft
CISCO
GSMA
Mobile World Capital
Digital Future Society
CTECNO



02 CONNEXEM BARCELONA POLICY PILOT



WHERE? LA TRINITAT NOVA NEIGHBORHOOD

- **7,620 inhabitants** (2019 data)
- **Lowest incomes** in the city
- One of the **largest nuclei of people in a situation of registered digital divide.**
- Neighbourhood with **more interventions from ICT Agents**, who provide residents with support in digital procedures to solve administrative interactions

*The pilot aims to be **scalable** to the rest of the city once the pilot's results are clear.

02 CONNECTEM BARCELONA POLICY PILOT

FOR WHOM?

- 1** 16 to 65 years old..
- 2** **Living or educating** their children in the neighborhood.
- 3** All have been **validated by the local Social Services**.
- 4** Women **represent more than 80% of the beneficiaries**, most of them unemployed.

02 CONNECTEM BARCELONA POLICY PILOT

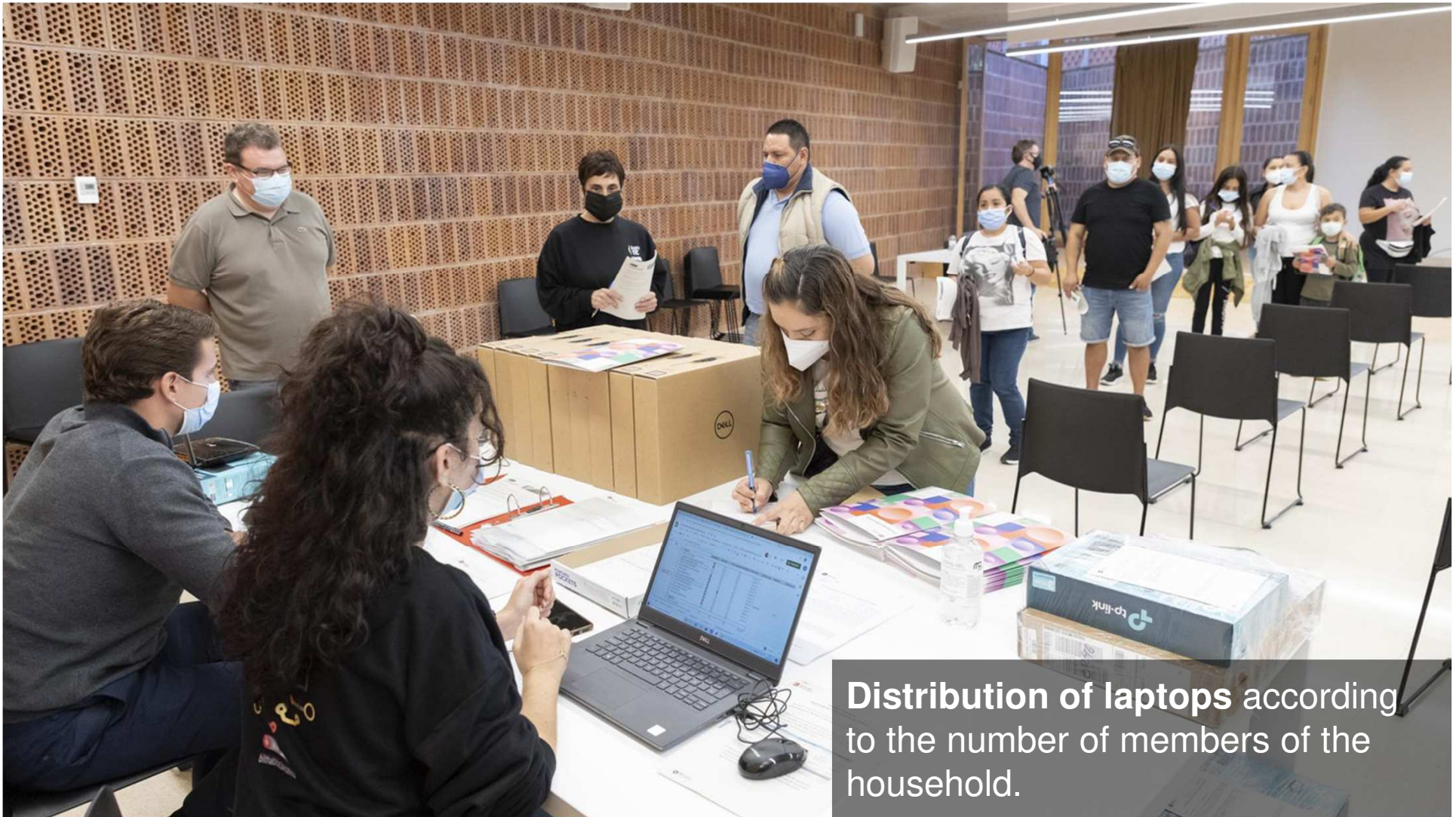
FIRST STEPS

- 1** **Deep knowledge** of the neighborhood reality and particularities.
- 2** **Identify** reference enclaves for residents: Casal del Barri (neighborhood house), high school Trinitat Nova, Barcelona Technological Institute, Neighbors Association, and local market.
- 3** Set those enclaves as **endpoints** for programme beneficiaries (ITC Agents) and an **input of new potencial beneficiaries**.

... AND ACTION! OCTOBER 2021



Distribution of laptops according to the number of members of the household.



Distribution of laptops according to the number of members of the household.

Installation of broadband Internet connections for the beneficiaries.



Support in IT or digital skills acquisition.





The key role of **ICT Agents**



ICT AGENTS

- Provide help with **basic administrative procedures** such as applying for grants or subsidies
- Help users build a **digital skills path**
- Redirect users to **pre-existing municipal training courses** by economic development agency Barcelona Activa
- **ACTIC** Regional Government IT certification



Ongoing evaluation of the degree of IT skills acquired

02 CONNECTEM BARCELONA POLICY PILOT

FIGURES

- 1** Up to **400 people** benefiting from the project.
- 2** **300 laptops** and **150 MiFi** devices funded by Barcelona City Council.
- 3** **250 SIMs with unlimited data** donated by operators: Vodafone (200), Orange (100), Parlem (50). **100 laptops** donated by manufacturers and other organizations: Lenovo (20), Toshiba (25), Mobile World Capital Foundation (26).
- 4** **4 ICT agents** deployed in the municipal facilities of Trinitat Nova during the intensive support phase.
- 5** **More than 150 slots in IT training courses** offered by Cibernàrium de Nou Barris (Barcelona Activa).
- 6** **4 systematic evaluations of digital training** (1 ex-ante, 3 ex-post) to assess the quality of digital training policies.

660.000€
TOTAL BUDGET

550.000 €

Hardware acquisition

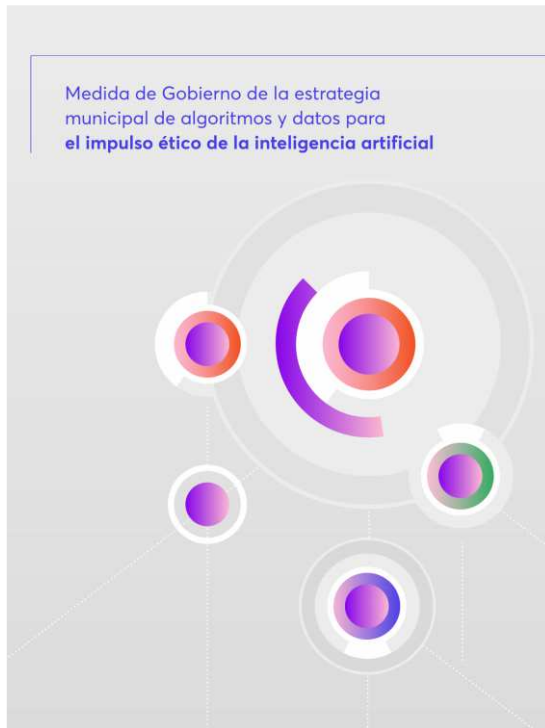
50.000 €

ITC Agents

03

BEING READY FOR NEW CHALLENGES

MUNICIPAL ALGORITHMS&DATA STRATEGY FOR AN ETHICAL PROMOTION OF AI



Avoid the negative impact of AI and ADS developed or procured by the City Council and use them for **enhancing policy-making capacity**

PRINCIPLES

- Technical robustness and security
- Privacy and Data Governance
- Transparency
- Diversity, inclusion, equity
- Social and environmental commitment
- Responsibility, democratic control and accountability

ACTIONS (2021-2023)

- Development of **pilot projects**
- Municipal AI **registry**
- Updating the **legal framework**
- **Procurement clauses**
- **Capacity building** and upskilling staff
- The creation of the **Global Observatory of Urban AI** or participation in global networks such as Eurocities or Cities Coalition for Digital Rights

Thank you for joining

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