

Bridging the digital divide: strategies for inclusive digitalisation in metropolises

Introduction



The promise of digital transformation for metropolises is undeniable: inclusive governance, improved quality of life and optimised resource allocation. However, this promise risks becoming a mirage if it does not reach the entire population. Unequal access to technology and digital skills, coupled with existing social inequalities and regional disparities, threatens to widen current gaps and create new ones.

By acknowledging the challenges and working collaboratively on creative solutions, large cities and metropolitan areas have the opportunity to bridge the digital divide and foster a more equitable future.

The digital divide: the main obstacle to metropolitan digitalisation The digital divide refers to the ever-evolving gap in access to and use of technology. It presents the greatest hurdle to equitable digitalisation in cities and metropolitan areas. The divide is multifaceted, encompassing various aspects of inequality:

- Material access: Lack of devices and reliable internet infrastructure.
- Digital literacy: The ability to navigate technology confidently, ranging from basic troubleshooting to advanced skills.
- **Equal opportunities:** Inequalities based on gender, race, ability, socioeconomic status and other factors often translate into unequal access to the full potential of digital opportunities.
- **Trust in digitalisation:** Trust is needed for individuals to embrace digitalisation. Public servants and targeted programmes can help bridge the trust divide.

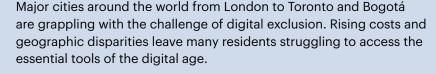
Digital inclusion strategies that focus solely on the first two levels of the digital divide, such as equipping populations with devices and providing digital skills training, have proven inadequate.¹ Policymakers need a multi-dimensional approach that addresses all layers of the divide while recognising the existing social inequalities that perpetuate this gap. By promoting digital rights, leveraging digital technologies and providing equal opportunities for all citizens, local and metropolitan governments can play a crucial role in fostering digital inclusion.



The effects of rising costs and geographic disparities

Economic barriers and regional disparities in internet connectivity pose formidable challenges to individuals' **material access to digitalisation**. The private sector is a key player in the implementation of digital inclusion policies by providing the digital know-how and infrastructure needed to reach the wider public. However, its involvement requires a legal framework that facilitates active and collaborative participation. Addressing these challenges and creating an enabling environment for private sector engagement is essential to bridge the digital divide and foster inclusive growth.

City solutions bridging the gap in material access



London, like many cities, is facing the far-reaching effects of a cost-of-living crisis, notably seen in the significant impact of the increasing costs of broadband, mobile connectivity and devices. **To address these economic barriers, London has introduced three key initiatives:**

1. Get Online London — targeting 75,000 digitally excluded individuals over three years, employing a hyper-local approach through voluntary and community sector organisations;²

2. London Device Bank — redistributing repurposed devices at no cost with a keen eye on environmental and social impact;³

3. National Databank — distributing free mobile sim cards, collaborating with Virgin Media O2 and using data donated by major telecom companies.⁴

In **Toronto**, economic constraints have been a significant barrier to internet access: the monthly cost of internet service is the primary obstacle for underserved households. Consequently, many rely solely on mobile phones for internet access.⁵

Toronto's "ConnectTO" policy set up free public WiFi locations according to specific criteria, including community centres and areas with high usage rates. This initiative has provided free WiFi to 3,500 devices and 7,700 residents in neighbourhood tower buildings, serving around 4,000 users daily at community recreation centres and approximately 5,600 users across all ConnectTO sites.⁶

These initiatives show how collaboration and creative solutions are crucial to bridging digital divides and ensuring equitable access for all citizens.

Cities are rethinking digital literacy for a more inclusive future with equal opportunities

Digital literacy is often seen as the key to achieving a truly inclusive digital society. However, the current focus on digital literacy in terms of users, devices and content tends to overlook socioeconomic factors and the digital gender divide, among other issues.

City solutions bridging the gap in digital literacy and equal opportunities



In recent decades **New York City** has partnered with specialised local organisations to ensure the inclusion of historically underserved communities in digital policies. **The city has implemented digital inclusion programmes to provide low-wage immigrant workers with access, training and ESL** (English as a second language) **classes, enabling them to pursue employment opportunities through the internet.** It also offers **specialised digital skills training** for older adults, a growing proportion of whom are immigrants, people of colour, or from low-income communities.⁷ The city has also **designed a digital literacy curriculum available in 10 language**.⁸

Digital

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In **Bogotá** one in ten women does not use the internet and in low-income areas the number rises to two out of ten.⁹ Among the most common factors for lack of access to digital skills training are time poverty due to paid and unpaid care tasks and formal and informal work. With this in mind, **Bogotá** introduced the "Care Blocks" initiative.¹⁰ These are service hubs offered by district entities, strategically located near the residences of women caregivers. Within each Care Block, women can freely access various services — including digital training — during flexible hours. While women access these services, district professionals attend to their children or elderly or disabled dependents in the same building. By improving access to digital resources and opportunities and supporting vulnerable populations with efforts to improve digital literacy, the Care Blocks are expected to help close this digital divide.

Barcelona identified the need to understand digital inequalities through an intersectional lens, recognising gendered differences influenced by factors such as age, income, immigrant status and education level. To address this, **Barcelona**'s **digital training centre** Cibernarium under Barcelona Activa (Barcelona's economic development agency) **plans to provide digital literacy training to unemployed women led by female trainers.**

Trust plays a crucial role in shaping individuals' willingness to embrace digitalisation

Digital divides are not just about access to technology. Trust plays a crucial role in shaping the willingness of individuals to embrace digitalisation. As metropolises move essential services such as healthcare, social welfare and administrative processes online, public servants become vital digital stewards. By building trust with residents who lack the digital skills or confidence to navigate these online systems, they can bridge the trust gap and empower more residents to participate in the digital world.

City solutions bridging the gap on trusting digitalisation



In the city of **L'Hospitalet, neighbouring Barcelona**, it was found that digital inclusion efforts work well when leveraging existing relationships between public servants, social workers, community organisers, peers, and local residents. **To address digital needs in low-income areas, L'Hospitalet introduced the TIC Truck initiative**,¹¹ **a mobile assistance centre for various digital queries,** from smartphone use to online administrative tasks. Staffed by local young people with similar backgrounds to the residents, the programme fosters connection and provides effective assistance.



City solutions bridging the gap on trusting digitalisation



Mistrust in digital technologies is closely tied to confidence in those conducting the training programmes. The city of **Brussels** also acknowledges the dual role social workers play in building trust among residents resistant to doing administrative tasks online. **Social workers in Brussels city welfare centres and community hubs help vulnerable people overcome the digital gap, providing training through programmes like the Num@tic project,¹² assisting with digital administrative issues to better support those in need. Additionally, the Citizen Affairs Department's mobile team aids citizens in retirement homes and hospitals, and those with mobility issues with tasks such as address changes and identity card applications.**

The path forward: recommendations for city governments



Identify digital divide barriers. Develop a comprehensive strategy to quantitatively and qualitatively identify individuals in the digital divide, considering factors beyond income, such as gender, disability, race, legal status, geographic region, age, etc. Use focus groups to help city administrators understand the barriers residents face, enabling them to design policies that incorporate a gender perspective. This approach will guarantee resources are allocated efficiently and address the root causes of digital exclusion.

Tailor digital policies to be inclusive and relevant to residents' needs.

Digital access and literacy programmes should account for the socioeconomic factors of the local population. Programmes should be developed based on active listening and input from inhabitants, with compensation schemes for their feedback. To ensure these programmes and other digital services are accessible, they should address multilingual and accessibility needs and be culturally sensitive and inclusive of varying socioeconomic backgrounds.

Take a multi-stakeholder approach in the design and implementation of digital inclusion policies. Digital policies should be designed in collaboration with different council departments and include valuable input from local organisations. During implementation, city administrators should engage public-facing institutions and services that informally contribute to digital inclusion, as frontline workers can act as digital stewards.

Support local organisations in their efforts to promote digital inclusion.

One of the main challenges local organisations face is lack of financial resources; ongoing and responsive funding for local partners is essential.

Ease economic barriers to digital access. Metropolises can implement policies to alleviate the costs of digital access. Initiatives such as providing city-owned low-cost digital infrastructure, affordable e-SIM cards and public spaces with free WiFi — prioritising spaces such as libraries, community centres and municipal buildings — can enhance connectivity options for inhabitants.

Guarantee analogue channels and human assistance for digitised services.

Ensure that all digitised services have an analogue counterpart that is easily accessible to the public. Residents who access digitised services should have access to personal assistance throughout the process.



Recognise Internet access as a basic human right. Foster political will through initiatives like leveraging public and private partnerships to ensure universal access, while encouraging global collaboration to emphasise the importance of internet access as a basic human right.

A dedicated working group was formed to explore the multifaceted issue of digital exclusion in metropolitan areas. This collaborative effort was aimed at understanding the diverse factors contributing to the digital divide and recommend policy solutions to ensure equitable access to the digital world for all citizens.

¹ Ebadi, Bushra. (2023). Beyond digital access as a human right in cities: proposing an integrated, multi-dimensional approach. Digital Future Society. [PDF] Available at: https://digitalfuturesociety.com/app/uploads/2023/05/Beyond_digital_access_as_a_human_right_in_cities_low.pdf

² Helen Milner (2020). Get Online London. London Office of Technology and Innovation [online] Available at: https://loti.london/get-online-london/

³ Good Things Foundation (2024). London Device Bank prevents over 2.5 million kg of CO2 emissions by reusing electronics [online] Available at: https://www.goodthingsfoundation.org/what-we-do/news/london-device-bank-prevents-over-2-5-million-kg-of-co2emissions-by-reusing-electronics/

⁴ Good Things Foundation (2024). National Databank. [online] Available at: https://www. goodthingsfoundation.org/national-databank/

⁵ Andrey, Sam & Abdelaal, Nour. (2022). Towards a Digital Equity Policy for the City of Toronto. [PDF] Available at: https://www.toronto.ca/legdocs/mmis/2022/ex/bgrd/back-groundfile-224479.pdf

⁶ ConnectTO Program, Executive Committee Presentation, March 30, 2022. [PDF] Available at: https://www.toronto.ca/legdocs/mmis/2022/ex/bgrd/backgroundfile-223322.pdf

⁷ Samar Khurshid (2023). Digital Literacy Programming for Older New Yorkers to be Required Under Bill Passed by City Council. Gotham Gazzette. [online] Available at: https:// www.gothamgazette.com/city/12021-council-digital-literacy-older-new-yorkers

⁸ For more information see: https://access.nyc.gov/about/

⁹ Vásquez Ardila, Juan Manuel (2022). Estos son los proyectos que aportan al cierre de la brecha digital en Bogotá (These projects will help close the digital divide in Bogotá). Bogotá. [online] Available at: https://bogota.gov.co/gobierno-abierto-de-bogota/proyectos-que-aportan-al-cierre-de-la-brecha-digital-en-bogota#:~:text=Seg%C3%BAn%20 estudios%20de%20la%20entidad,acceden%20a%20esta%20tecnolog%C3%ADa%20diariamente (In Spanish)

¹⁰ Karen Barrero (2023). Bogotá Care Blocks and gender equity, present at the World Government Summit. BOGOTÁ. [online] Available at: https://bogota.gov.co/en/international/bogota-care-blocks-present-world-government-summit

¹¹ Barcelona City Council (2023). The TIC-Truck project is consolidated. [online] Available at: https://punttic.gencat.cat/en/article/tic-truck-project-consolidated

¹² For more information on the Num@tic Project see: https://ocmwbxl.brussels/?p=131

Endnotes



A programme of



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