Manchester Digital Strategy:

Creating an Inclusive, Sustainable & Resilient Smart City

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Creating an inclusive connected city

- A Digital Strategy for Manchester as a whole

- Complementing and strengthening the vision and plans set out in the Our Manchester Strategy

- Building on Manchester's digital strengths but also recognising Manchester's digital challenges

- Recognising the role played by all things digital in dealing with Covid-19 and plans for an inclusive recovery

- Based on how smart people, smart places and smart prosperity can enhance the commitments made in the Our Manchester Industrial Strategy to ensure that all Manchester residents can benefit from recovery

- Think and plan imaginatively about future work and future living and the role that digital can and should play in opening up opportunities for everyone

- Working with partners to ensure that all digital plans really do meet the needs of all Manchester residents and also align with other strategies at MCC and GMCA level

Context: Manchester's digital strengths

- Recognised as "UK's second technology city", consistently outperforming "all cities outside of London" (The Data City, 2019)

- Scale and scope of the digital sector covering both established and emerging technologies (Tech Nation 2020 "UK Tech for a Changing Nation" report)

- Wide ranging talent pool of digital and creative skills from entry level to high value parts of the digital economy

- Specific growth areas within the digital sector, including e-Commerce, Cyber, Artificial Intelligence (AI), FinTech, Data Science, e-Health

- Wider digitalisation of the economy, strong links between Manchester Digital sector and retail, advanced manufacturing, media and logistics sectors

- Digital ecosystem supporting business networking, collaboration and new business growth, including:
  - Digital Skills Network: bringing schools, colleges, universities, other training providers, businesses and digital sector networks together, e.g. new developments in "EdTech"
  - Citizen-led Smart City initiative (Responsible Tech Collective) and growing role of ethical tech and Open Data initiatives, e.g. Open Data Manchester
  - Manchester Digital, including latest report on *"How Manchester's Tech sector is tackling the coronavirus pandemic"*
  - Voluntary, Community & Social Enterprise (VCSE) sector including MACC, Young Manchester
  - Digital Coop – Cooperative Network Infrastructure (CNI)
  - Digital Innovation: University Living Labs, Manchester Urban Observatory, Health Innovation Manchester, Cyber Foundry, School of Digital Arts (SODA)

Strengthening Manchester's Digital Ecosystem

- **Smart People:** improving inclusion, skills and diversity

- **Smart Places:** creating digital neighbourhoods and city-wide digital access

- **Smart Prosperity:** a more inclusive digital economy with improved access to high quality jobs

- **Smart Resilience:** digital innovation supporting zero carbon goals and inclusive connectivity

Building upon Manchester's Digital 'foundations'

- Projects: Triangulum, CityVerve, SmartImpact

- Expertise: digital innovators, digital entrepreneurs, digital activists

- Legacy: 30+ years of digital initiatives: Manchester Host, Electronic Village Halls, Manchester Community Information Network, East Manchester Connected Community (EastServe), Living Labs, Connected Smart Cities Network, Coop Network Infrastructure (CNI)

# Smart Cities: digital comparisons and evaluation

- ARUP report focusing on how to develop a Digital Strategy for Manchester, building upon the ARUP review of CityVerve project
- Case studies of other cities digital plans from UK and globally, plus additional evidence from Eurocities
- Four key recommendations:
  - A shared vision statement for Manchester as a place and for Manchester City Council itself;
  - Establishing a Digital Office within the City Council;
  - Sharing potential digital interventions with the wider digital ecosystem
  - Co-producing new collaborative projects and work programmes
- **Using this evidence base to inform the Digital Strategy**
  - The most relevant ARUP recommendations are now included in the Digital Strategy (draft) and key lessons learnt from the case studies will be highlighted in an annex
- **Looking forward with new ideas for future approaches**
- Green/Digital and Digital/Green synergy and zero-carbon smart city aspirations
- New industrial landscapes – 'Industry 5.0': the impact of automation, AI etc.
- Digital solutions for post-pandemic living: digitally enabled social infrastructures

Making a digital difference to what makes us uniquely Manchester ….

- **Smart people:** gaining and sustaining the skills, aspirations and confidence to be the foundation of Manchester as an inclusive and diverse smart city

- **Smart places:** digital neighbourhoods providing access, connectivity and support for all residents and businesses

- **Smart prosperity:** stimulating continuing growth in the digital economy and ecosystem to create new jobs, safeguard existing jobs and develop an inclusive economy

- **Smart resilience:** digital innovation being used to support new jobs and skills with smart energy and mobility supporting our zero carbon goals and for deploying digital connectivity as a utility, not just a commodity, enhancing accessibility and affordability with open, innovative and future-proofed infrastructure
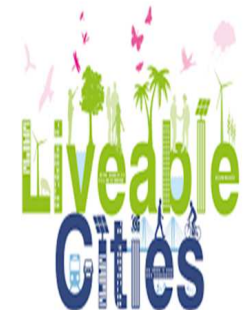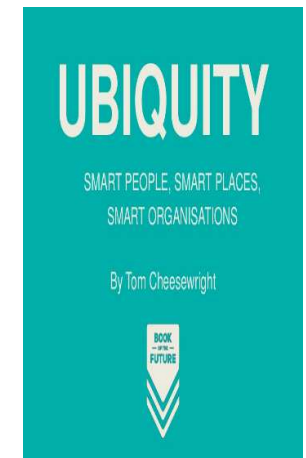
Smart connected places supporting smart people

New digital initiatives under discussion (funding sources being identified)

Smart Innovation District and Hub/s

Digital City Cooperative & Smart Urban Places Access network (SUPA-Net)

Civic Innovation Programme:
CivicTech challenge programme promoting new business and innovation

urban observatory

CIVIC INNOVATION CHALLENGE
POWERING SMART & CONNECTED COMMUNITIES
DESIGN PHASE

Urban Data Discovery Platform:
becoming a data-led organisation: Smart City Charter and new Smart Data initiative

Corridor Partnership + ID Manchester (North Campus area)

- **New hubs – NOMA/NQ – Fed House +**
- **Health Innovation, including North Manchester General Hospital + potential in Wythenshawe**
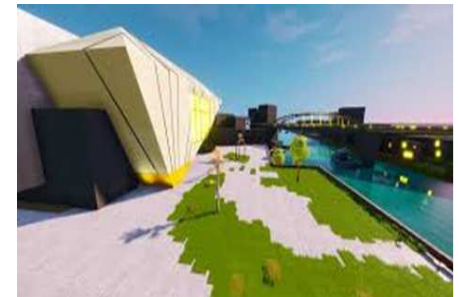- **Sport Tech – East Manchester**

Open access "FibreManchester" network in partnership with Cooperative Network Infrastructure (CNI – aka GM Digital Coop) with advanced wireless access in digital neighbourhoods and access to kit/devices

Creative Digital: links to collaborative work on policy and practice with the Culture Recovery Plan

MANCHESTER

Digital Strategy: building upon current work

- ## Defining what we mean by being a "smart city"?

- *Smart Cities will have smart citizens at their heart*

- *Smart citizens will collaborate in new and dynamic ways*

- *Smart economic and social opportunities for working and for living*

- *Smart digital solutions for making environments greener, cleaner and healthier*

- *Smart citizens ensuring that smart cities are more democratic, resilient and attractive*

- *Smart future internet-enabled services to generate and celebrate creativity, innovation and diversity*

    Smart Innovation & People (SmartIP) EU project led by MCC (2013).

*"To be considered "smart", a city must reinforce the participations of everyone recognizing the diversity of citizens … and try, as much as possible, to eliminate, not only physical but also digital barriers. That is what we call **Inclusive Smart City**,"*
Joao Neto & Sergio Kofuji
https://www.researchgate.net/publication/305474511_Inclusive_Smart_City_An_Exploratory_Study

Digital Strategy:

- **Taking account of current policies and initiatives:**
  - Our Manchester Industrial Strategy: "Developing a More Inclusive Economy"
  - Recognise the strength and resilience of our digital sector and ecosystem
  - Face the challenges of recovery: both the impact on digital and the impact of digital
  - Create a new Manchester 'Digital Narrative' accessible to everyone
  - Alignment with:
    - the current "Our Manchester" reset
    - Manchester's Culture Recovery Plan
    - High Schools Digital Audit and Action Plan/s
  - Digital inclusion and skills (2020-2030) – key role of the Digital Skills Network and Digital Inclusion Action Plan and consider what new and innovative approaches are required as compared to the last 10 years
  - Digital infrastructure: similarly, new emphasis on being a utility and ubiquitous so it is accessible and affordable for all residents

- **Other UK and global comparisons? Good examples from the ARUP report, Core Cities, UK Smart Cities, Eurocities**

Digital Transformation and the new Digital Strategy:

- **Working closely with ICT to ensure alignment of the ICT and Digital strategies**

- **Procurement: ensuring that social value is a priority in the Digital Strategy**

- **Recognising the complementary nature of MCC's own digital infrastructure and wider roll-out**
  - ICT already renewing and upgrading LAN/WAN/WiFi connectivity for MCC with potential for opening this out for wider community access
  - Potential for closer collaboration between existing suppliers and CNI/Digital Coop members (which includes Virgin, Loop/Gamma and others)
  - Digital Infrastructure asset mapping exercise is now underway (in partnership with CNI/Digital Coop) including the Civic Quarter Heat Network
  - Complements proposed work by Manchester Cultural Leaders Group on networking venues

- **Legal and regulatory issues: case study of the London Borough of Croydon's "Digital Infrastructure Toolkit"**
  - Being proactive in having a Manchester Toolkit covering issues like "barrier busting" including planning policies, wayleaves etc.
  - Being proactive in securing social value from all telecoms investment

New Digital Initiatives supported by the Digital Strategy:

- **Smart Data Initiative:** including a "Smart City Charter" based on the "Eindhoven Principles" (one of our Eurocities and Triangulum partners), new MCC Data Management Strategy & Open Data Manchester's "Declaration for responsible and intelligent data practice"

- **Planning and public realm:** creating smart places covering public realm, civic spaces, street furniture etc. to deploy accessible and affordable digital infrastructure, including WiFi, everywhere possible

- **Smart energy:** connecting up digital and energy infrastructure and initiatives: heat network, smart grids and electric vehicle (EV) recharging networks, developing new business models to cross-subsidise the deployment of smart energy and digital capacity

- **Future foresight:** making sure Manchester is well placed to take full advantage of future trends and opportunities with increased capacity for research and innovation in universities, colleges and schools

Manchester Digital Strategy and the GM Digital Blueprint

- **Longer term planning for working with GMCA**
  - Key role for MCC "Digital Office" plus interim arrangements

- **GM Digital Portfolio Delivery Executive**
  - Chaired by Sara Todd (Trafford CEO)
  - Potential for Manchester to take lead on key issues and we can set priorities and planned outcomes for MCC's role

- **Smart GM Places Leadership Group**
  - New group bringing together infrastructure (digital, transport, energy, health, emergency services) and planning, need to ensure that there are much better links between infrastructure and inclusion policies and actions

- **GM Digital Inclusion Leads**
  - Potential for ensuring a clearer link with Smart GM Places Group

- **GM Digital Comprehensive Spending Review Proposals**

- **MCC-GM coordination over other proposals to UK Government**

Proposed Manchester Smart City Action Plan

This is work in progress and will take into account feedback from the consultation process. The working headings for the core commitments are (draft only):

A. Smart People: Digital inclusion and skills:

1. Digital inclusion and skills at the heart of the digital strategy
2. Promoting digital inclusion, diversity and equality
3. Ensuring skills progression from entry level to high value
4. Supporting digital/creative sector convergence to support jobs and skills

B. Smart Places: Creating digital neighbourhoods:

5. Creating a Manchester Digital Office
6. Digital Action Plans for every neighbourhood
7. Digitally enabled place-making including public realm
8. Promoting smart urban design and intelligent buildings

Proposed Manchester Smart City Action Plan

C. Smart Prosperity: enabling a smart inclusive economy

9. Enabling inclusive growth in the digital sector to support jobs and skills

10. Growing the innovation ecosystem to attract more investment

11. Future foresight work to take advantage of future trends

12. Supporting the Culture Recovery Plan through digital innovation

B. Smart Resilience: innovation for zero carbon & connectivity

13. Enhanced digital capacity to support smart energy and smart mobility

14. Greater mutual support between green and digital initiatives

15. Digital connectivity as an open, accessible utility not just a commodity

16. New capacity to enhance digital research and innovation

17. Social value at the heart of all digital investment and deployment