

Economy, Business Growth & Skills Overview and Scrutiny Committee

Date: 4 February 2022

Subject: Greater Manchester Digital Blueprint: Progress Report

Report of: Cllr Bev Craig, Leader of Manchester City Council and Portfolio Lead
Leader for Digital City Region; Tom Stannard, Chief Executive of
Salford City Council and Portfolio Lead Chief Executive for Digital City
Region

PURPOSE OF REPORT:

The purpose of this report is to provide an update on delivery and activity planned for 2022 in support of the GM Digital Blueprint.

RECOMMENDATIONS:

The Economy, Business Growth & Skills Overview and Scrutiny Committee is requested to:

- Review progress against the GM Digital Blueprint's ambitions during 2021 and consider the key activities planned for 2022.
- Support the direction of travel and prioritization of GM Digital activity.

CONTACT OFFICERS: Phil Swan, GM Digital Chief Information Officer; Lisa Rice, GM Digital Portfolio Management Office Lead, GMCA

Equalities Implications:

Regular portfolio level reviews and corresponding Equality Impact Assessments of the GM Digital Portfolio are undertaken. These reviews highlight where there may be a detrimental impact on individuals with protected characteristic, where there may be additional need to target activity to advance equality of opportunity and what activity should be undertaken to foster good relations between people who share protected characteristics and those who don't. The outputs of the review and Equality Impact Assessment are shared with the GM Digital Portfolio Delivery Executive members and the GM Digital Steering Group.

BOLTON
BURY

MANCHESTER
OLDHAM

ROCHDALE
SALFORD

STOCKPORT
TAMESIDE

TRAFFORD
WIGAN

Climate Change Impact Assessment and Mitigation Measures –

Across the GM Digital Portfolio there are activities intended to reduce Greater Manchester's carbon footprint. This includes work by TFGM on traffic signally optimisation to reduce waiting times, re-using existing ducting to roll out 2,700km of new fibre connectivity rather than new dig, and exploring ways of using data to encourage individuals to reduce their carbon footprints.

The programme includes work with global organisations on their plans to reduce their emissions from data centres.

Remote / home working has been a strong feature of the pandemic response, enabled by digital capabilities. As Greater Manchester and the country looks to "reset" its working practices as lockdowns ease, encouraging practices that enable more local working, use of public transport and reduced car travel present a significant opportunity for the city region.

Risk Management:

Risks to delivery are closely managed via project and programme boards relating to individual initiatives.

External advisory boards assist with the identification of risks and opportunities.

The GM Digital Portfolio Delivery Executive and Steering Group monitor respond to escalated risks.

Legal Considerations:

n/a

Financial Consequences – Revenue:

n/a

Financial Consequences – Capital:

n/a

Number of attachments to the report: 0

BACKGROUND PAPERS:

The GM Digital Blueprint is available at the following link: <https://www.greatermanchester-ca.gov.uk/what-we-do/digital/>

Related Scrutiny Report, November 2019, available at the following link:

<https://democracy.greatermanchester-ca.gov.uk/documents/s3268/Digital%20Strategy.pdf>

Related Scrutiny Report, March 2021, available at the following link: [Economic Development \(greatermanchester-ca.gov.uk\)](#)

1 INTRODUCTION/BACKGROUND

- 1.1 The first GM Digital Strategy was published in February 2018. It built on the ambition outlined in the Greater Manchester Strategy that GM will be a world-leading digital city-region, to set out our vision for GM as a digital city-region with a difference.
- 1.2 This work was refreshed in 2020, placing the city-region's people more firmly at the heart of plans in an updated GM Digital Blueprint which set out a three-year approach for Greater Manchester to be a world leading digital city-region which supports the GM Strategy and the GM Local Industrial Strategy.
- 1.3 The Blueprint sets out five priorities and two enablers where we will focus activity and influence to achieve the ambition of being a world-leading digital city-region as shown in Figure 1.

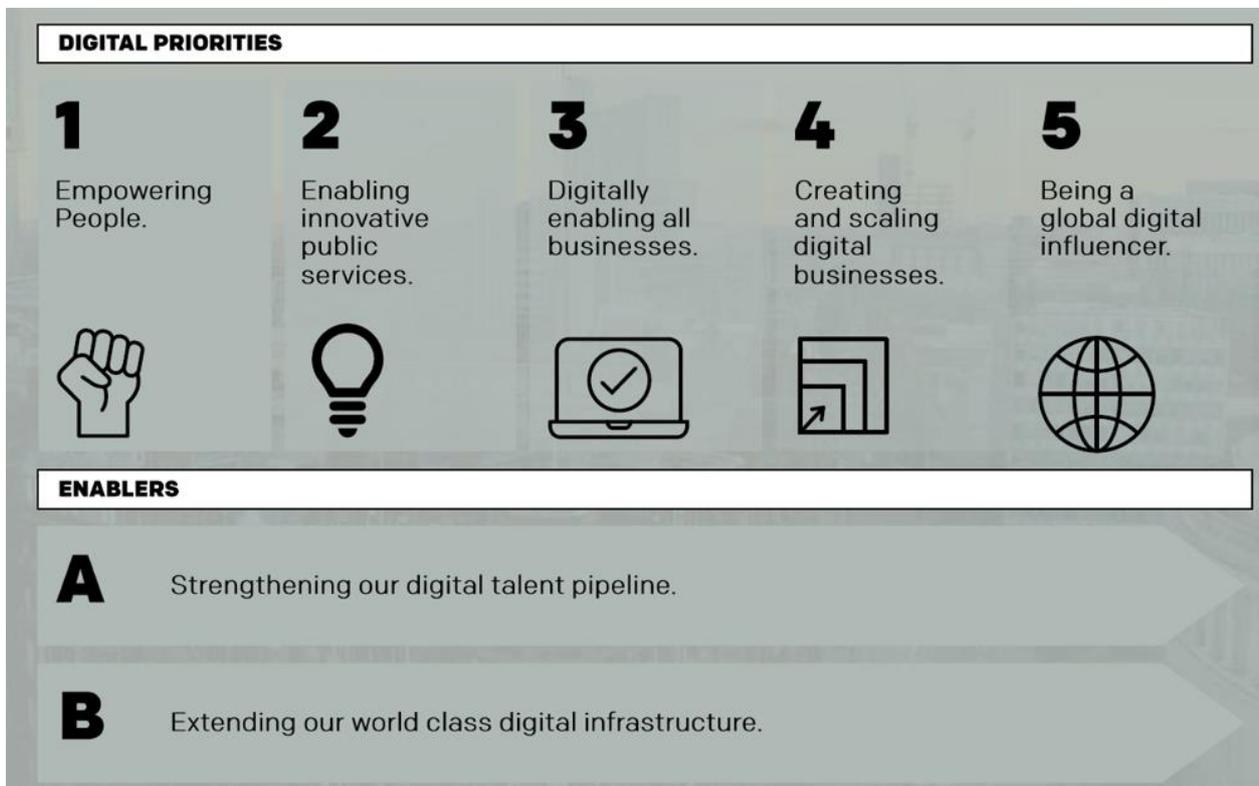


Figure 1. GM Digital Blueprint themes.

- 1.4 It is important to note that the GM Digital Blueprint is a strategy for the city-region, not only the GMCA or even the public sector. Its scope spans a broad range of organizations and communities in the GM Digital eco-system including local authorities, health services, Greater Manchester Combined Authority, Transport for Greater Manchester, MIDAS, businesses, universities and the Voluntary Social Enterprise and Community Sector..

2 OVERALL PROGRESS AGAINST TARGETS

- 2.1 Across all the Priorities covered in the Digital Blueprint there has been a high level of activity in 2021. With digital being a key area of focus in terms of the economic response to the pandemic, this impetus to ensure the city-region and its communities are well positioned to take advantage of digital opportunities will continue alongside accelerating work on digital innovation and transformation of public services.
- 2.2 Overall, Greater Manchester is increasingly recognised in the UK and internationally as a key centre for technological excellence with investment in our Creative, Digital and Technology (CDT) sector, start-up and scale-up activity, and organisations opening facilities here. Headline examples in 2021 include:
- North West overtakes South East to become one of UK's top locations for foreign direct investment projects¹
 - PwC announces new tech hub in Manchester, creating 1000 new jobs²
 - Matillion raises \$150M at a \$1.5B valuation³
- 2.3 This success is spilling over into demand for talent – GMCA commissioned analysis found that over 40,000 IT and data roles were advertised online in Greater Manchester in the 12 months up to Sept 2021, more than in any other sector.
- 2.4 Progress against key measures in the GM Digital Blueprint is as follows.

Headline Measure – by 2023	RAG	Direction
Employment and skills in digital and creative industries will rise to 96,000	GREEN	→

- 2.5 Our target to grow from 85,000 to more than 96,000 people in the CDT sector by 2023 is likely to have already been exceeded given the scale of roles being advertised. This is however a difficult figure to measure as technology is so embedded in all sectors, such as the financial sector, not only pure CDT industries.
- 2.6 The true employment figure is therefore likely to be considerably greater. As such It is clear that the digital sector remains one of the main recruiters in Greater Manchester with significant growth of incumbents and new entrants to the market seeking access to our diverse pool of experienced individuals and students without paying a London premium.
- 2.7 As explained further in section 3, this is creating pressures on our talent pipeline and ensuring that opportunities are balanced across the city region wide is included in the focus of work supporting development of Growth Zones.

Headline Measure – by 2023	RAG	Direction
An increase in digital inclusion and basic digital skills across the city region to 80%.	AMBER	↑

¹ [North West overtakes South East to become one of UK's top locations for foreign direct investment projects - Business Live \(business-live.co.uk\)](https://www.business-live.co.uk/news/north-west-overtakes-south-east-to-become-one-of-uk-s-top-locations-for-foreign-direct-investment-projects)

² [PwC announces new tech hub in Manchester, creating 1000 new jobs](https://www.business-live.co.uk/news/pwc-announces-new-tech-hub-in-manchester-creating-1000-new-jobs)

³ [Matillion raises \\$150M at a \\$1.5B valuation for its low-code approach to integrating disparate data sources | TechCrunch](https://techcrunch.com/2021/09/15/matillion-raises-150m-at-a-1-5b-valuation-for-its-low-code-approach-to-integrating-disparate-data-sources/)

- 2.8 Home schooling, home working and the shift to online public services such as GP consultations supported by both governmental and locally driven distribution of technology has both highlighted the need to address digital exclusion and enabled more people to get online than ever.
- 2.9 Whilst work with the Good Things Foundation has shown that as many as 1.2M people in Greater Manchester are digitally excluded or marginalised, it is estimated that 80,000 PCs or other devices have been distributed to school children in Greater Manchester so far and more to care homes and vulnerable.
- 2.10 The GM Tech Fund and 100% Digital Inclusion ambition launched in 2020's "Digitober" event by Cllr Sean Fielding and Andy Burnham have set the bar higher on this ambition which is being responded to by the GM Digital Inclusion Action Network and Taskforce with significant industry support.

Headline Measure – by 2023	RAG	Direction
Average download speeds in GM will exceed 100MPS.	GREEN	↑

- 2.11 The GM Digital Blueprint published in March 2020 stated the ambition that GM average download speeds across fixed and mobile infrastructure – then averaging 50Mbps - would exceed 100Mbps by 2023. GM is on course to achieve this ambition with the GM average now over 80Mbps. Indeed, two local authority areas (Wigan and Stockport) are already over 100Mbps
- 2.12 Gigabit connectivity availability in Greater Manchester is at over 78% currently compared to 66% across England as a whole. Over 2,700km of fibre connecting approx. 1,600 public sites is being delivered by April 2022 through several contracts, most notably the GM Local Full Fibre Programme placing Greater Manchester at the forefront of connected city regions.

Headline Measure – by 2023	RAG	Direction
The Creative, digital & Tech economy in GM will have grown to £5.5BN from £5BN by 2025	GREEN	↑

- 2.13 Updated information on the size of Greater Manchester's Creative Digital and Tech is currently unavailable, however Greater Manchester overtook Cambridge as the area with the second highest venture capital investment in the UK in 2020 reaching \$687.6m in 2019, up from \$199.1m in 2018⁴.
- 2.14 In addition, in a single week in February 2021, four Greater Manchester companies raised over £153M collectively and that trend looks to have continued throughout 2021.

⁴ [Manchester named UK's second most attractive city for tech investment - Invest in Manchester](#)

3 DELIVERY AGAINST BLUEPRINT PRIORITIES

3.1 The following section provides specific updates for each of the GM Digital Blueprint Priorities and Enablers.

Empowering People

- 3.2 The national and local recognition of the detrimental impact of digital exclusion has been brought to the forefront of agendas across the board. Without access to digital connectivity, data, devices and skills those GM citizens experienced unequal opportunities to access education and employment, services and social engagements throughout the social restrictions of Covid-19.
- 3.3 The need to address this inequality was a focal point of the GM Mayoral manifesto in 2021. The GM Mayor has committed to the ambition for 100% digital enablement of people over 75, people under 25 and the provision of accessible services for disabled people.
- 3.4 The establishment of the Digital Inclusion Action Network in May 2021 to drive forwards this agenda through co-design and cross-sector collaboration has thrust the GM Digital Inclusion Agenda for change forwards and provided the political impetus to secure commitment to programme initiatives. The GM Digital Team has successfully extended into new areas of working and developed new partnerships to optimise the delivery outcomes of the programme.
- 3.5 Lessons learned and best practice are shared on a bi-monthly basis at the GM Digital Taskforce forum which has over 150 members from the public, private and VCSE sector providing a broad spectrum of expertise, experience and insights into the issue of digital exclusion, the challenges in reducing inequality and how we can optimize our efforts to deliver on our ambition for 100% digital enablement in Greater Manchester.
- 3.6 The prominence of the Digital Inclusion Agenda has also strengthened cases for investment in infrastructure, smart technology and need for accessible public services as the issues of digital exclusion permeate all aspects of life and the GM Digital Portfolio delivery.
- 3.7 Digital Inclusion projects due to go live in the new year include a collaboration with Wythenshawe Community Housing, a Care Leavers Initiative, extension of the Technology fund to Special Education Needs and Pupil Referral Units setting in Greater Manchester, and the Single Landing Point for Digital Inclusion support.

Innovative Public Services

- 3.8 There is both increasing opportunity and demand for use of technology in public services so that individuals and communities can be supported more specifically, insightfully, and quickly in joined up ways. However there remain a number of systemic challenges for the public sector at both local and national levels such as skills and affordability, and security pressures from increasingly sophisticated and widespread cyber attacks and incidents require constant attention.
- 3.9 This area will be reviewed by the Corporate Issues & Reform Scrutiny Committee in February 2022.

Creating, Scaling and Digitally Enabling GM Businesses

3.10 Collaboration with industry leads in Cyber, eCommerce and Telcoms plus Government Departments has shaped the GM Digital Talent Pipeline activity plus activity to attract inward investment such as the Digital City Festival. With GM voted the “world 3rd best city” by TimeOut and international investors increasingly targeting GM for breakthrough businesses, the city region is gaining a reputation as a significant hub for innovation.

3.11 Analysis of digital cluster strengths and activities is supporting the identification and pursuit of initiatives to strengthen the digital economy, as per Figure 2.

INCREASING DIGITAL CLUSTER ATTRACTIVENESS

Increasing the attractiveness and growth potential of GM in target sectors by being distinctive & unique

<p>TALENT</p> <ul style="list-style-type: none"> Scale: 100,000 students; 7M people within 1 hr. High scale of diversity Affordability Attractiveness of culture <p>PRESSURES: “War for talent”</p> <p>GM RESPONSE: Pipeline expansion: Fast Track Digital Skills Fund; AEB; GMACs; <u>BridgeGM</u>; increase schools and college engagement; industry collaborations; schools engagement programme; diversification support</p>	<p>NETWORKS</p> <ul style="list-style-type: none"> Strong spirit of collaborative disruption High number of pre-covid meet-ups Business networks and awards <p>PRESSURES: Significantly based on the regional centre</p> <p>GM RESPONSE : Development of growth zones; support for business networks inc. high profile activity; investment in facilities that supporting networks; active convening of networks e.g. GM Cyber Advisory Group.</p>	<p>INFRASTRUCTURE & DATA</p> <ul style="list-style-type: none"> Robust <u>gigabit</u> telecoms investment; internet peering via IX Manchester Analogue connectivity – MAG, HS2 / rail, road World class office & research; co-working and innovation areas / zones <p>PRESSURES: UK connectivity lags internationally; uneven distribution.</p> <p>GM RESPONSE: Development of growth zones; LFFN; 5G support; GM One Network; Cooperative Network; GM Digital Platform; GM Care Record; GM Digital Platform; GM Information Strategy; <u>MappingGM</u>.</p>
<p>INVESTMENT</p> <ul style="list-style-type: none"> VC investment in Manchester overtaken Cambridge – £647M in 2019 from £199M in 2018. 8 digital “unicorns” in North West “<u>Northshoring</u>” & commercial self-investment e.g. PWC, Roku, Cloud Imperium Manchester a target for global tech VCs Affordability (40% better than London) <p>PRESSURE: Ensuring GM gets Gov’t support</p> <p>GM RESPONSE: Increase profile, Gov’t engagement, MIDAS, investor relationships</p>	<p>BRAND AND PROFILE</p> <ul style="list-style-type: none"> Mayoral influence and visibility 3rd best city in World (Timeout) Europe’s largest indoor arena <p>PRESSURE: Lacking a headline global signature digital event; budget relatively low</p> <p>GM RESPONSE: International marketing, Digital City Festival, develop niche deep-knowledge events</p>	<p>RESEARCH</p> <ul style="list-style-type: none"> Private sector R&D bases (Gamma, BAE, <u>Qinetiq</u>, THG, Matilion). Public sector driven research: Defence, healthcare. University size and strengths, and multi-university collaboration - Cyber & AI Foundries, Turing Accelerator / co-lab activity. <p>PRESSURE: Scale</p> <p>GM RESPONSE: <u>iGM</u>; research prioritisation and investment; increasing cross <u>uni</u> collaboration; brand and profile</p>

Figure 2. Cross cutting cluster strengthening with Talent highlighted given current opportunities and pressures.

3.12 A particular focus continues to be support for growth of the digital security sector, building on the establishment of the GCHQ strategic base in Manchester. In a further success for the North West, Government announced that National Cyber Force would be based outside Preston and a new Cyber Corridor established between Greater Manchester and Salmesbury. This move was recognized as “cementing the North-West region’s position as the cyber centre of the UK”, in an industry growing exponentially.

3.13 This builds on work establishing a set of research and innovation facilities and programmes across Greater Manchester such as the GM Cyber Foundry, AI Foundry, and the Digital Innovation Security Hub plus programmes hosted at the Home of Skills and Technology (HOST) in Salford.

3.14 This £5BN investment offers significant potential for the city region and the response to this is being factored into work to refresh the GM Cyber Strategy and link with Innovation GM alongside work by MIDAS to further attract inward investment.

- 3.15 A refresh of the GM Cyber and Digital Security Strategy is in development in collaboration with our academic and industry partnership. This will shape our ambitions and commitments to the development and support of a thriving Cyber and Digital Security ecosystem in GM and the Northwest.
- 3.16 In 2022 work will continue to further promote inward investment and raise Greater Manchester’s international profile, support home grown business support, enhance Greater Manchester’s digital security sector and support development of Growth Zones.

Extending our World Class Digital Infrastructure

- 3.17 Household and industry consumption of data is doubling every three years⁵ and - if this trend continues - will be approximately eight times higher by 2030. For Greater Manchester to continue to thrive in a digital age, it is therefore essential that the city region is at the forefront of both fixed and wireless digital infrastructure investment.
- 3.18 The progress of the GM Local Full Fibre Programme alongside wider industry activity and engagement through the GM Digital Infrastructure Advisory Group has catapulted forward Greater Manchester’s digital infrastructure since 2019, as shown in Figure 3, and at present 78% of the population has access to Gigabit level connectivity (including via cable services) with Full Fibre (“Fibre to the Premise”) increasing rapidly.

GM Fixed Connectivity Coverage Dec 2021 (2019)			
	Gigabit (1,000Mbps)	Full Fibre Coverage	Superfast (Min. 30Mbps)
Bolton	89.87%	13.55% (0.84%)	99.3% (99.3%)
Bury	74.75%	65.92% (4.07%)	99.4% (99.4%)
Manchester	71.66%	32.65% (10.92%)	96.1% (95.7%)
Oldham	81.49%	23.29% (7.11%)	99.1% (99.06%)
Rochdale	62.22%	10.14% (3.1%)	98.8% (98.79%)
Salford	86.11%	64.92% (45.14%)	97.8% (97.2%)
Stockport	88.35%	12.49% (0.56%)	99.22% (99.22%)
Tameside	76.35%	62.01% (6.46%)	99.6% (99.57%)
Trafford	67%	5.27% (1.95%)	99.2% (99.16%)
Wigan	87.69%	6.73% (1.31%)	99.3% (99.23%)
GM Average	78.4%	29.7% (8.1%)	98.8% (98.6%)
England	66.35%	28.8% (8.73%)	97.4% (96.5%)

Figure 3. Fixed connectivity speeds in GM, Dec 2021 vis Sept 2019.

- 3.19 Delivery of the £28M GM Local Full Fibre Network programme will be complete by April 2022 with the DCMS funded element completed in December 2021. Given the shared nature of this infrastructure, four of the councils, TFGM and GMCA including

⁵ • [Total data volume worldwide 2010-2025 | Statista](#)

Fire & Rescue embarked on a joint procurement of Wide Area Services in 2021 with recommendations to be brought to GMCA Board and the Corporate Issues & Reform Scrutiny in early 2022 alongside governance in each partner organisation.

3.20 Expanding use of this contract to other parts of the public sector has been included. The key benefits for the organisations participating are expected to be bandwidth increases, scalability, improved resilience and lower costs.

3.21 Several opportunities exist to leverage the Full Fibre network which will be explored further in 2022:

- Instigated by the Police & Crime Commissioner, work has been undertaken in 2021 to assess the maturity of CCTV operations across Greater Manchester and this will be explored further in 2022.
- TFGM's current use of Artificial Intelligence to test potential improvement traffic flows and air quality require fibre connectivity to traffic signals, many of which have been included in the Full Fibre Network.
- Whilst the Clean Air Zone programme is using mobile SIM card data connectivity, there is potential to leverage the Full Fibre network.
- The Fibre Network could be used to offer free gigabit wireless connections in key locations, as is already happening in 21 community centres as part of the social value returns from the Full Fibre programme.

3.22 In 2021, a Smart GM Places Leadership Group was established to bring together representatives from boroughs, TFGM, Health & Social Care Partnership and GMCA to guide and inform this work. This is complemented by the industry focussed Digital Infrastructure Advisory Group.

3.23 Conversations with Place Directors, GM ICT Leaders Group, GM Digital Infrastructure Advisors and wider partners in the GM Digital ecosystem have created visibility of the use of the opportunities to weave together the use of digital assets and capabilities across GM and use them to optimize delivery across broad range of GM strategic agendas including place-making, growth zones, public sector innovation and environment.

GM Digital Talent Pipeline

3.24 Demand for digital skills and talent has increased rapidly in 2021, as outlined in the Digital Growth section above. In the past month alone, three organisations have announced plans to recruit 1000 digital professionals each. This presents both opportunities and challenges for GM as it is estimated that there are at least 10,000 new roles being created each year and increasing.

3.25 The main route into the digital industry is through a digital/tech degree (31%) closely followed by career switchers 22% though apprenticeships are growing (Source: MD NW Skills Audit 2021).

3.26 Schools: In 2019/20 only 62% of GM schools offered Computer Science GCSE, dropping as low as 11% in more deprived areas. In 2018/19 this translated to 3943 young people studying Computer Science at GCSE level in Greater Manchester.

3.27 Further Education: From 2021 "T-Levels" in Digital Production Design & Development, Digital Support Services & Digital Business Services will be available across GM's FE Colleges.

3.28 Higher Education: In 2018/19 nearly 4500 GM students were enrolled on CS related courses with over 45,000 taking wider STEM courses. GM is developing several

centres of excellence including Manchester Metropolitan University School of Digital Arts, Salford Institute of Technical Skills, and UA92 Digital Academy.

- 3.29 University of Manchester recently disclosed that the numbers of undergraduate starters has doubled in 2021 from 280 to 600 – with three As required at A-Level to secure a place. UoM remains the most applied for university in the UK with the highest proportion of students remaining in the city region post graduation (53%).
- 3.30 There were 2,204 Digital Apprenticeship Starts in the period 2017-21. 55% L3, 33% L4, 12% degree level, however an issue remain that there is a lack of standards in place for certain job roles, lack of provision at L2/5 despite general good take-up.
- 3.31 Reskilling & Retraining: Approx. 3500 people will be retrained into a digital role across GM/NW using local/national funds. Focus is on people changing sectors/roles.
- 3.32 Spending Review proposals included requests that will expand our ability to develop skilled digital professionals, however there needs to be a wider cross public-private-academic drive to achieve this.
- 3.33 There are opportunities to work with businesses to ensure the talent pipeline for the digital sector is adequately supplied to meet growing demand and also ensure that there is a diverse representation in the workforce. The GM Digital teams is working closely with GM Work and Skills to develop a strategic cross-cutting approach to ensure citizens of Greater Manchester have exposure to digital skills and employment pathways and that the culture, transport, infrastructure and housing in Greater Manchester continues to attract people and businesses to the region.

Being a Global Digital Influencer

- 3.34 Greater Manchester’s international reputation is growing. The global tech press has noted this, referring to GM as a growing innovation hotspot. Example headlines are included in Figure 4.

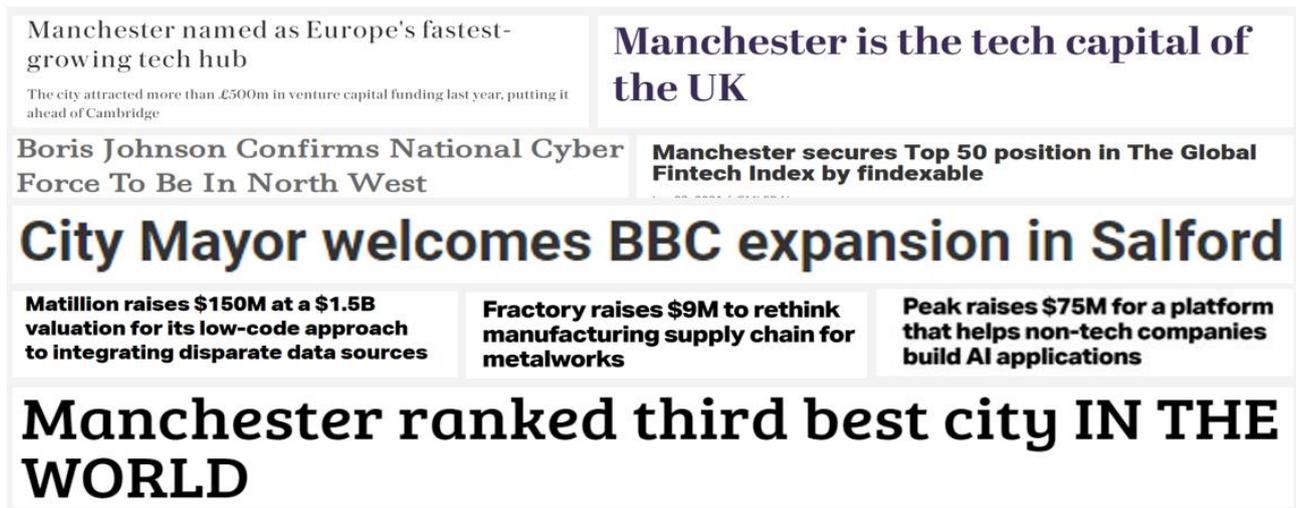


Figure 4. A snapshot of Greater Manchester digital headlines, 2021.

- 3.35 Similarly initiatives such a GM One Network have drawn global attention and the announcement of National Cyber Force in the North West region creates a unique opportunity being the largest defense commitment in the UK since the creation of the RAF a century ago.

- 3.36 Marketing Manchester and MIDAS have launched a new digital campaign including a set of videos highlighting GM's strengths and attractiveness in parallel with targeted activity.
- 3.37 The 3rd Digital City Festival event is being planned for 2022 with the intention that it further raises GM's visibility.
- 3.38 Within the context of the Growth Zone strategy, Places Directors are considering how all areas of GM increase their digital sector profiles.

4 CONCLUSION AND NEXT STEPS

- 4.1 As a city region, Greater Manchester remains committed to creating opportunity for people of all ages in Greater Manchester to live well, access learning, skills and careers, enjoy successful businesses and benefit from good environments and high-quality public services.
- 4.2 The plans for delivery on GM Digital economic priorities over the next 12 months reflect the targeted response to economic opportunities and challenges, to grow the sector, to provide good employment and career opportunities and to build inclusivity into every project.
- 4.3 GM Digital continues to be a significant programme for Greater Manchester with the sector being a priority growth area and with digital innovation underpinning future delivery of effective and resilient public services. This work will continue to be overseen by the GM Digital Steering Group, chaired by the Portfolio Leader, and the GM Digital Delivery Executive, chaired by the Portfolio Lead Chief Executive.
- 4.4 Support is sought for continued prioritisation of activity in this area.