Salford
Digital Strategy
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1. Introduction and Strategy Context

Salford as an Economic Growth City

Salford will open up and connect its existing assets to enable collaboration and experimentation by a diverse range of emerging and established organisations.
Introduction and Strategy Context

Salford as an Economic Growth City

Digital technologies are transforming the lives of citizens in profound ways – how we travel, shop, eat, work, communicate and live. As well as such rapid change, technology also brings significant disruption to lifestyles, occupations and sectors, requiring local government to embrace new strategies to create value and growth within our cities.

Salford is a relatively compact environment of 249,000 residents but it faces similar societal challenges as some of the world’s mega-cities – such as increased demand for urban mobility and pressure to provide sustainable services, better housing and improved lifestyles and health for its citizens.

But Salford is also a city in transition and is now the fastest growing economy in Greater Manchester.

The connection between a “digital strategy” and economic growth is now a recognisable central theme of civic policy across the UK, and a competitive regional economy is now linked directly to a region’s digital credentials and its role in “innovation”. In this regard Greater Manchester’s own digital strategy is no exception.

However, the challenge for Salford’s digital strategy is to complement the vision of Greater Manchester as an integrated digital innovation region but to do so in a way that engages Salford citizens’ real needs and leverages Salford’s identifiable strengths and opportunities.

Therefore, in response to the economic growth taking place in Salford and the opportunities emerging, it was agreed by a collective of stakeholders in the city including Salford Royal Foundation Trust, Salford City Council, The Landing MediaCityUK, Peel and the University of Salford, that a discrete Salford Digital Strategy was required in order to capitalise on sector strengths and to complement the Greater Manchester Digital strategy.

A commissioned report with all stakeholders identified the areas of focus:

1. Flexible approach to emerging digital opportunities – an open space for experimentation
2. Open up existing assets and capabilities, breaking down barriers
3. Develop marketing, brand and leadership
4. Initial focus on leveraging media/health assets, growing from there
5. Developing the skills of the workforce (inc. education and training)

The intention was for Salford to have a clear statement of focus to achieve its aim of becoming the most attractive city for digital enterprise. It resulted in the following mission statements:

**Salford will open up and connect its existing assets to enable collaboration and experimentation by a diverse range of emerging and established organisations.**

**Salford will become the go-to destination for digital enterprise, digital innovators and digital innovation and collaboration.**

**Its initial focus will be on leveraging its strengths in digital media and healthcare, but the city would be open to all sectors, and be recognised internationally in a clear brand and value proposition.**

A Collaborative of stakeholders was duly formed – Digital Salford – with a clear Terms of Reference capturing its ethos and intentions.

In May 2018 Digital Salford (the Collaborative) created the role of Chief Digital Officer to signal its intentions to continue to lead as a Digital City and a Digital City Council. The new appointment of a city Chief Digital Officer (CDO) to lead the digital ambitions of the City of Salford represented a clear intention towards the mission of making Salford the most attractive city for digital enterprise.

The CDO determines strategy, priorities, themes and investment areas which will make a difference to Salford’s economy and its collaborative digital role in Greater Manchester.

The Office of the CDO is housed at The Landing MediaCityUK, an iconic digital hub at the heart of Salford Quays, and will become an integrated “front door/one door” into Digital Salford for inward investment, digital growth and acceleration, infrastructure and inclusivity.
The Vision:
To make Salford the most attractive city for digital enterprise and to establish Salford as a leading digital economy AND, in doing so, to ensure that innovation and growth is directly connected to outcomes for Salford people.
1.2 Towards a Citizen-centric Digital Strategy

Extensive research has highlighted the need for Salford to invest in pipeline talent in order to drive its enterprise mission, signalling the definitive economic link between a region’s ability to develop the skills of local population and the need support entrepreneurs to move to Salford.

However, the social and economic landscape in Salford (its strengths and weaknesses) mirrors the position in Greater Manchester more widely and therefore the intention of the Salford Digital Strategy is to align specific details of digital development closely to initiatives already in train at GMCA in order to enhance and achieve economies of scale. A strong example of this is Digital Pipeline Development and this is covered in more detail in section 4.1 below.

Nevertheless, there is a potentially more ambitious approach to engagement with communities, residents and young people that should form a basis for the overall Salford Digital Strategy – one which seeks to look at Social Impact holistically rather than just the specifics of sector skills training.

This is an achievable ambition because Salford is paradoxically both small enough and big enough to be able to deliver a different kind of Digital Strategy – one that drives forward a successful connected digital economy based upon enterprise growth and one that simultaneously aims to engage with its stakeholders and residents – the citizens of Salford – in the application of new technologies for positive social impact.

Wherever possible such a model of engagement will involve an element of co-design and consultation and will require a significant programme of communications and knowledge share.

We can only empower our communities if the deployment of digital technologies and new processes is attached to opportunity and improved welfare.

Therefore, the vision for a Digital Salford is one that marries digital economic growth with direct social impact.

This approach will necessarily overlap with developments in public sector transformation and will fully align with Salford’s Digital You inclusivity agenda and GM’s pledge to reduce isolation and homelessness. Importantly, the Digital Strategy aligns with the City Council’s Social Impact agenda whose mission is to look for relevant and additional social, environmental and economic value from everything that it does. Given that Salford is positioned as the 22nd most deprived local authority area nationally on the Index of Multiple Deprivation (IMD), it is imperative that a Digital Strategy for the city is fundamentally people-centric.

Within that vision, the ambition is also to connect in new ways the accelerating growth of Salford’s Digital Innovation sector (having concomitant high quality jobs and future facing careers) with communities across Salford. MediaCityUK will have a key role to play in this. There is no other city or urban centre in the UK that has such a unique entity as MediaCityUK.

The Vision:
To make Salford the most attractive city for digital enterprise and to establish Salford as a leading digital economy AND, in doing so, to ensure that innovation and growth is directly connected to outcomes for Salford people.

Its developing global status as an innovation centre is more than matched by Salford Royal as a Global Digital Exemplar Hospital Trust. The University of Salford’s lead position in robotics, acoustics, smart energy and autonomous vehicles provides a third ‘node’ to Salford’s innovation assets. By triangulating these assets and developing a singular narrative which is linked to an overarching social impact agenda, we are in a position to drive forward a unique and fitting Digital Strategy.

In conclusion: The Salford Digital Strategy sets out a vision and action plan that is uniquely Salfordian in its Social Impact agenda, but which also aligns with the wider GMCA city region Digital Strategy, Local Industrial Strategy and the RSA Inclusive Growth Commission. The creation of a collaborative – Digital Salford – and the Chief Digital Officer role provides stakeholders in Salford with a mechanism to link the digital economic drivers of city growth to social imperatives, future opportunities and quality of life for its citizens.
Summary of measures:

We will set up Digital Salford as the delivery mechanism for the Digital Strategy. This will generate three overarching opportunities for the City of Salford:

#i A city-wide identity for citizen engagement, interaction and intervention;

#ii A coherent “one door” enterprise communication channel for digital inward investment and innovation partnerships;

#iii A governance mechanism based on stakeholder collaboration for Salford’s Innovation brand (Salford Innovation Triangle)
2. Strategy Overview

As a result of research and engagement by Deloitte and the partner networked workshops that followed, the priorities that emerged were captured and ratified in the 100-day CDO plan.

There are four identified Action Areas of activity for the Digital Strategy to focus on:
#ACTION AREA

Smart City
- Unlocking MediaCityUK and the Quays as a connected smart city living lab
- The Salford Innovation Triangle as a meta-narrative for combined innovation assets

Enterprise
- Driving an identifiable enterprise and digital tech eco-system for Salford
- Directly support inward investment opportunities

Digital Public Sector
- Support the city-wide public sector Digital Transformation
- Support the development of a dynamic data gateway service for Salford residents
- Ensure alignment and partnership working with Greater Manchester Digital strategy

Infrastructure
- Ensuring a city-wide connectivity plan
- Attract investment in next-generation networks

MyCity Salford
- A new model for citizen engagement and communication

Digital Health and Citizen Welfare
- Innovation in technologies for inclusive public health

Digital Salford Skills / Digital You
- Digital Inclusion
- Digital schools
- Bridging the Gap

Working across these action areas is the cross-cutting social impact agenda that will be the DNA of the Salford Digital Strategy. These can be categorised in three channels:
3. The Action Areas of the Digital Strategy
The Action Areas of the Digital Strategy

### #3.1 Action Area

#### Smart City

**Unlocking a Smart City.** Since the arrival of first tenants in 2010-11 MediaCityUK has grown and matured as a technology centre and visitor destination. This growth has continued with now over 250 businesses on site and over 7,000 people living and/or working at MediaCityUK. But the project here is far from complete - MediaCityUK is set to double in size by 2030 with a further £1bn investment.

MediaCityUK & the wider Quays is a unique asset in the North representing 30 years of co-investment between private and public partners and MediaCityUK’s relationship and connection to the Quays will be an important factor in its future development. The Res Publica Report “Escape Velocity” identified MediaCityUK and The Quays as a “Digital Creative Super Cluster”. The UK Government’s Industrial Strategy seeks to identify a new framework for industrial planning and economic growth which focuses on sectors and places. As part of this, the Government has identified the need for cities and regions to develop Local Industrial Strategies and identify key strengths and opportunities that already exist within their localities.

MediaCityUK’s status as a national broadcast centre has been thoroughly achieved but the development of an organic co-located indie supply-chain on site is incomplete. Nevertheless MediaCityUK continues to diversify and grow and its future-facing growth opportunities are as much about next-generation digital tech solutions and tech eco-system as they are about content generation and curation. It has a singular opportunity to evolve into a digital technology economy of global significance – one which is central to the UK’s industrial future.

Our action plan is to leverage MediaCityUK’s unrivalled infrastructure advantage and inter-connectedness in order to unlock its potential as a Smart City exemplar, a mini-city living lab if you like, where entrepreneurs and innovators can deploy products and solutions and where partnerships in applied R&D can demonstrate the scalability of those solutions and to develop approaches to its management.

A physical duct network interconnects every building at MediaCityUK through which hundreds of single-mode fibre pairs have been installed to facilitate rapid deployment of new technical installations and to support activities that require rapid configuration and re-configuration both in-building and in external, public-facing areas.

In addition, MediaCityUK has a central Building Management System (BMS) for cross-site utilities/fire/ security/data management/power, as well as its large-scale cross-site data centre. More than 20 national & international connectivity service providers have extended their fibre networks to the campus, which together with the largest teleport in the North, make MediaCityUK is one of the most connected spaces in the UK. As a consequence, direct connections to a comprehensive network of third party datacentres and cloud platform providers (local & international) allow for direct access to highly scalable computing and processing capabilities. The points of presence (POPs), together with an additional 100+ equipment bays/racks of spare capacity in other highly-resilient, technical accommodation, would allow for any test bed to scale as necessary.

Our core partner, Peel Media, as custodian of the data platforms and physical infrastructure, is fundamental to the successful realization of this vision. Peel is committed to unlocking Smart City innovation at MediaCityUK and is a sponsor of The Landing.

**5G at MediaCityUK.** Through our partnership with VodafoneUK we will enhance the existing technology footprint at MediaCityUK with a fully operational and commercial 5G network - Narrow Band IoT. Alongside this we plan to set up a 5G Innovation Hub at The Landing MediaCityUK enabling SMEs and research consortia to collaborate on 5G use-cases. The physical space of the Hub will stimulate co-creation and will aim to address and deploy solutions against some of Salford’s wider societal challenges.

GMCA has an ambition to become world leading in 5G services: new secure optimised networks; operational transformations for business; and transformed service delivery and user lifestyles. The Innovation Hub at MediaCityUK - one of the most exciting and connected spaces in the UK – aligns with that vision and would provide all parties with a global and iconic statement to help realize the ambition.
Our initial use-cases at the Hub will embrace several areas of activity:

# Civic and public health solutions including waste management/recycling, energy management, open data, innovation, digital health.

# High resolution content standards for delivery over 5G networks; business-to-business and business-to-consumer innovations in content delivery and consumption.

# Immersive content (city-wide deployment of Virtual and Augmented Reality VRAR content) utilizing the existing cluster strengths at MediaCityUK and significant network of SMEs developing new content forms for Virtual and Augmented Reality.

# Connected autonomous vehicles (CAVs) With our partners the University of Salford, Transport for Greater Manchester, and Salford City Council, we will deploy the Navya Autonom Shuttle at MediaCityUK and generate use-case data for the future of CAVs and Mobility as a Service in Salford. Mobility as a Service (MaaS) trials will commence in 2019 for application within commuter journeys.

# Urban deployment of 5G and its implementation alongside LTE and existing wifi systems.

**Smart City Alliance**

To realize its Smart City action plan, Digital Salford will create a Smart City Alliance Group of commercial partners to drive MediaCityUK as our ‘frictionless’ mini-city environment for iterative and fast-moving proof-of-concept application across all contexts and interpretations of “smart” city.

The long-term aims of the Alliance will include:

# demonstrating new capabilities of 5G to unlock and accelerate technology solutions for social good.

# generating new business models and applications for commercial partners.

# supporting the identity of MediaCityUK/Salford Triangle as an innovation campus as well as a Creative and Digital cluster.

# preparing the City of Salford for an overarching Internet of Things (IoT) strategy.

**Summary of measures:**

Digital Salford will function as the one door and convener, bringing together industry partners, academia, entrepreneurs and SMEs for commercial solution development. We will aim to unlock MediaCityUK as a Smart City Living Lab for next-generation solutions and networks by:

#i providing opportunities for local schools and colleges to become involved in technologies that may facilitate improvements in their neighbourhoods;

#ii establishing a physical 5G Innovation Hub at MediaCityUK;

#iii generating 5G/Smart City hacks, bootcamps and bid opportunities;

#iv establishing a Salford Smart City Alliance for effective deployment of products, services and communications;

#v engaging partners from across Greater Manchester to scale trials and innovation activity across the city region including support to get early access to street furniture and building rooftops. Specific digital innovations emerging from the Hub could inform deployment in transport and healthcare innovation across Greater Manchester.
Digital Salford will function as the one door and convener, bringing together industry partners, academia, entrepreneurs and SMEs for commercial solution development.
The Salford Innovation Triangle - Innovation to drive economic growth.

Salford has significant strengths in terms of innovation practice already taking place within the businesses and other organisations that comprise its economy. To date these strengths are perhaps most evident in the digital sector and the cluster of such activities around MediaCityUK as outlined above. However the city has other prominent innovation leads especially in the field of Digital Health Care and medicine at Salford Royal Foundation Trust and industrial applied research around the University of Salford.

The interplay between MediaCityUK & The Quays, Salford Royal NHS Foundation Trust and the University of Salford provides a wider innovation context within which a national smart city exemplar can be developed and through which wider industrial strategy objectives can be achieved.
Salford’s Innovation Triangle

Taken together, the three ‘nodes’ of MediaCityUK, the University and the Hospital provide an internationally significant cluster – the Salford Innovation Triangle – providing a key focus which, with further fostering and support, will further enable the City Region to achieve its growth ambitions.

Embedded within the cluster area are a number of development opportunities and existing economic activities which provide a geographic focus and a physical link between the nodes. These include the Salford Crescent Masterplan area and the future opportunity areas North of Broadway/Eccles New Road and Liverpool St industrial areas. This ‘Innovation Triangle’ provides a major opportunity to accommodate new investment and activity and to act as a key focus for the development of innovation and digital activity – and hence for growth across the Greater Manchester economy.

The Innovation Triangle brings together the strengths and achievements of Salford into a coherent geophysical space.

By linking these centres of excellence Salford can boast a compelling agglomeration of digital assets underpinning its thriving economy.

The vision is to further combine and co-ordinate Salford’s assets as a purposeful Smart City technology triangle engaged in transforming complex urban and societal problems into citizen experiences and services, and economic growth.

Salford Royal NHS Foundation Trust is one of the most innovative and digitally-advanced Trusts in the UK and a leading centre of global digital excellence. It is one of the first healthcare organisations to pilot the use of real-time patient-generated health data for care and research in the UK. Its Digital Factory on campus is an innovation test-bed for rapid deployment and commercialisation of clinical solutions.

The University of Salford has lead specialisms in 5G networks and software-defined networks as well as a world class acoustics department. It is one of the founders of the Northern Robotics Network (NRN), which works across the North to identify ways in which world class research, cutting edge companies and innovative application, can help drive the future of robotics in the UK. Alongside these strengths the University is innovating with Energy House 2 for real-time simulation of built environment and clean energy solutions. It is the fastest growing University in the NW.

MediaCityUK is the largest digital and creative cluster outside of London and home to a vibrant tech eco-system centred at The Landing. MediaCityUK is set to double in size over the next decade and has the potential to be a smart city living lab in the Northern Powerhouse.
Summary of measures:

Digital Salford will support the development of the Salford Innovation Triangle by:

#i  working with stakeholders and partners to embed a digital open innovation framework into future masterplanning in Salford;

#ii  to be the voice for and to contribute to integrated place-making for the management of buildings and energy, transportation and public safety as fundamental elements of the Triangle;

#iii  supporting a programme of communication, engagement and consultation with market developers to challenge existing ways of working and to enhance the links between the innovation nodes.

#iv  helping to develop an innovation culture in the Triangle which promotes place-making, employment and educational opportunity.
Greater Manchester is becoming a focal point for high growth digital companies, especially in ecommerce and digital marketing platforms. These companies and others in FinTech, VR and cyber security (with the pipelined Cyber Innovation Centre) are helping to attract additional private venture capital to the region. Large corporates are also looking to Salford and Greater Manchester as a base. Salford is a powerful key contributor to this overall picture.

In addition, Greater Manchester has one of the country’s most extensive and dynamic network of incubators, accelerators and co-working spaces, establishing the City Region as a Tech Destination, attracting new companies and promoting collaboration and disruptive thinking underpinned the highest volume of data centres outside of London.

The super cluster of MediaCityUK and the emerging potential of the Salford Innovation Triangle are key components of the Tech landscape in Greater Manchester and its narrative as a world innovation city. Consequently, it is important to Salford’s Digital Strategy to seek a collaboration agenda with every aspect of this evolving GM picture. This will require an enhanced profile of interaction and engagement with organisations and groups in the Combined Authority to support a city region digital technology sector. Therefore Salford’s Enterprise agenda as a component of its Digital Strategy is underpinned by a culture of collaboration, support and sharing.

The Landing is the core driver behind Salford’s digital enterprise activity and a pre-cursor of the Salford Triangle in action. The Landing is a co-working and proto-typing space that sits at the heart of the Salford Quays cluster. It offers digital SMEs and micro-businesses a flexible place to work alongside large media and technology organisations, allowing them to be part of, and benefit from, the rapidly growing business community at MediaCityUK. The Landing hosts over 10,000 hours of business meetings, workshops and seminars per year, attracts over 30 international delegations per year, and has had an economic impact on the UK economy measured at 1,414 gross FTE jobs and £82.9m in GVA per annum. This has augmented the place-making initiatives around the Quays, bringing in new cultural and environmental stakeholders who have helped to create a self-sustaining momentum within the Quays cluster.

In addition to this The Landing functions as a natural convener and ‘glue’ for innovation activity across public-private operations. It achieves this through a series of Accelerator/Incubator programmes aligned to the development of growth enterprises in areas such as Digital Health, Immersive content, Industry 4.0 and AI.

The Landing also operates a unique Network Benefits programme which wraps layers of support around digital companies to accelerate their access to market and growth potential.

The Landing houses the largest independent User Testing Facility (UX) outside of London which is actively used by production companies, big brands and start ups alike. There are four high tech labs allowing businesses to test media with targeted demographic groups in order to deliver the best user experience. Our intention is to grow the profile of these Labs and to position them as a discrete “proof-of-value” service design asset in Smart City end-to-end integration – all of which is dependent upon user focus.

Similarly, The Landing has a Rapid Prototyping Facility which enables businesses to design and create physical products, using advanced 3D printers, laser cutters or vinyl cutters enabling start ups to reduce time and costs, and consortia partners to develop working prototypes. Our intention is to further leverage the assets in the labs to support our Additive Manufacturing business programmes through our partners In4.0.

A Virtual Reality and Augmented Reality Testbed will be operational in Q1 2019 at The Landing alongside a dedicated Immersive Technology incubator. This programme and vision was launched in September 2018 at Metalab, a mixed reality international conference held at The Landing. The VRAR testbed will sit alongside the 5G Innovation Hub.

The Landing also houses the North’s only Media and Music Accelerator, operated by one of The Landing’s successful start ups, Ostereo, an industry disrupting record label.

This space allows an extension of The Landing’s nurturing of creative media talent to produce real new media business and propositions.

In its totality, The Landing functions as an archetypal eco-system and environment where investors, R&D consortia, large organisations, SMEs, micro-businesses and supply chains can convene, collaborate and grow. Moreover, alongside this commercially driven eco-system we have aligned social agenda challenges – especially around Digital Health - and opened the doors to Salford communities.
Social Agenda at The Landing

This element of The Landing’s operations is a microcosm for the city-wide Digital Strategy agenda for citizen-centric economic growth and engagement. Around 1,100 Salford residents and young people in 2018 alone have attended courses and workshops supported by The Landing in an attempt to close the digital inclusion gap. For example, The Landing supports a programme that has improved the lives of young Salford people on the ‘missing register’ training them to be live media presenters.

Healthcare is also a key driver and delivered through a strategic partnership with the NHS. In 2018 The Landing ran bi-monthly workshops with NHS clinicians to improve efficiencies and performance in pre-operation processes. For example, through its rapid prototyping facility it was able to reduce the length of a hip operation by 90 minutes, reducing the need for pre-operative consultation thereby saving clinical costs whilst improving efficiency and patient care. There are many examples of such interventions with the NHS including the 3D printing of a ten year old boy’s brain aneurism. This enabled the surgeon to prepare more effectively for the operation as well as using the print as a reference point during the procedure.

In addition to taking over 200 delegates through Digital Health programmes The Landing has raised over £3M for commercial health care businesses since 2016.

The Landing’s team and partnerships mean that innovation programmes, hacks, rapid prototyping, defined accelerators and tech workshops operate seamlessly and successfully. Clients and partners include: Barclays, AWS, Kellogg’s, Microsoft, Tech Mahindra, UP accelerator, Cisco and BBC.

In short, The Landing believes in professional setup and delivery to produce iterative and focused innovation outcomes.

To help achieve this we have created a dedicated Tech Lounge – Social7 – on the seventh floor of our facility. This has become the natural convener for events, investor groups, presentations, workshops and conferences, catering for over 10,000 individual visitors per year.

Summary of measures:

Digital Salford will be a driver of Salford’s inward investment ambition and tech sector development by:

1. working collaboratively with GMCA to ensure an holistic city region success story/representing Salford at G2M Digital Steering Group, Health Innovation Manchester and operational task groups as the coherent “one door” enterprise communication channel for digital inward investment and innovation partnerships

2. enhancing The Landing and MediaCityUK/The Quays as a leading global tech destination; ensuring that the Network Benefits eco-system continues to attract scalable companies and investment

3. generating economic growth (GVA) through investment, productivity and job creation in our tech sector

4. continuing to unlock the commercial assets and activities for citizen/schools engagement, skills development and employment opportunities
Digital Salford will be a driver of Salford’s inward investment ambition and tech sector development.
The economic and cultural transformative effect of high-speed digital connectivity cannot be understated. At present the UK Government has recognised the importance of infrastructure and established the National Infrastructure Commission (NIC) in 2015. The NIC has recently completed their first National Infrastructure Assessment (July 2018) which identifies, at a national level, how the infrastructure needs and priorities of the country should be addressed.

In response GMCA has undertaken work towards a wider cross-sector Greater Manchester Infrastructure Strategy (GMIS) to ensure continued economic growth through enhanced infrastructure. The GMIS will set out the strategic directions for the short, medium and long-term priorities for infrastructure across Greater Manchester by 2040, whilst facilitating further collaboration with the infrastructure providers, GMCA and Local Authorities within Greater Manchester.

Fundamentally it will mean that Salford will need to work collaboratively within the GMIS framework. The Infrastructure Strategy will establish the scope and approach to enabling GM’s future infrastructure. The aim of GMIS is to act as a bridging document to tie together the various relevant infrastructure sectors and Greater Manchester strategies towards a collective aim. The GMIS is wide ranging in its approach to infrastructure encompassing six key areas: energy, transport, drinking water, flood/waste water, parks & gardens, and Digital. Digital is a key component of the overall strategy.

Full Fibre Connectivity project Salford is already fully engaged in the GM Local Full Fibre Networks (LFFN) project which will utilise £40m Local Full Fibre Networks/ LA & CC funding & an estimated £200M market investment. The target is to achieve a 25% fibre connectivity by this means across GM by 2020. (300,000 premises covered @ £800 each).

LFFN will provide Salford with a connectivity ‘backbone’ across its public sector assets. To join the procurement process for LFFN Salford City Council will be required to separate its Network Services/infrastructure from its IT and operational platforms. This is a significant move towards a collaborative framework for GM to enable the pan-regional network to be presented to the market.

In terms of physical infrastructure, Salford’s ambition is to be a fully connected digital city by 2021. In real terms this means connecting 100% of its residents with access to fibre or next-generation radio networks.

To achieve this Salford will need to accelerate market investment in full fibre and fixed wireless networks through a Public Sector Demand Model.

Such a model will require a new approach to how we can utilise existing city assets, especially electrical power network, and will require a new combined dialogue with Telcos, MNOs and DNOs. At present all Telco activity around fibre to the home or to the cabinet is predicated on consumer demand models, none of which will satisfy an ambition for full digital inclusion. Within the Digital Salford Strategy the aim is to generate a new type of Public Sector Demand model to begin to address the gaps in provision that, unless tackled upstream, will inevitably lead to a new digital underclass in our towns and cities.

# 3.3
Action Area
Digital Infrastructure – an holistic approach.

Other cities and regions in the UK are exploring a similar approach. For example in GM the dialogue is exploring:

- # Metrolink and National Rail ducting available to the market;
- # adopting a Standardised Wayleave across Greater Manchester [to reduce the cost and time involved in delivering fibre to the premises];
- # driving demand through a targeted voucher system for businesses;
- # fully mapping dark fibre and ducting assets and introducing a ‘one dig’ approach in GM

Addressing the gaps in provision.
Salford fully supports and aligns with this approach but intends to drive the underlying social impact agenda in a robust way. At present there is no commercial requirement for full connectivity to parts of the city that are unlikely to afford the take-up of digital commercial services. The long-term likelihood of this will be to further discriminate against discrete communities, housing groups and community centres.

Therefore the intention is to engage and consult with a range of telcos, distributed network providers, commercial partners and operators in order to arrive at a new partnership model for full Salford connectivity – an holistic approach that will prioritise connectivity over revenue. There is a natural confidence in Salford to be able to embark upon such an endeavour. It will require a new way of thinking about and managing networks and new consumer models for making superfast digital connectivity affordable.
At present 18% of homes in the UK are “mobile only” and this trend is likely to increase as mobile services and applications are boosted by 5G and fixed wireless access. Consequently a new partnership in Salford will seek to develop a mobile policy within its infrastructure plan to explore innovative use of and leverage of public assets. This would include:

# a re-assessment of existing and potential mobile sites
# strategic and overarching application of site code to achieve holistic vision
# development of enhanced services for citizens and new service models

There is already independent infrastructure commercial investment at play in the city with some regions (e.g. Eccles) at 93% fibre-to-the-premises in 2019. Therefore, Salford’s growth trajectory and its innovation enterprise footprint are key market levers that we can build upon to ensure that no-one is left behind in the digital city of the future.

Salford’s emerging 5G network across MediaCityUK and the Quays powered by Vodafone will further positioning Salford at the forefront of next generation 5G mobile. Future mobile smart city networks and the rapid changes they will bring to how we deploy services and how residents can benefit, are fully dependent upon flexible fibre back-haul infrastructure. Consequently, if we intend to create a thriving and inclusive digital smart city over the next decade, then the Technology foundation – the fibre network – needs to be comprehensive.

The DNA of the Salford Digital Strategy is to challenge unacceptable levels of poverty and inequality in our neighbourhoods; our digital infrastructure foundation is crucial to that journey.

Summary of measures:

Digital Salford will bring together public and private stakeholders to achieve the connectivity ambition by:

#i consulting with telcos, mobile network operators, and new market entrants/communications providers to develop a partnership model for a city-wide connectivity plan utilizing the LFFN backbone;

#ii mapping current connectivity assets to focus on the city’s ‘not-spots’ and to produce a Connectivity Master Plan including Mobile Policy;

#iii promoting the benefits and social value of full connectivity to city-wide agencies and residents;

#iv ensuring that all new build plots are fully fibre-connected.

#v exploiting the 5G opportunity at MediaCityUK/Quays for wider use-case distribution across the city including Port Salford;

#vi developing an in-house barrier-busting policy and align with GM standardized wayleave programme;
Supporting Salford’s public sector Digital Transformation.

Digital transformation speaks to the need to build a leaner, more efficient public services and to improve the customer experience. Forward-looking public organisations co-operate and work closely with service providers to handle the complexities of public sector environments and quality citizen engagement.

In the process it can often turn technology suppliers into partners. Even large and very large public bodies, who traditionally do most of their technology development in-house, increasingly collaborate with their suppliers. Suppliers in turn have been focused on developing internal expertise and frameworks to offer concrete advice on how to integrate a solution into processes even as it changes those processes. They are also experimenting with risk-sharing models that involve co-creation of services and outcome-based pricing.

Consequently Digital Salford is able to function as a gateway to suppliers and potential technology partners in order to scope out opportunities for innovation and service transformation.

The direction of travel is to manage and operate public services across an agile and unified innovation platform which will include:

- an ethical and trusted data framework
- a city cloud platform for sustainable management of physical assets
- open-innovation challenges that encourage discrete service improvements
- a more responsive, interactive and personalized resident service
- appropriate and considerate deployment of Artificial Intelligence and automation to help navigate services and provide smarter, more sustainable operations
- a focus on health and well-being and a recognition of the interconnectedness of education, accessibility and social inclusion across the platform.

Digital Salford is fully engaged to help broker new partnerships and to support both the technology shift and the cultural shift underpinning public sector digital transformation.

Summary of measures:

Digital Salford will function as a gateway and support mechanism for Salford public sector digital reform and service delivery. It will:

- directly support culture change and adoption of new services and versions
- engage with private sector partners for co-created service solutions and provide an environment for ongoing workshop planning.
- support key officers within the City to shape strategy and implement transformation
- directly support the growth and success of MyCity Salford and MyCity Salford Health.
Digital Salford will function as a gateway and support mechanism for Salford public sector digital reform and service delivery.
4. Cross-cutting engagement – the DNA of the Salford Digital Strategy
4. Cross-cutting engagement – the DNA of the Salford Digital

“Digital Skills” is a singular challenge for any city or city region – not least because definitions of “digital skills” can vary enormously. For example the UK Digital Skills Framework has benchmarked functional digital competence:

- communicating;
- handling information and content;
- transacting;
- problem-solving;
- being safe and legal on-line.

And this definition of inclusive Digital Skill underpins a social imperative to ensure that citizens are able to engage with the digital world to reduce inequality and improve quality of life.

On the other hand, in an enterprise context, the connotation of “Digital Skills” points towards more specialised and highly sought-after employment roles now emerging across Greater Manchester.

For example, Manchester Digital Skills report 2019 (fig below) reveals that, across GM, supply continues to fall behind demand for permanent roles, and vacancies remain unfilled. “Developer” is still far and away the hardest role to fill but the picture is becoming nuanced, with high demand for specialist data and insight type roles.

Most difficult roles to fill. Businesses that recruited in the last 12 months were also asked which roles were most difficult to fill. Similar to previous years, developer roles were far and away the most difficult to fill but client-facing roles continue to be a struggle to fill too.

<table>
<thead>
<tr>
<th>Role</th>
<th>Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>30%</td>
</tr>
<tr>
<td>Dev Ops</td>
<td>13%</td>
</tr>
<tr>
<td>Sales &amp; Business Development</td>
<td>9%</td>
</tr>
<tr>
<td>PPC</td>
<td>7%</td>
</tr>
<tr>
<td>Strategy</td>
<td>7%</td>
</tr>
<tr>
<td>Creative</td>
<td>6%</td>
</tr>
<tr>
<td>Data Analyst</td>
<td>5%</td>
</tr>
<tr>
<td>Data Scientist</td>
<td>5%</td>
</tr>
<tr>
<td>Testers / QA</td>
<td>5%</td>
</tr>
<tr>
<td>Systems Architect</td>
<td>5%</td>
</tr>
<tr>
<td>Account Management</td>
<td>4%</td>
</tr>
<tr>
<td>IT &amp; Infrastructure</td>
<td>4%</td>
</tr>
<tr>
<td>Product Management</td>
<td>4%</td>
</tr>
<tr>
<td>Project Management</td>
<td>4%</td>
</tr>
<tr>
<td>SEO</td>
<td>4%</td>
</tr>
<tr>
<td>User Experience</td>
<td>4%</td>
</tr>
<tr>
<td>System Engineer</td>
<td>4%</td>
</tr>
<tr>
<td>AI and Machine Learning</td>
<td>3%</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>2%</td>
</tr>
<tr>
<td>Design</td>
<td>2%</td>
</tr>
<tr>
<td>Growth Hacker</td>
<td>2%</td>
</tr>
<tr>
<td>Network Engineer</td>
<td>2%</td>
</tr>
<tr>
<td>Social Media</td>
<td>1%</td>
</tr>
<tr>
<td>Digital Marketing</td>
<td>1%</td>
</tr>
</tbody>
</table>
Alongside these two narratives the concept of “digital skills” in UK mainstream secondary education is also fragmented and uncoordinated. Of course there are many examples of good practice but it is still the case that an institution can achieve an “outstanding” rating without having to engage with ‘digital’ as part of its core curriculum. GM has initiated a Digital Talent Pipeline programme to begin to work with schools upstream and some Salford schools will be engaged in the programme.

The FE sector, on the other hand, is making brave moves to engage with employers and to develop apprenticeship formats and key competencies in digital; it understands and recognises the perceived concept of a “digital skills gap”. However, part of the problem here is that the narrative of an industrial ‘skills-gap’ has a decades-long history in UK tertiary education which in turn has engendered well-established training methodologies for preparing students for the world-of-work. This sectoral approach (construction, leisure services, catering, logistics etc) has functioned to provide tailor-made accredited programmes supported by on-the-job training and apprenticeships. Despite such structures and protocols in place the measured digital skills and productivity gap in the UK continues to prevail. We have to examine why that is the case and begin to look for a different paradigm.

Part of the answer to this lies in the nature of the impact of technology itself as a disruptor of standardised employment pathways and another part of the answer lies in the lack of specialisation on digital skills within our institutions. Therefore, the Salford Digital Strategy for skills will recognise three overlapping areas of focus:

**Digital You**

Despite the growth of the digital sector and the expansion of innovation around MediaCityUK and the Quays, Salford has high rates of digital exclusion where 24% of adults in Salford lack basic digital skills. Digital You aims to bring all the benefits of the digital world to almost 8,000 Salford residents, with a goal of helping them to transform their lives.

Salford City Council is working with The Good Things Foundation, the UK’s leading digital and social inclusion organisation, and more than 25 local Salford community organisations – libraries, Gateways, community centres, community organisations such as work clubs and women’s centres, and housing associations to help support the Digital You programme and reach a sustainable movement within two years.

Residents are being engaged in digital through local community settings and helped to develop basic digital skills and confidence. Good Things Foundation has described this exciting programme as “a landmark investment from a council with vision, commitment and ambition.” Digital You has a strong focus on sustainability. Therefore, Good Things Foundation have been contacting community organisations across the city to encourage them to join their Online Centres Network which offers a wide range of free benefits. These include access to a variety of training, access to learning resources including their online learning platform Learn My Way, opportunities to link in with other organisations and schemes including funding and profile-raising.

**Digital Salford**

full alignment and engagement with Digital You and co-ordinated assets through #digitalsalford

#digitalsalford engaging directly with all Salford schools

Building the #digitalsalford talent pipeline with stakeholder partners
Bridging the gap

This section of the Digital Strategy focuses more directly on opportunities in mainstream institutions across Salford for future generations in our schools and Colleges. Social Mobility Commission research demonstrates school and college leavers from social mobility cold spots, BME and white working class backgrounds face disproportionate disadvantage in the labour market. This demographic will be a primary target focus for the Salford Digital Strategy skills.

There are clear and innovative responses to the demands and pressure of industry in both government legislation and employer interaction in secondary and tertiary education and training – including specialist coding colleges, and direct funding for the Institute of Coding. In Greater Manchester, the Digital Talent Pipeline Project, which will commence in January 2019, is an innovative example of how a city region can galvanise its own employer networks to engage proactively with schools. Salford schools will benefit from such programmes within the GM framework.

However, there is an opportunity for the City of Salford, given its depth and strength of assets in digital and creative, to shape its own targeted programme of activities to drive forward next-generation education and skills for young people.

Therefore, through pan-Salford partnerships our intention is to set up a discrete Digital Salford Talent Pipeline project – a unified skills escalator pipeline through all levels with greater business engagement to ensure skills are responsive to rapidly changing demand.

The project will have these overarching principles:

- The project will build on existing provision in and around the MediaCityUK & the Quays ecosystem.
- Target sectors: digital, media, creative and overlaps between them.
- A high value single-branded product that has the buy in and therefore quality assurance, of training providers and employers.
- Apprenticeships – the work around maximising the benefit to local SMEs from the Apprenticeship Levy will be linked to this project as can support apprenticeship outcomes from the hub for Salford residents in Salford SMEs in the digital, media and creative sector.
- Beneficiaries – young people from school through to adults.

The project will have these overarching functions:

- Quality assurance: additional support to learners will be provided via a network of leading industry bodies that are close to the rapidly changing nature of the industry. Interventions will involve industry-embedded intensive training and development. In this way learners progressing through the pipeline will be work ready.

Curriculum review, development and innovation: the opportunity is to bring together existing providers to create innovative learning pathways from school through to university that are industry backed. The hub will bring together providers and industry to co-design cross institutional curriculums that meet the needs of employers in the sector. Support for teachers to develop their skills and interest to get involved in bringing their subjects to life and also potentially adding some light resource to a very stretched teaching base. This links to broader work around the careers strategy which GM are heavily involved with through their Bridge GM initiative, backed by GM Mayor. Industry related interventions especially at KS3, where young people are forming perceptions around ‘what’s for them’.

Digital in schools

Digital Salford will initiate a new initiative – Digiwise - as a new approach for “unlocking” the digital world in mainstream education.

Digiwise aims to enhance core competencies: Maths, Science, Computer Science, and English as well as having a positive impact upon personal resilience, student retention and student engagement.

It will achieve this primarily through a programme of Continuing Professional Development (CPD) for teachers which will not require them to appropriate complex new digital technology skills but which will provide teachers with new directions for delivering and enhancing their own core subjects.

The Digital Salford Talent Pipeline project will unlock MediaCityUK as a skills centre for young students and provide real world experiences and employment opportunities informing future apprenticeships or HEI choices.

Filtering and brokerage: talent will be filtered into appropriate occupational pathways to maximise the talents of the individual learner in a way that positions them as future talent for the sector.

Fast tracking: talent spotting will also be built in with skills nurtured to retain talent and match to employers accordingly.

DigiWise will not involve schools having to invest in equipment or make changes to the school curriculum or schedule of resources. It aims to inspire and enable teachers as well as parents and students on the potentials and opportunities of emerging digital innovation for future careers and life choices.
Working with schools in Salford we will provide teachers with a large bank of core subject lesson plans and methodologies for delivery. We will set up a structured training package/programme for teachers helping them gain skills to deliver lessons and units of work that will focus on giving students a better understanding of how the core subjects they are studying link to the changes and innovations in the digital world around them.

DigiWise will include hands-on training workshops and teaching sessions at MediaCityUK where teachers and their students can work together alongside industry specialists.

DigiWise will also provide teaching professionals with a virtual network of digital coaches who can: a) advise about digital lesson plan delivery b) offer ongoing support and guidance

The pilot
Our intention is to work with a single school in the region (yrs 9-10) to test drive the approach and fine tune the delivery. The CPD and the classroom sessions will be supported by our partners and for some subjects and sessions will include free digital technology devices to enhance the delivery of model lessons and inspire pupils.

The full pilot programme will be evaluated for our key target outcomes:

i) Demonstrate a measurable improvement in performance and student engagement in our test school
ii) Demonstrate an improvement in teachers’ morale and ability to engage students
iii) Demonstrate a measurable and attributable mean improvement in core subject grades
iv) Demonstrate an attributable improvement in retention and attendance

Additional outcomes and spin-out benefits will include:

i) Build a GM repository of content and core lesson plans in the context of digital technology
ii) Link students to the Salford Digital Talent Pipeline programme for work experience placements across a pool of local organisations co-ordinated by our partners.

Summary of measures:

Digital Salford will ensure that the cross-cutting theme of Digital Skills development for Salford people is realized by:

#i continuing to support the groundbreaking work by Salford City Council and Good Things Foundation for the Digital You programme;

#ii offering direct and ongoing support for Salford Digital Eagles agenda

#iii initiating, with partners, a Salford Digital Talent Pipeline programme

#iv running and evaluating a Digiwise programme pilot for Salford schools.
4.2 MyCity Salford

A significant step towards the new model of citizen engagement and responsive service is the creation of the MyCity Salford platform. This radical platform has the potential to function in several ways:

- as a citizen gateway to public services through profile/identity management
- as a dynamic register for pan-City assets
- as a community portal for social prescribing – MyCity Health.

The MyCity programme is an ambition cross-cutting initiative. It differs from standard citizen-engagement web forms in that it is constructed around user-generated content and profiles. The intention is for citizens and users to interact with city assets and to form a degree of social cohesion through engagement that will enable them to access information, services and support.

The first stage of MyCity Salford has been constructed and tested, and a programme is in train to increase awareness and user numbers. In Q1 2019 the intention is to enhance the local retail offer for citizens through the MyCity platform in order to generate a significant user base.

The second stage for MyCity Salford is to begin to trial social prescribing and public health engagement through the platform. This presents a particularly exciting and innovative direction of travel for Salford whereby pro-active and responsive public health awareness, prevention campaigns and social care activity can be activated and distributed.

This has been envisaged as MyCity Salford Health and is predicated upon successfully leveraging the current MyCity Salford platform in order to create a solid user-base.

In 2018 GM Health and Social Care Partnership, co-ordinated by Salford, had previously launched MyCityHealth as a precursor to the ambition for innovative public health engagement. The MyCityHealth website has since evolved into the “Greater Manchester Health Hub” website driven to address the overarching pan-GM health issues identified by the Partnership such as alcohol and drug use, smoking and obesity issues.

There remains, however, a clear opportunity to move beyond information awareness and towards defined social prescribing. A planning group and MyCity committee has been formed to continue to drive forward this agenda.
Advances in Digital Technology have the potential to transform the way in which we can manage our own good health and take a personalised role in how we manage periods of sickness.
4.3 Digital Health and Public Welfare

Advances in Digital Technology have the potential to transform the way in which we can manage our own good health and take a personalised role in how we manage periods of sickness.

Over the next decade this potential will see a proliferation of commercial applications and services aimed at empowering citizens to manage their well-being at home and subsequently live independently in good health for longer. This growing health ‘marketplace’ – estimated at over £400bn by 2024 – will have a significant effect on our health and social care systems requiring new mechanisms for response and partnership working.

Our cross-cutting approach to Digital Health and Public Welfare will focus on this rapidly emerging technology paradigm and look for how we can best leverage the key areas of the Digital Strategy – Smart City/Infrastructure/Enterprise/Public Sector – and connect and co-ordinate innovation activity with our the world-class Salford Royal Foundation Trust (SRFT).

SRFT is a NHS University Teaching Trust that is nationally regarded as a leader of safe, high quality care. The Trust has become an internationally recognized brand through its pursuit of safe, clean, personal and high quality care for every patient, every time. SRFT has a track record for settings, delivering exceptional healthcare and is the first acute and community Trust in the country to be Care Quality Commission (CQC) rated Outstanding on two consecutive occasions. SRFT’s use of technology to embed safe care and develop innovative healthcare solutions has been highlighted as an area of good practice by the CQC.

Rated as the most digitally mature provider Trust in the NHS, SRFT is a centrally funded Global Digital Excellence site committed to developing and investing in a UK leading and globally competitive digital healthcare eco-system. Salford has one of the most mature standards based platforms for the development of digital and IoT health and care solutions and a strategy to shape a new digitally driven future, allowing transformation at pace across care settings.

Secretary of State for Health and Social Care, Matt Hancock, visited SRFT recently to learn about the groundbreaking technology that is improving patient experience, clinical outcomes and productivity, and freeing up staff time for patient care. After his visit Matt said, “Today I have seen the future and we want to make sure that this is spread right across the country”.

Its Digital Factory methodology is a key element in ensuring SRFT remains a pioneer of innovation. It is the test bed for incubating concepts and designing innovative digital solutions. It ensures that digital solutions can be demonstrated and tested rapidly with investment pipelined when the proposed solution has been proven as a concept. Its strategic partnerships ensure its ecosystem can benefit from the latest global digital developments, as well as access to an international market. These unique propositions give the Trust an exciting opportunity and a platform ready for inward investment to propel Salford’s and GM’s growth.

Digital Salford will work with Salford Royal Foundation Trust to support its innovation eco-system and provide further integration between health and care services. This will include exploring opportunities to expand the use of digital engagement tools which allow Salford residents to be able to interact with health and care professionals without having to attend outpatients or clinical setting.
We want to unlock the potential that digital technology provides to redesign such services around the citizen, enabling services to become more integrated, more proactive, and more personalised.

How we will achieve this:

# by setting up a series of immersive acceleration programmes designed for entrepreneurs of all stages who want to create impact by improving people’s lives through purpose-driven health innovation

# by setting up technology links between SRFT Digital Factory and The Landing MediaCityUK to do proof-of-concept modeling prior to implementation in a clinical or social setting

# by developing a Salford enterprise eco-system that looks for solutions to complement and improve the patient experience across long-term clinical or care scenarios through multi-channel clinical and lifestyle support

# by developing MyCityHealth as a portal for citizen engagement in personalized digital health solutions and social prescribing.

# by ensuring that all citizens are connected to robust digital infrastructure in order to promote and distribute remote and IoT-based care solutions.

Supporting a GMCA partnership

Our core partners SRFT and University of Salford are significant contributors to Health Innovation Manchester and The Greater Manchester Health and Social Care Partnership. Greater Manchester has significant challenges in health inequality, and the devolved structures integrating health and social care in the city region provide an important and, in England, unique opportunity to improve service delivery and quality of life for citizens. More recently, and within its Strategic Plan for Health and Social care, GMCA has initiated an overarching technology architecture for secure information sharing across health and public services – a Smart Resident data platform – which will enable efficient co-ordination of data between service providers and enormous opportunities for clinical research and application.

Digital Salford will continue to support actively pan-GM initiatives for health innovation. In digital, working with partners there is a real opportunity in Salford around the creation, implementation and exploitation of a digital test bed across the city of Salford that can feed into the GM wide agenda, complementing existing activity elsewhere in the city region, as well as having direct relevance to Grand Challenges of the Industrial Strategy, including Ageing Society and Big Data and AI.

The approach that Digital Salford will have through its core members: on primary care, telecare, IoT innovation, real-time data/network analytics, social prescribing and innovations in social care management – will complement and enhance the GM landscape, providing a focus on dynamic solutions to rapid market opportunities and new types of commercial partnerships.