



**SLIGO**  
COUNTY COUNCIL  
COMHAIRLE CHONTAE SHLIGIGH

Digital  
Strategy  
for Sligo

2020 -  
2023

Embracing digital innovation to make the region a better place to live, work, visit and do business.

September 2020  
Public version 1.0

# EXECUTIVE SUMMARY

## 1.1 Introduction

The leadership team in Sligo has the objective to embrace digital innovation in order to showcase what is possible in a rural city on Europe's western seaboard. The region is characterised by having a rich cultural heritage, centred on the 25,000 urban residents in the main city, plus 90,000 in the wider region.

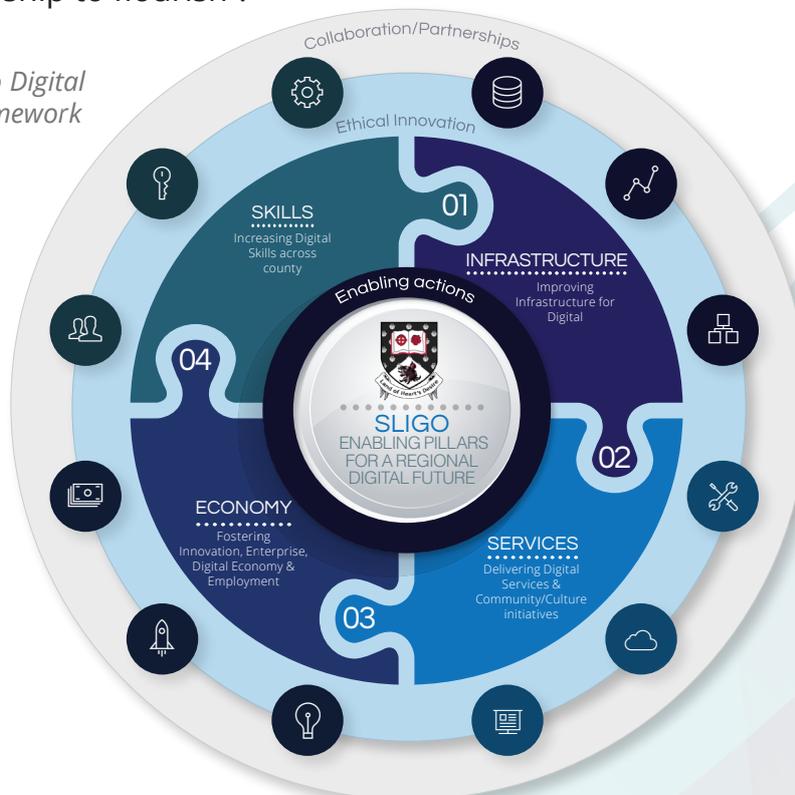
Sligo, classified as a transition region<sup>1</sup> by the European Commission from 2020<sup>2</sup>, has already stated its vision<sup>1</sup> of being a leading Smart City and Region by 2025. This Digital Strategy is key to both accelerating the transition and enabling the vision.

Furthermore, Sligo's leadership is committed to strategically investing resources to support research, innovation and skills development. It also aims to help create and foster a healthy and vibrant environment for entrepreneurship to flourish<sup>3</sup>.

The starting point for this strategy are the many Digital-related activities, innovations and developments underway, that provide excellent foundational examples.

This Digital Strategy has to look forward but also to look at the current situation the region finds itself in. The Covid-19 pandemic has put severe challenges on society and business. Work practice and lifestyles have had to change and some of these will be with us well into the future.

Figure 1 Sligo Digital Strategy Framework



<sup>1</sup> Transition region is where GDP per inhabitant was between 75 % and 90 % of the EU average. (<https://ec.europa.eu/eurostat/web/regions/background>)

<sup>2</sup> <https://ec.europa.eu/eurostat/web/regions/background> - transition regions (where GDP per inhabitant was between 75 % and 90 % of the EU average)

<sup>3</sup> Sligo County Council (2016). County Sligo Local Economic and Community Plan (LECP) 2016-2021, Sligo.

This is not just for Sligo, but for the whole of Western Europe. These changes have been reflected in increased digital reliance as well as new digital instrumentation.

A new digital landscape is emerging, online meetings (for both family and business) have increased rapidly, others like e-businesses are expanding, home shopping and home delivery of food/goods is growing, and new technologies such as track and trace have appeared.

Having a flexible Digital Strategy is essential for Sligo, it not only has to reflect existing requirements, but also accept that many of these may evolve requiring increased or new processes and technologies to be adopted. This strategy provides an inclusive yet considered approach to shaping the future Digital Society across the region as well as creating the foundations to design a better Smart and Green economy that can endure and prosper economically.

### 1.1.1 Digital Vision

Following the launch of this strategy document, Sligo County Council intends to accelerate its digital vision. In the process, it will create an environment that supports innovation, collaboration and investment for residents, visitors and businesses.

The primary vision of this digital strategy is to place County Sligo at the forefront of a digital transition. In doing so it will also:

- i. Support the climate action agenda,

- ii. Promote increased economic activity in the region and within the city centre, and,
- iii. Deliver improved social inclusion.

It is important to recognise that this vision must also be flexible to adjust in the context of an evolving national and international landscape.

### 1.1.2 Digital Objectives

To place Sligo at the forefront of digital innovation, a series of short to medium term objectives have been developed for the life of this strategy.

1. Accelerate the deployment of digital infrastructure to enable Sligo achieve its Smart City Sligo 2025 ambitions,
2. Activate a rich ecosystem of public, private, academic and civic partners in a collaborative process to make the digital vision an enduring reality,
3. Establish an appropriate governance structure to manage the ongoing digital initiatives and deliver value to all stakeholders.

In particular, the actions driving these objectives are to:

- Create and promote energy efficient streets, neighbourhoods and urban centres,
- Develop policies around smart transport, delivering better public transport, less traffic congestion and lower emissions,
- Build evidence-based decision-making capabilities using sensor data streams,

- Make all public realm assets, such as benches, street poles, bus shelters etc., available to enable accelerated digital innovation as well as installing sensors, Internet of Things assets, Wi-Fi and other technologies where appropriate,
- Exploit the capabilities of data and analytics to improve aspects of the city and its environs. This can include, better environmental information on water, traffic congestion, anti-social behaviour, planning decisions, etc.
- Present the Region as a 'Living Lab' that will collaborate with leading edge national and international organisations for testing, developing and scaling applications such as in e-health, tourism and IoT solutions,
- Support an ecosystem of collaboration that includes, public, private, academic and civic partners.

### 1.1.3 Strategic Pillars

In a recent digital readiness assessment by Indecon<sup>2</sup>, commissioned by the Department of Rural and Community Development at a national level, 7 thematic pillars are set out to develop a comprehensive digital strategy.

To create a meaningful and manageable plan for the next 3 years, these 7 thematic pillars have been combined into 4 strategic pillars for Sligo.

#### Sligo Digital Strategic Pillars: 2020-2023

1. Increasing Digital Skills across the county
2. Improving Digital Infrastructure
3. Delivering Digital Services & Community/Culture initiatives
4. Fostering Innovation, Enterprise, Digital Economy & Employment

Table 1 Strategic Pillars

**1. Increasing Digital Skills across the county.** Championing inclusion and lifelong learning to ensure the businesses and communities, especially vulnerable people, are digitally skilled, confident and literate.

**2. Improving Digital Infrastructure.** Providing the infrastructure needed to ensure the regions are better connected and hence informed.

**3. Delivering Digital Services & Community/Culture initiatives.** Creating people-centred programs and services using technology to be both more responsive to the needs of the communities. Engaging with citizens and communities through using technology to transform how people engage with public services, and interact with each other.

**4. Fostering Innovation, Enterprise, Digital Economy & Employment.** Creating the collaborative environment to foster innovation and entrepreneurship. This can be between the public, academia, business and community actors.

Sligo's digital transformation is centred around these four strategic pillars and in line with international best practice, will be supported through collaboration, partnerships, and underpinned by ethical innovation.

### 1.1.4 Collaborative Innovation Approach

Sligo is proposing an innovative approach to delivering on this strategy by embracing a new paradigm using Open Innovation 2.0<sup>3</sup> (OI2). This approach is based on a Quadruple Helix Model where government, industry, academia and civil participants work together to co-create and drive structural changes far beyond the scope of what any one organisation or person could do alone<sup>4</sup>.

The outcomes of this strategy will accelerate digital innovation between 2020 and 2023. This in turn will form a core component of the regional 2030 development strategy that has already commenced. It is expected that the next Digital Strategy 2023-2026 will build further on this again using the Quadruple Helix Model for co-creation and collaboration.

## 1.2 What is currently underway

County Sligo has many initiatives underway that provide solid foundations to support this strategy. Continuing to develop these initiatives along with the ambition of the Council, provides a unifying framework to enable Sligo to become a leading Digital and Smart Region nationally and internationally.

A selection of these are presented here as they relate to the 4 strategic pillars,

### 1.2.1 Pillar 1: Increasing Digital Skills across the county

Various initiatives are underway that increase the level of digital skills across the region, including:

1. The Local Enterprise office and Sligo Chamber Skillnet provides a range of offerings from IT Skills, Social Media, Mentoring & Management development up to QQI accredited business development, leadership & management programmes.
2. The North West Regional Skills Forum (NWRSF) helps ensure the skills needs of business are met, supporting job creation, sustainability of business and the availability of talent.



3. IT Sligo Employment Services provides online bespoke work based learning programmes for companies in the region.
4. IT Sligo has a range of National Qualification Framework (NQF) Level 6,7 & 8 courses available on digital technologies, AI, ML and Data Analytics.
5. St Angela's College provides a range of Health and Education courses, with graduates at NQF Level 7, 8 & 9.
6. Mayo, Sligo and Leitrim Education and Training Board provides a wide range of further education and training programmes across the region.

## 1.2.2 Pillar 2: Improving Digital Infrastructure

Sligo have a number of initiatives underway in this area, these include:

1. Developing co-working hubs such as An Chroi in Tubbercurry and The Landing Space in Sligo city.

<https://www.idaireland.com/how-we-help/landingspace>

2. Upgrading public buildings, such as the Tubbercurry Community Library, to be a digital resource and service centre, and accessible to the public outside of core opening hours.

<https://sligolibrary.ie/tubbercurry-community-library/>

3. Innovating with sensors, such as the trial using Photocells on street lights, to collect data that can be used to inform evidence based decision making. This data provides valuable information to understand the impact of various initiatives or policy decisions.

Figure 3 shows the reduction in people in Sligo City centre at various dates during the COVID-19 pandemic and the level of compliance for public policies.

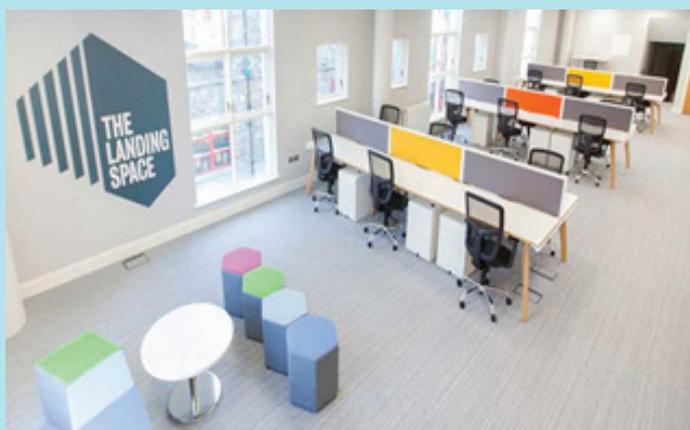


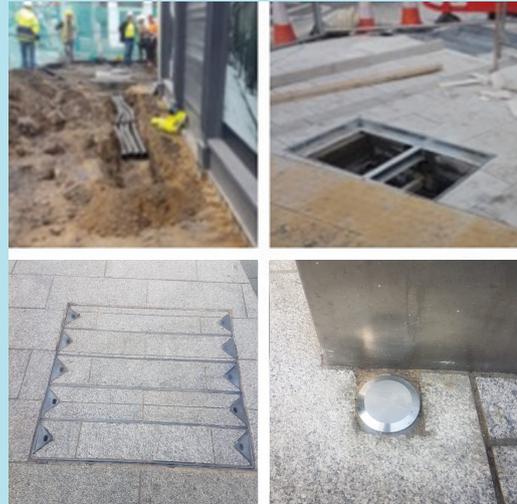
Figure 2 The Landing Space Co-working location



Figure 3 Sligo City centre visitors during COVID-19

4. The council has adopted a policy to include at design stage, the provision for digital infrastructure in all major capital projects. Examples include:

For all roads and other infrastructure projects, shared ducting is included that allows fibre to be easily installed without any further construction works.



*Figure 4 Shared Infrastructure being installed in O'Connell Street*



*Figure 5 O'Connell Street Shared Infrastructure Map*

Currently this is in place on the O'Connell Street redevelopment project, the Western distributor road and the planned Cranmore Regeneration project.



*Figure 6 Stephens Street Cultural Plaza*

5. Various other SMART initiatives are also committed to:

- Ensuring there is a SMART Connected component to all new public realm developments.

This example is the new development of the Stephens Street Cultural Plaza, where Smart Utility poles are being installed.

- Leading an innovation initiative using Wi-Fi and Bluetooth within existing infrastructure such as streetlights and electricity poles, that aims to derive analytics of usage of urban spaces.

It can also provide push messaging information to visitors on the 'EuroVelo 1-Atlantic Coast Route'<sup>4</sup>, as it runs along the west coast of Ireland on its route from northern Scandinavia to the southern end of Portugal.



*Figure 7 Smart Utility Poles in Stephens Street Plaza*

6. Upgrading the N4/N15 roadways to use traffic signal and fibre-optic communication technology.

This will allow real-time data to optimise traffic signal settings to road network conditions.

Leading to reduced travel times, reduced congestion, fuel consumption and pollution.

Enabling Emergency Vehicle green waves and the potential for public transport priority, and managing tourism congestion.



Figure 8 Additional BCP's & WiFi4EU in 60+ Rural Locations planned



Figure 9 Existing Sligo High Speed Broadband map (Q3 2019)

7. There is a significant increase in connectivity planned across the regions, predominantly in the more rural under-served areas, this includes:

- a. Broadband Connection Points (BCP's) in schools and community centres in remote areas being prepared for rural broadband installation under the National Broadband Plan.
- b. Up to 60 new locations with Wi-Fi installations under the WiFi4EU<sup>5</sup> scheme.

<sup>4</sup> Following Europe's mighty western border, reaching from Scandinavia, to South and Western Portugal, the Atlantic Coast Route visits the majestic fjords of Norway, the wild Irish coastline, the rough cliffs of Brittany and the sun-kissed beaches of Portugal, totalling 11,000 km. <https://en.eurovelo.com/ev1>

<sup>5</sup> The WiFi4EU initiative promotes free access to Wi-Fi connectivity for citizens in public spaces including parks, squares, public buildings, libraries, health centres and museums in municipalities throughout Europe. <https://ec.europa.eu/digital-single-market/en/wifi4eu-free-wi-fi-europeans>

### 1.2.3 Pillar 3: Delivering Digital Services & Community/Culture initiatives

Notable progress has been made over the past year on a number of initiatives supporting this pillar, including:

1. Sligo County Council already enables citizens and businesses to interact online including online payment for a range of services, and these are planned to increase during 2020.
2. Furthermore Sligo it is engaged in a number of innovative projects that are a combination of Smart, Green and Digital, these include;

- a. Energy savings around a street light refresh to low energy LED, and as mentioned earlier, combining this with using Smart photocells.
- b. Collaborating with Queens University Belfast to measure water quality and predict potential issues especially on the blue flag beaches.

<https://www.qub.ac.uk/schools/NBE/Research/ResearchCentres/qubbes/>



Figure 10 Access to Digital Services

- c. Sligo plans to adopt an open data structure that when deployed is capable of sharing data with various stakeholders, businesses and citizens.
- d. Using sensors to collect movement data that will provide an evidence base for infrastructure decision making on prioritising transport, parking, amenity usage, telecommunications, location of small cells etc.

## 1.2.4 Pillar 4: Fostering Innovation, Enterprise, Digital Economy & Employment

The initiatives already underway in the region that help foster innovation and employment include:

1. The Council supports the establishment of co-working spaces to foster the tech start-up community and support innovation in business.

The Council plays a role in facilitating introductions and networking, including supporting the ecosystem with government and industry bodies, such as the London-Sligo Network<sup>6</sup>, and local industry focus groups & clusters such as the Atlantic MedTech Cluster & the Tech North West Cluster.

2. A Memorandum of Understanding with IT Sligo to work together on a range of real-world projects, research areas and new initiatives.



Figure 13 Sligo(dot) Branding  
[www.sligo.ie](http://www.sligo.ie)



Figure 11 Tech North West logo



Figure 12 Atlantic MedTech  
Cluster Logo

3. Sligo Chamber of Commerce and the Local Enterprise Office support a program of training, workshops and seminars covering online business topics for all businesses.
4. Supporting the region with an updated brand 'Sligo.(dot)' that showcases the region as a location to 'Live, Invest and Visit' [www.sligo.ie](http://www.sligo.ie)

Within this there is also a comprehensive section outlining reasons to invest in the region as well as a catalogue of all businesses [www.sligo.ie/invest/](http://www.sligo.ie/invest/)

<sup>6</sup> <https://www.sligochamber.ie/evening-sligo-business-network-london/>

<sup>7</sup> <https://telecominfraproject.com/who-we-are/>.

5. Digital Futures Manufacturing Centre, (DFMC) based in Sligo, serving the northwest and border regions has been funded. This centre will have a primary focus on supporting industry with developing capability in automation of manufacturing supply chain technology and creating an environment to allow companies focus on developing and implementing Industry 4.0 strategies.

#### 6. Recent initiatives

In recent months a number of global organisations have already begun early developments and testing of new initiatives using the concept of Sligo as a living lab.

These include:

- i. Sligo is now the HSE Digital Health Living Lab for older people including large global organisations such as Amazon working jointly and independently on exciting new initiatives. This innovation is a large step to support the 'Stay left, Shift left' digital health transformation strategy of the HSE and supported by Three Ireland. This has potential for the region to develop into a Remote Digital Health Management Centre of Excellence over the coming years.
- ii. Global Telecom Infra Project (TIP)<sup>7</sup> includes hundreds of companies – from service providers and technology partners, to systems integrators and other connectivity stakeholders, driving infrastructure solutions to



Figure 14 Digital Futures Manufacturing Centre



TELECOM INFRA PROJECT



Three.ie

advance global connectivity, Sligo County Council is now a member of this community.

[www.telecominfraproject.com/](http://www.telecominfraproject.com/)

- Sligo and in particular Strandhill is the first rural location selected for global field trials during Q3 & Q4 2020.
- These learnings will form the knowledge basis from which a blueprint will be created that is capable of being replicated in similar regions globally.

## 1.3 What are the digital infrastructure requirements & needs?

Future-proof digital infrastructure remains crucial for the digital transformation of the economy<sup>8</sup>. During the strategic consultation process an analysis was conducted into the infrastructure needs of the various stakeholders. A gap analysis of the current infrastructure status was prepared and a summary of the plans to address these outlined.

### 1.3.1 Stakeholders infrastructure requirements analysis

During the consultation process all stakeholders were interviewed and their digital infrastructure needs were described. All stakeholders identified connectivity infrastructure as being by far the most important need and one which they believed the Council should have a significant role. For some broadband to the home and good 4G & 5G coverage was important, while various stakeholders had specific needs, such as town broadband and Wi-Fi in public places.

Infrastructure	Stakeholder needs						
	Individuals	Micro Business	SME's	Large Business	Education	Healthcare	Public bodies
Broadband to home	X	X	X	X	X	X	X
Town Broadband		X	X	X			X
Shared ducting in streets		X	X	X			X
Shared ducting to door	X			X			
WiFi in public places	X	X			X		
4G & 5G coverage	X	X	X	X	X	X	X

Figure 15 Stakeholder Digital Infrastructure Needs

### 1.3.2 Stakeholder digital Infrastructure gap analysis

The needs of the various stakeholders are clear. However, these are currently being served to different degrees. For instance, the 4G & 5G coverage, Home broadband and Town broadband appear well provided for, but they are skewed to the large population centres. Those living in or near remote and rural towns and villages remain under-served by digital infrastructure.

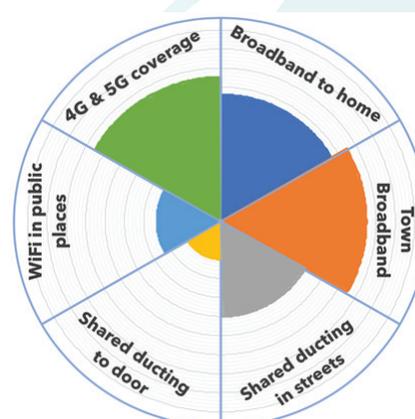


Figure 16 Stakeholder Digital Infrastructure gap analysis

<sup>8</sup> European Commission (2020) Country Report Ireland 2020. "European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011" [https://ec.europa.eu/info/publications/2020-european-semester-country-reports\\_en](https://ec.europa.eu/info/publications/2020-european-semester-country-reports_en).

The Wi-Fi in public places, shared ducting in streets and shared ducting to homes require much work to do to serve the stakeholder needs. However each of these areas have significant investment and expansion plans, such as up to 60 new Wi-Fi connections in public places, or have been designed into infrastructure development policies like the shared ducting for digital infrastructure which will continue to expand as general infrastructure developments occur across the region.

### 1.3.3 Public, Private & Non Profit Digital Barriers Survey

A recent online survey conducted among members of the public, private businesses and non-profit organisations across the region, confirmed the major digital gaps that emerged from the stakeholder consultations.

Of the 132 respondents, a significant 61% highlighted that availability of broadband was a major barrier to digital adoption within the region.

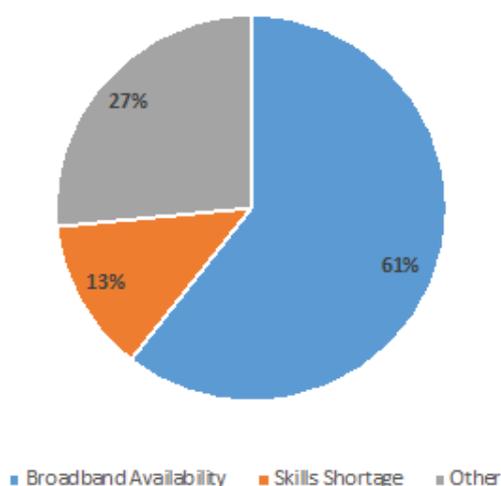


Figure 17 Digital Barriers Survey August 2020

### 1.3.3 Current digital infrastructure plans

Infrastructure	Current Status & Plans
Broadband to home	National broadband rollout commenced, Sligo CC actively supporting and enabling the regional deployment during 2020, 2021 and 2022
Town Broadband	Good broadband to most of Sligo Town, shared ducting will make it easy to futureproof. Other towns less well served.
Shared ducting in streets	Program underway, O'Connell St almost complete, and this is now a standard part of all new road projects from design stage.
Shared ducting to door	Planned for the new development in Cranmore. Needs to be included as part of all future housing development plans.
Wi-Fi in public places	Some public WiFi in Sligo Town, rollout of WiFi4EU to start mid 2020 to provide public WiFi in 60 additional locations.
4G & 5G coverage	Reasonable mobile coverage in significant parts of the region, however a few areas have poor or limited coverage, particularly rural areas.

Table 2 Current status of digital infrastructure

## 1.4 What does success look like?

All communities and stakeholders should to have access to, and confidence in, digital technology together with awareness of the benefits it can bring. Access to information, and an understanding of how to use it, will improve and enrich the lives of residents and visitors and contribute to business success.

Digital inclusion increases social and civic engagement,

- improves opportunities for business to succeed and scale,
- facilitates community development and
- contributes to the creation of employment opportunities and the economic health of the region<sup>9</sup>.

Sligo County Council supports the government's Future Jobs for Ireland Initiative 2019<sup>10</sup> and commits to foster a culture supporting innovation internally with digitally-enabled workplace that offer flexible working arrangements, and nurtures its employees to upskill for the future to attract and retain the top talent.

In line with the above Future Jobs for Ireland, the Council will collaborate with business, government, academia, education providers and advocacy groups to actively participate in realising the digital future of Sligo. The council will also ensure that every future programme and investment is given consideration from a Digital, Green and Smart perspective.

Sligo's has an ambitious vision for the future.

Sligo plans to accelerate this strategy by placing the public realm assets at the core of these initiatives. All public initiatives, developments, infrastructure projects, buildings, public spaces will all be used as enablers to help achieve these ambitions.

A future where the urban centre is a vibrant place, attracting visitors, shoppers as well as highly skilled professionals living and working in the town centre.

Currently there are many initiatives already underway (as outlined 1.1 above), these along with the suggested action plans (see Appendix I) will be further progressed and managed by the proposed new digital office ensuring a co-owned strategy where all actors work collaboratively towards a common goal.

<sup>9</sup> New York City, *One New York: The Plan for a Strong and Just City 2015*

<sup>10</sup> Department of the Taoiseach and the Department of Business, Enterprise and Innovation, (2019). *Future Jobs Ireland 2019*. [www.gov.ie/futurejobsireland](http://www.gov.ie/futurejobsireland)

## 1.4.1 Key Performance Indicators (KPI's)

Measuring the success of the Digital strategy needs to be based on clear measurable outcomes that contribute benefits to the region. The following Key Performance Indicators (KPI's) have been formulated to match with the strategic pillars and deliver tangible outcomes to the region.

Sligo Digital Strategy Themes - 2020-2023	Indicators 2020-2023	KPI for 2020-2023
1. Increasing Digital Skills across the county	Additional Digital Skills and Programs provided	Provide digital skills training for 500 Micro businesses and SME's in the region (or 2000 people)
2. Improving Digital Infrastructure	Building digital infrastructure into major engineering programs	Broadband to be rolled out to at least 6500 additional homes, shared ducting to be installed in 2+ km of new roads/streets.
3. Delivering Digital Services & Community/Culture initiatives	Sligo County Council developing capabilities to offer additional services online	Deliver 3 new services online and enable 3+ community/culture initiatives to be launched. Increase Council/Citizen online interaction by at least 25%
4. Fostering Innovation, Enterprise, Digital Economy & Employment	Promoting the region as a second FDI location, fostering new startups or university spinouts with grants or Proof Of Concept funding, enabling small companies to work with the council.	Increased employment in the digital economy, with 20 new enterprises launched and/or 1000 new digital jobs created. Enable at least 5 local SME's/MNO's/Startups to innovate with Open Data sources provided by the Council.

Table 3 Digital Strategy 2020-2023 KPI's

## 1.4.2 Strategic Action Plan

To deliver the strategic objectives outlined a series of potential actions, initiatives and projects has been created. These are directly grouped around four strategic pillars. A set of enabling actions, that includes supporting collaboration and partnerships, council related actions and actions to drive ethical innovation have also been prepared. The actions plans are included in Digital Programs & Initiatives section below.

## 1.5 What role can the Local Authority play?

One of the most important aspects of successful deployment of any Digital strategy, is the governance model that is put in place. Sligo has a collaborative governance ambition (based upon the quadruple helix model) – where there is strong collaboration between public, private, education and civil sectors. Sligo County Council aims to take the responsibility for certain aspects and then to strengthen and formalise collaboration with other parties and also to investigate the right business model for Sligo over the coming years.

In this context, the governance model recommended combines both a technical framework and a strong leadership function;

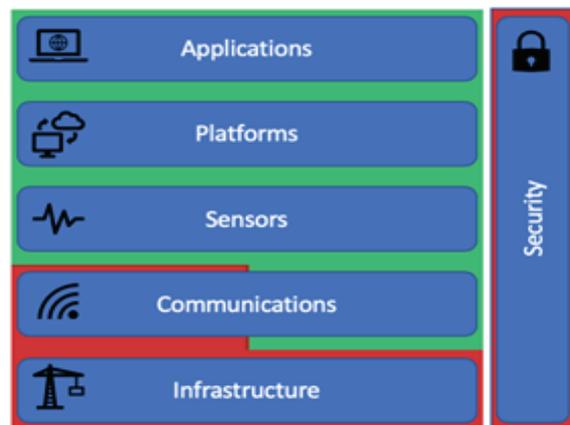
1. A Digital reference framework that extends across infrastructure, communications, sensors, platforms, applications and security layers. Within this it is vital that a Local Authority assumes responsibility for the digital infrastructure, just as it previously assumed responsibility for analogue services and infrastructures, such as roads and water networks, and ensured that they worked efficiently together.

Beyond this, the Local Authority will need to put in place a strategic governance model that takes responsibility for key aspects of the framework as well as providing management and oversight for other aspects via a network of subcontractors and third party providers.

2. A Leadership Function that includes the establishment of a Digital Development function led by a Chief Digital Officer.

### 1.5.1 Reference Framework

In this proposed reference framework, Sligo County Council takes main responsibility for the layers in the reference model that are critical to providing the conditions for diversity of actors and services and thus fostering competition in order to avoid negative lock-in or interoperability problems.



The city is responsible for infrastructure, security and the city's procurement of communications services and works closely with responsible 3rd parties for the other parts of the reference model

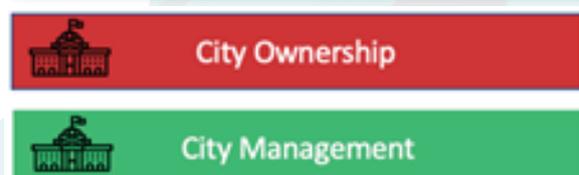


Figure 18 Digital Reference Framework (adapted from Deloitte, 2017)

In this model Sligo will maintain ownership and control of the infrastructure layer because it enables an open and operator-neutral market model for its Smart City and Digital Initiatives and supports competition in the upper layers in the reference model.

The proposed Digital Development Office should be run by a Chief Digital Officer with responsibility for all Digital and Smart City initiatives including managing all 3rd party contracts necessary to deliver these. The type of role necessary for the Digital Development Office at each layer of the collaboration model is proposed in Section 12.3.

### 1.5.2 Create Digital Leadership Function

Sligo needs to establish a new “Digital Development Office”. Given the strategic importance of Digital and Smart City initiatives over the coming decade, it is recommended that this office has a mandate from the CEO and strong cross functional links with the Senior Management Team.

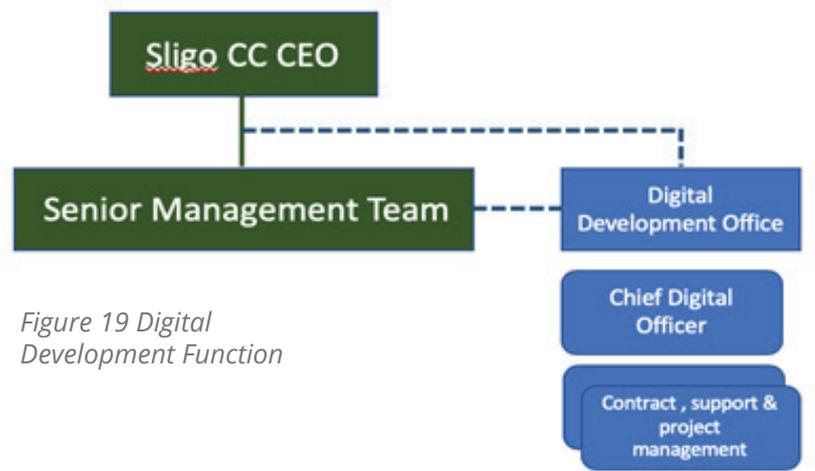


Figure 19 Digital Development Function

Reference model layer	Digital Development Office Role
Applications	Provide input on standards and specifications to enable 3 <sup>rd</sup> parties to develop applications or solutions either for the authority or commercially
Platforms	Create an ‘open standards’ flexible data platform capable of combining multiple data sources and facilitating future application development. This is likely to be managed by the local authority and delivered by specialist by 3 <sup>rd</sup> party(s)
Sensors	Set a consistent strategy & standards for sensors, including protocols, data structures, communications etc. Manage all sensor deployment by the authority, and approve all provided by external providers subject to standards
Communications	The local authority should engage a 3rd party operator to manage the communications infrastructure and help commercialise it. It is important that this is closely managed on an on-going basis. It is good practice that the provider of this service is not a provider of services at the upper levels in the reference model to minimize risk of lock-in
Infrastructure	Ownership and control of the infrastructure are vitally important to the local authority
Security	Digital office to have overall control for setting, managing and enforcing all security protocols and procedures. This is likely to be a specialist individual and/or a specialist 3rd party provider

Table 4 Digital Development Office role in collaboration reference model

### 1.5.3 Proposed plan for establishing governance and reference framework

Recognising these proposed models represent significant changes for the Local Authority it is recommended to adopt a phased approach. A proposed phased plan is as follows.

Proposed plan to deploy the Smart and Digital Reference Model		
2020/2021	2021/2022	2022/2023
Establish Digital Development office. Establish Reference Model Framework. Appoint Chief Digital Officer. Begin building internal capacity and skills.	Appoint external 3 <sup>rd</sup> parties to support reference model <ul style="list-style-type: none"> <li>- Security,</li> <li>- Communications.</li> </ul> Define Sensor and Platform framework in detail, set standards and select data platform. Continue to build internal capabilities and skills. Progress priority digital initiatives and infrastructure.	Reference Model fully defined and in place. Progress multiple initiatives with internal and external Actors. Engage with various 3 <sup>rd</sup> parties, academic, multinational and startups in a structured manner using the framework as a guideline. Engage 3 <sup>rd</sup> party specialist companies as and when needed as scope of remit expands. Continue to expand digital initiatives. Begin to measure impact and regional benefits.
Begin internally, build capacity & skills, and engage external 3 <sup>rd</sup> parties as initiatives take off		

Figure 20 Proposed plan for deployment of reference model

## 1.6 Schedule of recommendations

Included here is a listing of the initiatives proposed in the action plan. Further details are contained within the document below and the complete action plan is included in the Digital Programs & Initiatives section below.

Recommendations	
Strategic Pillar 1: Increasing Digital Skills across county	
1	Promote & increase digital skills across the region
2	Upskilled small & family businesses
3	Provide advanced skills to local enterprises
4	Promote Sligo as an SME/Micro business Digital Leader

Recommendations	
Strategic Pillar 2: Improving Digital Infrastructure	
5	Provide digital connectivity through the County's existing neighbourhood and community spaces.
6	Encourage others to do the same, such as in shopping centres and public spaces (leisure facilities, playgrounds, event spaces etc) run by other government agencies.
7	Support the National Broadband Plan, identify infrastructure gaps in the communities for prioritisation, and proactively engage with the National Broadband Ireland (NBI) team for Sligo rollout.
8	Continue to improve access and skills through libraries and community centres, including simple things like encouraging use of online banking and services;
9	Advocate for public access to digital infrastructure in private spaces.
10	Provide digital access including Wi-Fi in public spaces.
11	Identify opportunities for digital inclusion as part of built environment projects.
12	Continue to design-in shared ducting into all capital and refurbishment projects across the region.
13	Install sensors, at every opportunity to collect data that can be used to make evidence-based decisions to deliver better services to the region.
14	Create a policy to ensure all future initiatives, projects or investments are futureproofed by always considering the Smart and Green impact in all initiatives at planning stages.
15	Become the leading Local Authority in Ireland in Data Driven & evidence-based decision making.
Strategic Pillar 3: Delivering Digital Services & Community/Culture initiatives	
16	Enable additional Council services across digital platforms
17	Embrace and Scale the Open Data Programme
18	Promote internal and external digital activity through communications and engagement tools
19	Improve digital engagement and data sharing with communities
20	Make digital the primary communication tool
21	Position the Sligo region as a leader in digital connectivity and engagement nationally
Strategic Pillar 4: Fostering Innovation, Enterprise, Digital Economy & Employment	
22	Foster partnerships with stakeholders to build on emerging and established clusters in technology, med-tech, manufacturing and data analytics;
23	Prioritise relevant, tailored and accessible support that helps business to attract and retain talent in Sligo;
24	Celebrate and promote digital success across both the start-up and broader business communities.
25	Continue to promote and support small to medium enterprises (SMEs) become digitally enabled
26	Promote the Sligo Region as a 'Digital Living Lab' for Smart & Green Innovations
27	Establish a Quick start framework for Proof of Concepts

Recommendations	
Enabling Actions 1: Ethical Innovation	
29	Position the Council as an ethical innovator in the information marketplace
30	Expand open data initiatives to benefit local communities and business and to utilise data to support evidenced based decision making and collectively plan for the future of the region
31	Build appropriate infrastructure & frameworks to manage open data & information marketplace
Enabling Actions 2: What the Council & Workforce can do	
32	Establish a Digital Development Function, run by a Chief Digital Officer
33	Adopt a reference model for Smart and Digital initiatives
34	Implement mobile & flexible workforce strategy
35	Address digital skills shortages, manage digital change: greater productivity & improved performance with similar resources
36	Ensure that Smart and Green considerations are applied to every initiative at inception and prior to completion
Enabling Actions 3: Effectively facilitate partnerships to maximise benefits	
37	Build, foster and innovate with an ecosystem of partners.

## 1.7 Acknowledgements

The authors would like to acknowledge the following who willingly gave their time to make a valuable contribution during the development of this strategy.

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Table 5 Stakeholders contributing to the process



# SLIGO

COUNTY COUNCIL  
COMHAIRLE CHONTAE SHLIGIGH

