Response to the National Smart Specialisation Strategy consultation

Digital Hubs in Ireland

Cisco is the worldwide technology leader that has been making the Internet work since 1984. Our people, products, and partners help society securely connect and seize tomorrow's digital opportunity, today.

Executive Summary

How can Ireland realise the full potential of digital hubs as a key enterprise innovation policy lever to support the Smart Specialisation Strategy for Ireland (S3)?

The development of a digital hubs network is a potential game-changer for Irish enterprise policy and innovation driven growth for rural Ireland. This white paper offers a vision for the growing network of hubs, which can act as a strategic bridge and forum for cross-cutting areas, connecting national level innovation policy with regional enterprise priorities. The hubs will deliver connectivity, unlock regional development and accelerate innovation in the enterprise landscape.

We recommend that Government adopts a broader vision for digital hubs as spaces that can deliver a variety of functions to enterprises, citizens and communities across Ireland. From a secure coworking space, to a learning environment, a hybrid health setting and finally, a

hub for the community. All of these functionalities need to be provided in a secure environment that is well protected from a growing range of complex cybersecurity threats.

We consider the differing needs of the digital citizen, from the remote and hybrid worker, to students, patients, entrepreneurs, and the atypical digital user. Although these users have differing requirements from a digital hub, through a set of common principles, and most importantly, a common infrastructure, digital hubs in Ireland can support the variety of use cases that enterprises, citizens and communities require.

Adopting a common infrastructure in digital hubs across Ireland will enable them to offer a common experience to users, ensuring accessibility and driving connections within communities and across regions.

We recommend that hubs in Ireland are operated as a unified network underpinned by common principles. This would enable Ireland to build a national network of digital hubs that are highly protected from cyber security threats, whilst delivering a standardised consistent experience across the hubs, and becoming beacons for innovation and growth. Adopting a common procurement approach and digital hub development principles will be a key enabler of this goal.

We conclude this white paper by setting out a

series of recommendations to inform the next phase in the development of Ireland's digital hub network, which can work in tandem with S3. In addition to drawing on the suggestions above, we recommend drawing on a mix of funding mechanisms, including PPP arrangements, to support hub development.

Summary of Recommendations

- **Cyber security:** ensure hubs prioritise cyber security to deliver a secure user environment;
- **Community:** equip hubs to catalyse wider community digital uptake, adopt Open Roaming;
- **Standardised experience**: deliver a standardised experience for users across the network;

- **Common infrastructure:** deploy common infrastructure to support a variety of use cases including deploying hub technology to ensure operational health & safety;
- **Procurement:** pursue large scale procurement to maximise efficiencies of scale;
- **Funding**: utilize a mix of national, EU and private funding streams for hub development; • **PPP:** support the development of public private partnerships to incentivise hub use;
- **Awareness:** raise awareness of digital hubs, the services they offer to drive use.

A space to work from your community
Productive co-working spaces for remote working and fostering the incubation of SMEs

A space for secure services
Enable citizens to access government services through a secure environment

A space to connect
Create vibrant, inclusive and sustainable communities throughout Ireland through centres for regional connectivity and digital inclusion.

A space to learn
Create digital learning environments that to develop digital skills and go on virtual field trips

A space for health
Improve access to GP and specialist medical services

A space for arts and culture
Deliver cultural experiences through technology, using digitalisation to improve access to the arts

A SECURE PLACE TO CONNECT IN AN EVOLVING THREAT ENVIRONMENT

CISCO

Introduction

A vision and practical advice for Digital Hubs in Ireland

The onset of the COVID-19 pandemic has accelerated aspects of digitalisation across Ireland, with the shift to remote working opening significant opportunities for regional development. The development of digital hubs is central to unlocking this potential.

Our response to the S3 consultation makes the case that digital hubs can act as strategic focal points for connecting national level innovation policies with regional enterprise priorities.

This white paper seeks to capture the opportunities facing the development of digital hubs across Ireland and samples of Cisco's offering in the form of use cases.

Cisco has included a series of suggested recommendations, which if implemented, will support the development of the digital hubs network. Of note, these include unifying the hubs network to create a 'common experience' based on a common infrastructure.

Cisco recognises the supportive policy environment and welcomes the Government's commitment to rolling out a national hub network and infrastructure on the island. It acknowledges the work of the Western Development Commission (WDC), and their development of a comprehensive strategy for the network,

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notably along the Atlantic Economic Corridor (AEC). This white paper makes the case for public-private partnerships on an area that can accelerate digital development and foster regional innovation in Ireland.

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Ireland's digital development will be central to the State's economic recovery, and there is huge potential to ensure Ireland's rate of digitisation can accelerate and adapt to meet new needs. Since the onset of the COVID-19 pandemic, remote working has proven its value in maintaining economic activity and has been transformational across sectors and

hubs which would form a pathway to a renewed economy and society.

Cisco Ireland is delighted to present this paper to the Department of Enterprise, Trade and Employment, offering our vision for how digital hubs can act as a key policy driver for S3 as a

> In its simplest form, a digital hub is a physical space facilitating people to work remotely. It has the potential, however, to be so much more. As Ireland prepares for the changing needs of our society and economy, it is time to recognise that these hubs could form new centres of knowledge on healthcare, on education, on the arts and culture; notwithstanding their innovative capability in supporting start-ups, larger enterprises and public services.

geographies. However, the opportunity of remote working is not equally distributed. Many are unable to work from home for a variety of factors, such as accessibility, security or capability. Additionally, remote working policies, including those dealing with confidentiality, IT security, and the software used by employees working from home, raise valid questions on whether they are fit for purpose and if they are securely supported. In this context, the Department of Rural and Community Development identified the strong upside potential of a network of digital

means of coordinating Ireland's approach to becoming a leader in digital growth and delivery of digitised public services. By using these hubs we can ensure that this growth is not solely driven by multinational companies, but harbours promise for start-ups, SMEs and individuals alike.

This paper outlines a high-level thematic analysis of the key opportunities and issues for the development of digital hubs across Ireland, the requirements of a "connected citizen" and sets out some lessons learned from use cases.

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Digital hubs have the potential to be transformational for rural Ireland. By facilitating remote working, they can help to retain talent in rural communities, encourage mobile workers to move to the regions, provide increased trade for local businesses, and revitalise rural towns. These hubs can accelerate a truly regional recovery and contribute to a greater regional distribution of jobs.

Any economic recovery will require developing the longer-term capacity and the reorientation of our economy in an equitable way amid the transition to a low carbon future. Digital hubs can play a major role in this realignment. As identified in research by the Western Development Commission and the Whitaker Institute at NUI Galway, the wider economic benefits of remote working are wide ranging, including improved productivity, greater labour market participation and reduced emissions.

Town centre regeneration, health promotion and community volunteerism present great opportunities in this context. Digital hubs can act as a facilitating factor but can also give access to services to individuals and communities which may have previously been underserved. This includes those with low digital literacy skills and others who do not require a regular digital connection.

While the benefits for rural communities are readily identifiable, urban centres stand to benefit from decreasing pressures on infrastructure, housing and travel. Digital

hubs can play a role in dissipating urban pressures. This relieved pressure can go some distance towards achieving urban climate change objectives. For the citizen, this can mean a higher quality of life for many who may previously have spent long hours commuting.

The innovative potential of digital hubs is unprecedented. Designated sites can become a magnate for ideas and creativity and provide support and mentoring to develop Ireland's start-up community. Partnerships with universities, start-ups and SMEs can foster innovation diffusion across regions and offer a reimagined approach.

It is exciting that there is significant upcoming investment in the development of the national hubs network and infrastructure in Ireland. We

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Mapping the citizen journey

hope that this paper will enlighten and inform, while acknowledging the significant body of work completed to date. As well as providing support and mentoring to hasten the growth and development of Ireland's start-up community.

To understand the potential of a digital hubs network, we must assess the growing digital needs of the community. This means exploring the concept of a typical citizen's digital journey. It is only by doing so, that a clear vision emerge.

The digital hub will have a leading role to play in the life of a modern Irish citizen and on the future Irish workforce. Indeed, as the rate of digital adoption continues to increase, the digital citizen is becoming the cornerstone of the modern economy and society, as increasing aspects of day-to-day life can be carried out in part or fully online. In considering the potential

value of the digital hub to a community, we have mapped out various personas that comprise the digital citizen.

Remote work has been transformed from a feature of professional life to a widespread practice. Government published the National Remote Work Strategy, "Making Remote Work" in January, underscoring a new approach to labour force policy. Legislation is expected in September to provide employees the right to request remote work, to introduce a code of practice on the right to disconnect and to provide ongoing guidance. Significantly, Government will mandate public sector employers, colleges, and other public bodies to move to 20 per cent home and remote working in 2021. This supportive policy environment is a key enabling factor for the expansion of the digital hubs network.

The digital citizen The remote and hybrid worker

COVID-19 has meant that huge numbers of workers are not permitted to go into the office unless it is essential. For those who do, it is out of necessity, and likely a hybrid model of office and remote work. This has brought its own challenges, from connectivity and data security to work-life balance and childcare.

Employees working from home are especially vulnerable to cyber attacks when accessing corporate applications and data through personal devices or connections.

Many who may need a highly secure, high speed connection at their place of work, do not have access to this kind of facility. Similarly, important and confidential meetings have been continuing apace from home servers, where it is not always feasible to have a secure and high-quality connection.

Remote working will be an enduring legacy of the COVID-19 crisis. The remote and hybrid worker requires a high speed, secure and robust connection, particularly if they are underserved due to living in an area of poor rural connection.

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The entrepreneur and small business owner

The entrepreneur and the small business owner is always balancing the cost of premises and the need for a location. The COVID-19 pandemic has shifted this balance, and where previously these workers may have been required to base themselves in urban centers, other options are now being considered. Small businesses need low cost working spaces that they can use flexibly, which provide a high speed, secure and robust connection.

The student

Students have faced huge difficulties during this pandemic. COVID-19 has not only had an immediate effect on their learning but will have continued influence on their future. The university sector has moved to a blended learning approach, comprising significantly of remote learning. Each student faces their own challenges in this respect. If we ignore the important social and collective learning aspects of third level education, students continue to face exams, assignments, presentations and experiments on virtual forums. Students require digitally enabled spaces where they can learn individually or as part of a group.

The patient

The COVID-19 pandemic has both forced and enabled a massive adoption of telehealth and e-health solutions in Ireland. Virtual GP visits have become commonplace. Beyond the obvious benefits, which have seen improvements inpatient access to care and to clinician's productivity, studies that have shown a higher level of patient satisfaction due to not having to travel, sit in waiting rooms and generally accelerating the appointment process. The Health Service Executive's (HSE) digital health living labs is an excellent new instrument to help co-create, pilot, test, and socialise new digital solutions which improve patient care and quality of life, reduce cost and improve clinician experience.

When accessing digital health services, high quality video increases the range of care options that can be provided digitally as the digital environment more accurately replicates being in a GP clinic or hospital. Data security will also be paramount as sensitive patient data needs to be protected from cyber threats.

The a-typical digital user

Each citizen's access and approach to technology is not created equally. There are many with only an intermittent digital need, such as those in the agriculture or construction sector for ad-hoc training, upskilling and communicating. Similarly, senior citizens have an occasional but growing need to connect for social and welfare purposes.

Digital hubs will need to ensure that services are easy to access and use for a-typical users.

The citizen and the digital hub

The digital hub as a secure connecting centre

The remote and hybrid worker
Research by the Western Development Commission and NUI Galway has shown that 84% of respondents to their survey hope to continue some form of remote work after the pandemic concludes. The digital hub offers a solution to this reimagined working life and can improve the quality of life for the worker in this respect.

The patient
While there is an outsized potential to strengthen the care pathway for clinicians and patients alike, barriers remain. The digital hub can become a complementary resource to the challenge of equal access to healthcare in communities. With this we can address enduring problems, such as rural shortages of GPs, expand healthcare delivery options and improve the quality of patient experiences.

The student
Post-pandemic, students will continue to require a digital connection from their home communities to conduct research and collaborate with peers. The digital hub can enable students to succeed. They can use it as a digital learning environment for lectures, exams, group presentations and debates.

The a-typical digital user
There should be a forum offering these citizens a means to engage with the digital world. The digital hub can be this forum. It can offer the means for citizens to both access and gain the digital skills they need for the future.

The entrepreneur and small business owner
The digital hub can become a centre for innovation across rural Ireland, creating synergies with many of the goals set out within Government's recently published SME and Entrepreneurship Growth Plan.

Digital hubs principles and usage

The digital needs of Ireland's enterprises are wide ranging, while hubs themselves will likely vary considerably in size, offering and governance. Nonetheless, it is important they are consistent on a series of shared principles to best serve society.

Aligned with our optimistic ambition for the hubs themselves, Cisco is pleased to offer its views on the core principles which should underpin this infrastructure, supplemented by case studies to demonstrate how these can be practically achieved. These views have the consistency of experience for the citizen at their centre.

A space to work

Fundamentally, a digital hub should provide a safe and secure space to work, but its potential remit

for innovation is wide ranging. It can provide productive co-working spaces and foster the incubation of SMEs, start ups and micro enterprises. A recent Cisco study has shown that countries could add $2.3T to their GDP if 50% of their SMEs fully

Use case: Israel Connected Hubs

In Israel, Cisco partnered with the government to pilot three Smart Spaces (a form of digital hub) to connect domestic and international entrepreneurs, companies and individuals on the periphery with companies in the centre. These hubs demonstrated a cost-efficient way for Israel to extend its "start up nation" across the country. Teams can be formed without team members needing to move to the centre, allowing jobs to be created in the periphery. Cisco supported the Government to roll out 20 of these Smart Centres across Israel and the Government plans to open up to 60 more centres in the next two years.

A space for secure services
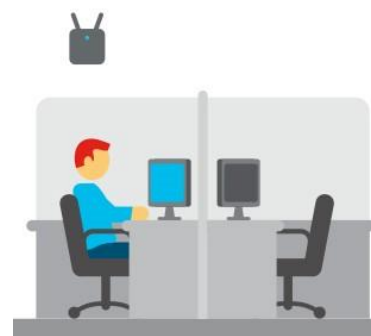
digitalised. Digital hubs can facilitate not only this digitalisation, but also form

an interconnected network across locations and the digital foster regional development.

Cisco believes that the digital hubs network has opportunity to advance the

transformation of public administration. There is strong potential for many internal and interadministrative processes that can be handled

digitally. A citizen's interaction with the State often requires a range of in-person verification methods, generally at select locations within the country. A digital hub can provide a means to interact with staff in government offices to verify identity and documentation in a secure environment. This includes virtual options for citizens to access the critical services they depend on.

A space to connect

Cisco acknowledges the Department's remit to advance and support the development of vibrant, inclusive and sustainable

communities throughout Ireland and to promote long-term social and economic development in rural areas and the regions. The digital hub has the potential to become a centre for regional connectivity and digital inclusion.

Use case: Government & Financial services booth

Cisco has trialled a government services booth in the Kazakhstan embassy in Moscow, meaning expats no longer need to return to their home country for any task that previously required in-person presence. The potential applications for this concept in Ireland are wide-ranging, from document authentication by the Department of Foreign Affairs, to the issuance or renewal of driving licenses and integrating with the public services card.

Cisco also have experience providing secure financial services to bank customers in Germany, via interactive hardware allowing documents to be scanned and sent to the bank securely from a soundproof room designed as a virtual bank teller window.

Use case: Digital village in Switzerland

We worked with villages to digitise coworking spaces in rural areas. Cisco partnered with the largest co-working spaces company to digitize 70 coworking spaces in towns and villages across the country.

Cisco also rolled out a pilot project for a digital hub in Eglisau where part of a train station's building was re-purposed. The core concept seeks synergies to embed a hub that facilitates transport connections with one that promotes digitalisation.

There are currently 50 digital hubs operating in train stations across Switzerland with the potential to offer coworking space access as an optional extra when purchasing a train season ticket.

academies and has provided training to over 23,000 students to date. Similarly, Cisco has partnered with the HSE to help over 120,000 HSE employees to advance their digital skills through NetAcad.

A space to learn

Any digital hub with far reaching ambitions should be a place of learning and knowledge sharing. Connecting with local schools and other centres of education is essential. It can provide opportunities for thousands of students across the regions.

Use case: Virtual visits & digital skills

In Australia Cisco's Digital Schools Network enables educators and students to connect and transform traditional schools into digital learning environments. This extends to training programs and virtual school excursions via CILC.

Similarly, Cisco's Networking Academy (NetAcad) programme sets out to provide digital skills training in libraries and selfpaced introductory courses on IT skills across Dublin and the rest of Ireland. These courses are freely available to everyone and include courses on Cybersecurity, the Internet of Things and Entrepreneurship. NetAcad courses require little intervention from library staff and they can support digital inclusion across the community. In Ireland Cisco is currently running 28

A space for health

A digital hub with a healthcare focus can address enduring challenges, such as rural shortages of GPs and expand healthcare delivery options and quality. It can lower the amount of time medical professionals need to spend travelling to consult on patient

treatment options, reduce the total time needed to agree on the next steps, decrease the variation in patient treatment pathways, and enable socially distant care.

Use case: Remote consultation.

Cisco has trialled and rolled out a MultiContent Solution in Norway, which enables doctors to remotely collaborate and discuss patient care options in a digital environment which is safe, secure and offers simultaneous full HD imagery for sharing high quality images and video feeds (i.e. MRI scans, CT scans).

The project started in Oslo University Hospital in 2020 and reduced the time

spent on deciding further treatment strategies for brain cancer patients from 7 weeks to 1 week after applying this technology. Much of the time saving was made by enabling experts of different disciplines to meet virtually and then to make treatment decisions in a single meeting.

A space for arts and culture

While COVID-19 has been hugely detrimental to the arts and cultural sector, it has demonstrated creative ways to engage with the arts. It has also shown the increasing importance of new digital modes of delivery for cultural projects as evidenced by the

recent investment into digital cultural projects. As Ireland begins to move out of the pandemic's shadow, there is a conversation to be had on the digital hub's role in cultural engagement.

Use case: Digital museum objects and augmented reality QR trails .

Cisco and ONI are working with the British Science Museum, British Natural History Museum, British Film Institute and Imperial War Museum and local cultural teams across the UK to explore the use of digital Museum objects to engage audiences with cultural content on the UK high street. Elsewhere, Cisco have focused on a regional project in Swindon

(UK) driving local regeneration and exploring cultural/digital engagement. The experiences are delivered to audiences on their own digital devices using an Augmented Reality (AR) tool activated by QR codes sited in outdoor locations around Swindon.

The digital hub could allow Irish citizens to connect, discover and initiate one of these so-called AR trails, host events on cultural themes leveraging QR codes and to coordinate screens in the hub itself to provide pop up style exhibitions.
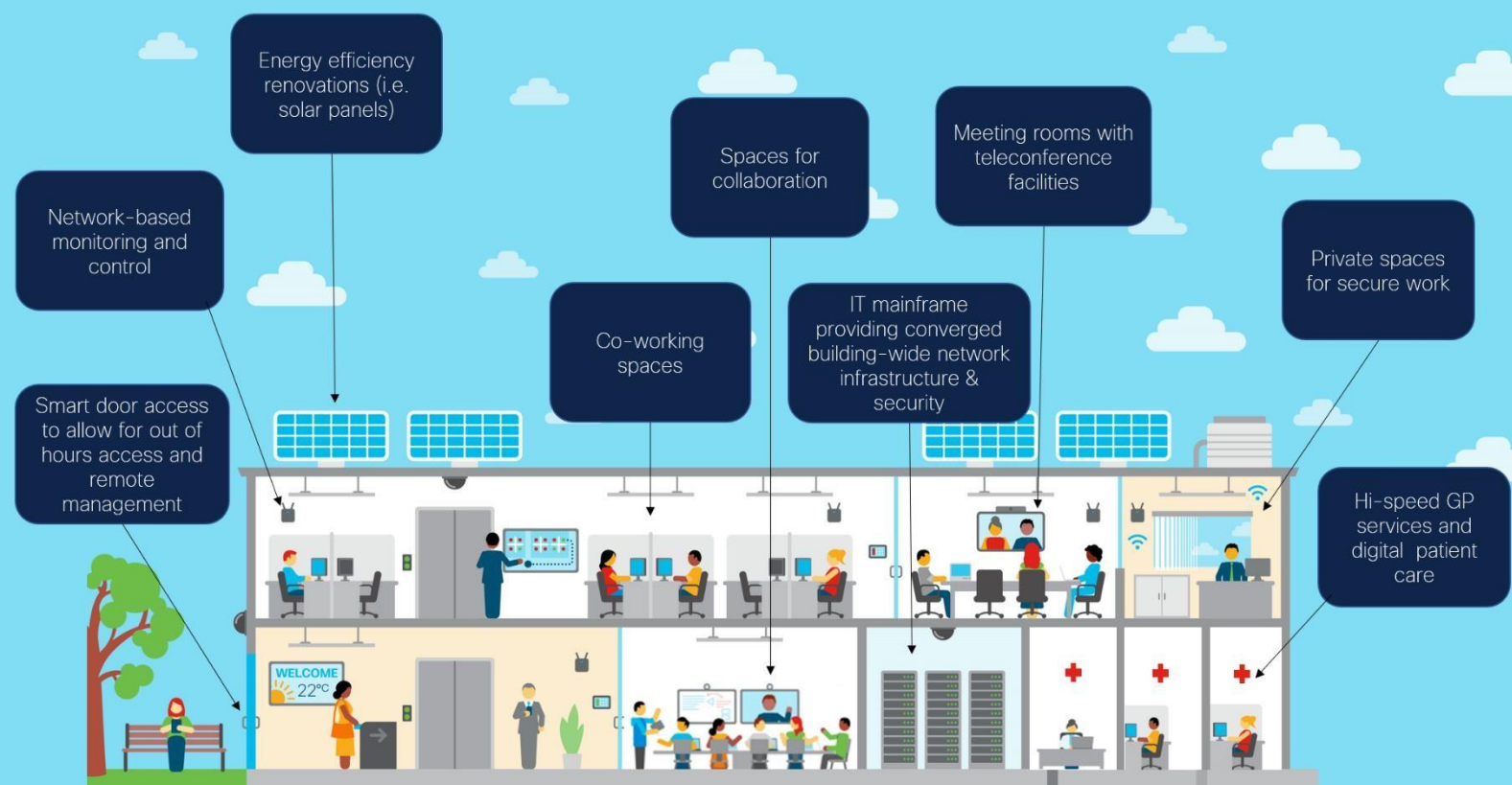
A beacon for efficiency
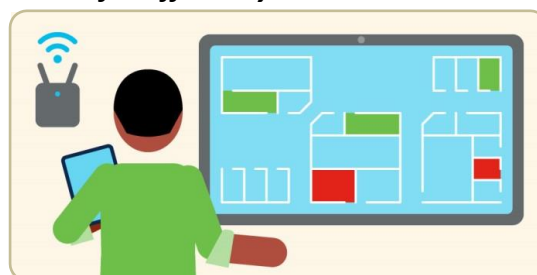
Government has outlined the opportunity for economic renewal through the interdependent green economy and digital transition. Cisco agrees wholeheartedly that

the economic recovery should be seized as an opportunity to invest in this green transition with the digital hub supporting this green agenda. Buildings today account for 40% of Europe's total CO_2 emissions but only 1% of buildings undergo energy efficiency renovations every year. The European Commission has called out the need to initiate a major renovation wave to reduce buildings' greenhouse gas emissions and to create jobs in the local communities. Digitisation of the building must be integrated into the construction and renovation work on the digital hub.

Cisco has experience connecting all systems and services, such as lighting systems, building systems, elevators, fire and other alarms, to create

Scaling digital hubs

Energy efficiency renovations (i.e. solar panels)

Network-based monitoring and control

Spaces for collaboration

Meeting rooms with teleconference facilities

Private spaces for secure work

Smart door access to allow for out of hours access and remote management

Co-working spaces

IT mainframe providing converged building-wide network infrastructure & security

Hi-speed GP services and digital patient care

WELCOME 22°c

a converged IP and Power over Ethernet (PoE) network infrastructure. This enables buildings to become more sustainable, to lower construction costs for cabling installation and configuration and to reduce operational costs through better energy management, IT and OT analytics, and selfdiagnostics. Ultimately, this can reduce costs and improve occupant satisfaction with network-based monitoring and control of temperature, lighting, CO, smoke, air quality, and other ambient characteristics of physical spaces. NTT and Cisco partnered to help ASHRAE, a leader in building standards, convert a 43year-old building into a sustainable workspace that is built to be smart, informative and transformative.

The modern, smart building allows for the optimisation of space to fit multiple requirements of the community. Above, we have set out a blueprint for various offerings for the digital hub, acknowledging that each will not be one and the same. Each can be tailored to the requirements of the community.

Cisco Workspaces offer a **wide variety** of areas based on the needs of the customer to maximise the optimal use of space. This varies from personal offices to co-creation areas providing an all-in-one collaboration device for wireless presenting, digital whiteboarding and video conferencing. Our offerings are grounded in user experience, needs and preferences. Special purpose rooms and meeting rooms are enabled by modern collaboration devices to allow for advanced ways of communication.

Cisco places the customer experience at the heart of our offerings. For the customer this includes the simple and quick setup of new equipment and a consistency across hardware and software. This in turn lowers costs as trained experts are not needed onsite for

configuration, allowing remote management for easier ongoing support.

In other words, Cisco provides plug and play devices which only need connecting to power

through personal devices or

and the internet to automatically configure with predefined settings. This could represent a huge cost saving in the setup of the digital hubs network and save time using third parties to set up equipment.

Cybersecurity

The digital hub network should provide a secure place to connect in an evolving threat environment. Users will be able to avoid cyber attacks when accessing corporate applications and data

connections.

Remote working has seen a shift in the threat landscape. Remote work introduces a number of security concerns that are different from working on premises. Attackers are adapting their techniques to take advantage of new opportunities. An example can be seen below.

Smart Buildings

Transitioning from 'connected' to truly 'smart' buildings allows for an owner to connect and utilise all systems and services in a building from lighting, HVAC systems, elevators, fire, and alarms to IT networking, allowing for a converged building-wide network infrastructure that can be controlled to save resources.

Making digital hubs smart will save money. Control over the environmental aspects of a building – lighting, window shades, etc. – has shown to save resources, with reductions in energy usage alone of up to 40 % and two out of three senior leaders reporting that a building management system produced an ROI.

Moreover, smart buildings allow for scalable workplace utilisation and occupancy monitoring, including the tools needed to deploy location sensing using your existing Wi-Fi network infrastructures. This gives you faster, more

accurate occupancy insights, to enable you to modify and streamline your connected spaces.

Digital hubs in Ireland, while ranging from privately owned to state funded, should ideally operate as a unified network underpinned by common principles.

Delivering a consistent experience

Key to encouraging citizens to avail of digital hubs is ensuring a seamless experience – one that's easy to access and that they will return to. This includes delivering a consistent experience across hubs to unlock the benefits and flexibility afforded to users from accessing a wider hub network. Open Roaming is a key technology that can support this.

A formal network should streamline the consistency of experience at the hub and across the network. It would also allow for multiple economies of size and scale, such as the development of white-label training programmes that can be deployed across the full network. This could include the likes of Cisco's Networking Academy (NetAcad) programme, which has already seen successful uptake in Irish libraries.

Securing users from cyber threats

Ensuring a high level of cyber security in hubs is critical to ensuring users have trust and confidence in using these facilities, and that the hubs are secure environments that can facilitate a broad range of uses, including sensitive commercial and personal information.

From a security perspective, operating over a shared network would allow for a secure connection, blocking cyberthreats that try to access the network and protecting personal data. This is particularly important given the rise of cyberattacks in 2020; 37% of organisations in Europe have seen the number of attacks increase by over a quarter. Public funds should go into future-proofing networks that will be capable of delivering gigabit speeds and meeting reliability and quality of service requirements.

Adopting a common procurement approach

From a procurement perspective, adopting a common approach to infrastructure will support multiple use cases in hubs, from a space for remote working, to a space for health and for learning. A shared network of digital hubs would allow for the bulk purchasing of software and hardware, maximising pricing efficiencies, while facilitating the use of shared services such as IT support.

Promoting innovation

The digital hub in itself offers the potential to become a centre for innovation in a given region. By linking these hubs along a shared network, it is possible to foster connections between universities, start-ups and SMEs across Ireland. This diffusion of innovation offers the potential for a joined-up policy approach.

OpenRoaming

OpenRoaming provides mobile users with frictionless Wi-Fi onboarding by linking together access providers (such as public venues, retailers, airports, and large enterprises) and identity providers (such as service provider carriers, devices, and cloud providers). Users need to sign on only once with a trusted identity provider. Afterward they will be automatically connected to OpenRoaming networks whenever and wherever one is available.

The digital hub network could look to leverage OpenRoaming

OpenRoaming could build synergies across Access, Service & Identity Providers, and even look to create a connected platform across the digital hubs network in Ireland. The Eduroam network across Irish universities is one such example of OpenRoaming in practice.

It could build on the vision for a seamless

experience for the digital citizen in their journey across the hubs network.

This white paper sought to outline how can Ireland realise the full potential of digital hubs as a key enterprise innovation policy lever to support the Smart Specialisation Strategy for Ireland (S3). This involved examining the key themes facing the development of digital hubs across Ireland, including the remote work journey of a "connected citizen", a needs assessment and samples of Cisco's offering in the form of use cases. This paper also explored the wider potential economic and social benefits from digital hubs, including improved productivity, greater labour market participation, reduced emissions and more balanced regional and rural development.

Cisco remain committed to assisting and inputting on the technical design and

Conclusion

implementation of a strategy for the network as a means of delivering S3, building on the work to date by the Department of Rural and Community Development, the WDC along the Atlantic Economic Corridor project, and the regional assemblies. There remains significant opportunity for this network to accelerate regional recovery and underpin the next phase of Ireland's economic development.

Cisco has identified the below actions and recommendations at an organisation and government level, which if implemented, will support the successful development of the digital hubs network.

Recommendations

- **Cyber security:** ensure hubs prioritise cyber security to deliver a secure environment for that underpins user trust;
- **Community:** equip hubs to act as a catalyst for digital acceleration in the wider community, beyond the hubs premises themselves, e.g. deployment of Open Roaming;
- **Standardised experience**: deliver a 'commonality of experience' between the hubs and across the network to support a seamless user experience across Ireland;
- **Common infrastructure:** deploy common infrastructure that can support a variety of use cases across the digital hubs network, including deploying hub technology to ensure operational health & safety, air quality;
- **Procurement:** pursue large scale procurement, rather than procurement at individual hub level, to maximise efficiencies of scale;
- **Funding**: utilise a mix of public and private funding streams to enable further hub development:
- EU funding mechanisms e.g. RRF and ERDF

- National funding streams
- Industry investment e.g. Cisco Country Digital Acceleration (CDA) programme;
- **PPP:** support the development of public private partnerships and cooperation to incentivise hub use;
- **Awareness:** as per the Report of the Expert Group on Remote Working, raise awareness of digital hubs, the services they offer and their role in providing an alternative remote work location, to drive use.