Digitalisation
– How Ireland can accelerate

AMERICAN
CHAMBER *of* COMMERCE
IRELAND

60TH
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About the American Chamber

The American Chamber of Commerce Ireland (henceforth 'the American Chamber') is the leadership voice of US business in Ireland. Our mission is to strengthen the US-Ireland-EU business community through advocacy and networking with purpose.

American Chamber membership includes US companies operating from Ireland, Irish companies expanding in the US and organisations with strong bilateral links between Ireland and the US.

This year the American Chamber of Commerce Ireland celebrates sixty years since its foundation on January 9th, 1961. AmCham was established to encourage business linkages between the US and Ireland. Today AmCham is the leading international business organisations in Ireland and abroad, representing our member's views in Ireland, Brussels and Washington DC. Throughout 2021 AmCham will be running a year-long programme to celebrate the global impact our members have had over the past six decades.

Introduction

This position paper outlines the views of the American Chamber on the need for a more accelerated approach to Digitalisation. This is not as an end in itself, but as a framework for accelerating Ireland's recovery, facilitating a more sustainable, circular economy whilst embedding principles of fairness and social equity. While the onset of the Covid-19 pandemic has disrupted this transition, we have also witnessed a quantum leap toward a digital transition than could not have been imagined twelve months ago.

Ireland's expected recovery in 2021 is the opportune moment to ensure there is not only a green recovery but a digital focused recovery as well. In particular, the EU Recovery and & Resiliency Facility[1] presents an opportunity for Ireland to implement investments and reforms for the digital transition. The National Recovery and Resilience Plan, the National Economic Plan, and the review of the National Development Plan are all under consideration, and this paper sets out an ambitious roadmap of the areas that will need to be prioritised for digitalisation within public services to happen. It is not just at an EU level that digitalisation is a priority, the Irish Government within their Programme for Government committed under a National Digital Strategy to 'drive digital transformation in the public service', 'develop Ireland's leadership in new digital technologies' and 'direct the Office of Government Procurement (OGP) to support the adoption of new technologies through the development of new public service frameworks'[2] . The American Chamber welcomes these commitments and sets out below how the Government can meet their objectives and ensure that Irish Government leads by example when it comes to digitalisation.

The American Chamber looks forward to the publication of a National Digital Strategy in the coming period and underlines the importance of a whole of Government approach to digitalisation. The digital transformation that is required must be placed at the heart of Government strategy. It must permeate all Government Departments and become the norm for all future strategies and how Government interacts with citizens. It is not just the responsibility of one Government Department to drive the digital transition but a collective effort and a cross departmental delivery board should be created once Ireland has a roadmap in place. How quickly Ireland embraces digital transformation, that will happen with or without our strategies in place, will without doubt determine our competitiveness in years to come. The American Chamber sets out below not only the digital infrastructure requirements and priority public services, but also the work that will need to be undertaken to build trust and buy-in of digitalisation, the training and skills requirements, the closing of the digital divide gap and relevant policy changes that need to take place within Government.

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1   The Facility was agreed and deployed in 2020 by the EU with €672.5 billion in loans and grants available to support reforms and investments undertaken by Member States. The aim is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions. The Commission has identified seven flagship priorities and strongly encourages MS to put forward submissions under them, four of these priorities directly align to the recommendations set out in this paper including:

- Modernise – Digitalisation of Public Administration
- Connect – roll out of rapid broadband services
- Reskill and upskill – education and training to support digital skills
- Scale up – data cloud capacities and sustainable processors

https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en

2   Programme for Government, Our Shared Future, p29

Benchmarking Ireland

Ireland has positioned itself as a digital hub, attracting the top five global software companies as well as global leaders in technology, cyber security and advanced manufacturing. Ireland's reputation as a digital leader is no doubt a significant factor for attracting these companies to Ireland, and Ireland is an active member of the Digital 9[3] (D9) group of digital frontrunner countries within the European Union. It is important to understand how Ireland ranks internationally compared to our EU counterparts and competitor countries:

- Ireland ranks 6th in the DESI index[4] of European digital economies, with improvements required in Connectivity and Human Capital

- An eGovernment Report ranked Ireland low on key enablers for eGovernment such as digitisation of the back and front office of Public Administration

- Ireland ranks[5] 20th in an IMD report[6] on World Digital Competitiveness, down one place from 2019. Denmark, Sweden, Switzerland, the Netherlands, Norway and Finland all ranked in the top 10 with the US number 1 for the third consecutive year

- Ireland ranks 14 out of 36 countries in Europe and North America, in the Digital Riser Report[7], specifically assessing the mindset and the ecosystem of each country when it comes to digital transformation, based on data from the World Economic Forum

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3   'The D9+ group is an informal alliance of Digital Ministers from the digital frontrunner EU Member States. It comprises the nine top-ranked European countries in the European Commission annual Digital Economy and Society Index (DESI), plus a small number of other countries who share similar ambitions for the Digital Single Market.' Found at https://www.gov.ie/en/press-release/569e2-minister-troy-attends-meeting-of-d9-eu-countries/

4   The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness.

5   The IMD World Digital Competitiveness Ranking 2020, p24, found at https://www.imd.org/wcc/world-competitiveness-center-rankings/world-digital-competitiveness-rankings-2020/

6   WDCR measures the capacity and readiness of 63 economies to adopt and explore digital technologies for economic and social transformation. The ranking relies on three factors: Knowledge, which captures the intangible infrastructure necessary for the learning and discovery dimensions of technology; Technology, which quantifies the landscape of developing digital technologies; and Future Readiness, that examines the level of preparedness of an economy to assume its digital transformation.

7   EU Digital Riser Report, p21, found at https://digital-competitiveness.eu/wp-content/uploads/ESCP03_Digital-Riser-Ranking_2020-09-14-1.pdf

While Covid-19 has been both a human tragedy and an economic body blow for the country it has accelerated the digital transformation globally. The countries as well as industry that invested in digital infrastructure and technologies have been better positioned to continue to deliver their services during the pandemic. The key learnings from the digital transformation we have witnessed in the last twelve months are:

1 Digital services are the fastest route for delivering adaptable Government services swiftly and securely;

2 Digitalisation enables society to adapt to external shocks faster than traditional (or analog) environments;

3 Government has a central role in modelling, facilitating and regulating digitalisation;

4 Organisations which are heavily digitalised are more resilient and adaptable;

5 Government has the responsibility to ensure that digitalisation does not exacerbate social deprivation.

1. Webex usage[8]

Cisco's video-conferencing app Webex clocked 590 million participants in September and is on track to record over 600 million this month, nearly double the numbers recorded in March when countries started shutting down due to the pandemic.

2. Contactless payments

Contactless payments saw a dramatic increase in 2020 as consumers switched from cash to contactless payment methods. In Ireland alone, the volume and value of contactless payments in Q4 2020 meanwhile rose by 23.7% and 63.4% year on year to 174 million payments worth €2.8 billion[9].

8   (https://www.reuters.com/article/us-cisco-systems-webex-idUSKBN278018)

9   Sourced from BPFI, found at https://bpfi.ie/publications/bpfi-payments-monitor-contactless-update-december-2020/

Socialising Digitalisation

The American Chamber believes that Ireland can be a role model for citizen centric digitalisation. However there are key elements that need to be in place to ensure this happens:

1 **COMMUNICATE**: The Government has a key role to play in setting out publicly the rationale for an acceleration of digitalisation, that a whole of society approach is needed, and how it will impact citizens.

2 **INFORM**: A properly co-ordinated and consistent public information campaign is needed, highlighting not just the benefits but also the safeguards being put in place – both locally and through inter governmental bodies such as the EU and UN.

3 **EDUCATE**: Digitalisation as a concept is open to misinterpretation and misunderstanding. Common misconceptions relating to privacy, security, employment replacement through AI, future employment opportunities abound. The Government must tackle this and set out the facts on the benefits and pitfalls of digitalisation.

4 **ENGAGE**: Such a campaign must incorporate multiple representatives of civil society, representing differing views on digitalisation if the programme is to gain the widest possible acceptance. The Government should also assess coordinating private sector contribution in the area, for example, CSR projects focused on digitalisation

5 **BALANCE**: Digitalisation must be a 'just transition' and it must seek to narrow the digital divide and help ensure all people are connected, respected, and protected in the digital age. The digital divide can be rural and generational as well as socio-economic. The American Chamber notes that access to online learning was hampered in many low income families because a household might only possess one device suitable for distance learning. Splitting access between multiple children was neither beneficial nor practicable.

Digitalisation Infrastructure

For digitalisation to be successful and pervasive throughout Irish society there are a wide range of challenges that must be addressed. However any progress that is made needs to be underpinned by the relevant digital infrastructure. The American Chamber believes the following key initiatives are the basis for a successful "leap forward" for Ireland:

• **Cloud adoption** • **Identity Management** • **NBP/Access Platforms** • **Cybersecurity** • **Privacy management**

Cloud adoption

Governments across the world are increasingly moving to sustainable public cloud computing – which is most easily defined as cloud services delivered by third-party providers over the internet – in order to improve public services. By doing so, they are benefitting from its well-documented advantages, including scalability, cost savings, increased security and innovation.

The Irish Government has also taken steps to make better use of the public cloud, including in response to the COVID-19 pandemic. It is time to accelerate this progress, particularly if the Government's ambition of **delivering 90%** of all services within three years is to be achieved.

Ireland is already a global hub for cloud computing infrastructure by virtue of extensive investment here from leading international digital firms. Ground-breaking technology, and the potential it offers, is on our doorstep. This extensive untapped cloud capacity and large pool of technical expertise can be better leveraged by Government to drive digitalisation of public services.

For Ireland to avail of that unique opportunity, and to avoid falling further behind other States when it comes to cloud-use, Government needs to take decisive action.

1. PUBLIC CLOUD

Implement a public cloud-first policy requiring public sector bodies to first consider the public cloud, before any other options, when upgrading or introducing a new service. Those bodies would remain free to choose an alternative to the cloud but would have to justify it on account of cost or other compelling reasons. Such a policy would build on the OGCIO's Cloud Computing Advice Note of 2019 and help drive public cloud adoption across the public sector.

2. DATA CLASSIFICATION

To facilitate this transition to public cloud-driven public services, **a uniform data classification model needs to be put in place.** This model would see data categorised as unclassified, official, or secret and above. It would thereby help address any uncertainty across Government that can act as a barrier to cloud adoption. Such models have long been utilised in other countries, including the UK, and have aided their respective transitions to the public cloud.

3. PROCUREMENT

Public sector bodies must be better able to procure cloud services. Public sector entities are accustomed to buying IT infrastructure using procurement rules designed for purchases such as hardware and related software. The relevant structures are not in place, however, to enable them to purchase cloud technology, which is in turn frustrating digital transformation. **A clear, competition-friendly cloud procurement framework therefore needs to be established by the Office of Government Procurement.**

The world's leading digital governments are already relying on the public cloud's flexibility, innovation and scale to deliver top-tier public services. This is not cloud for cloud's sake – the technology underpins digitalisation and better outcomes for citizens. The public cloud must be at the heart of Ireland's digitalisation agenda – the Government can readily take the steps to make that happen.

Identity Management

Secure electronic identification can be a cornerstone of e-Government strategies, and if the system has the trust of its citizens it can prove to be an effective and secure way for citizens to access public services. Ireland has made progress with the development of MyGovID, which is a secure online account for accessing some public services and provides citizens with an online identity that only you can use, but there is further investment that can be made.
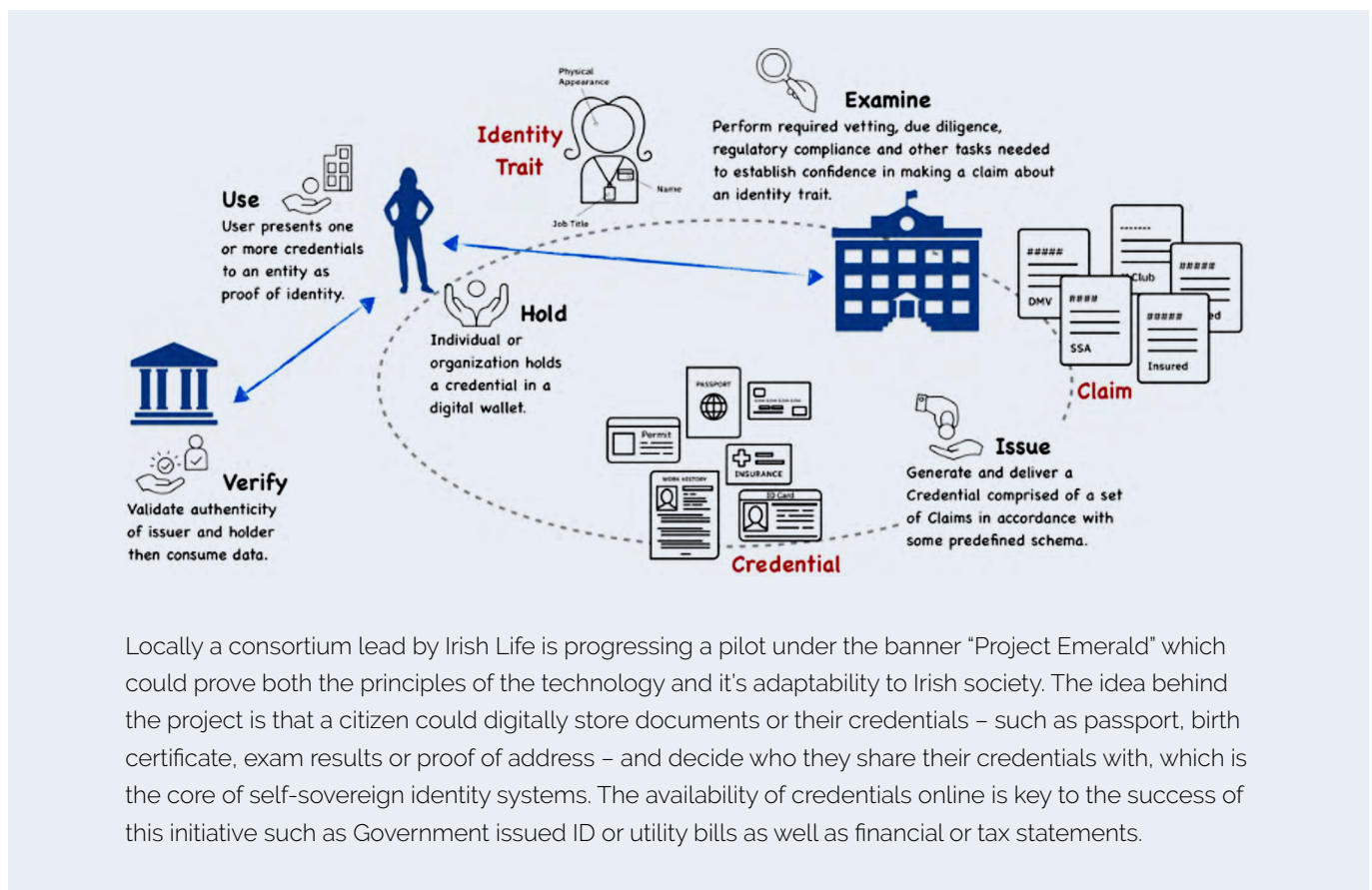
- One of the most exciting developments in this space is the concept of self-sovereign identify management.
- The key to achieving widespread social acceptance of increased digitalisation of end to end processes between the State, private enterprise and the citizen is the ability to assure the citizen that they retain control over the visibility and use of their data

The EU is proposing a new framework[10] for a European Digital Identity (eID) for all that can be widely used online and protects personal data and privacy cross border. eID and eSignature would mean that EU citizens do not need to leave their homes to interact with public administrations, they do not have to meet face-to-face to sign or even mail documents.

Identity management is a key step for allowing citizens and businesses to interact online with the healthcare system, education system or customs and tax system. Digital identity is the future for public administration, and in times of crisis, such as the pandemic, it is critical that citizens can still access public services digitally. It would also be of economic benefit as Ireland and the EU move into recovery, noting that 'countries implementing digital ID could unlock value equivalent to 3 to 13% of GDP by 2030'[11].

The American Chamber believes that Ireland should invest in self-sovereign identity management, this being a logical extension of the capabilities in MyGovID and the Government Digital Postbox and offers the citizen all the capabilities of the former while extending access and control to the citizen themselves.

Locally a consortium lead by Irish Life is progressing a pilot under the banner "Project Emerald" which could prove both the principles of the technology and it's adaptability to Irish society. The idea behind the project is that a citizen could digitally store documents or their credentials – such as passport, birth certificate, exam results or proof of address – and decide who they share their credentials with, which is the core of self-sovereign identity systems. The availability of credentials online is key to the success of this initiative such as Government issued ID or utility bills as well as financial or tax statements.

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10   The eIDAS regulation on electronic identification and trust services for electronic transactions in the internal market

11   'Digital identification: A key to inclusive growth' section 5, found at
      https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-identification-a-key-to-inclusive-growth#:~:text=Our%20analysis%20of%20Brazil%2C%20China,implementation%20of%20digital%20ID%20programs.

National Broadband Plan

The American Chamber strongly welcomes the progress made on the National Broadband Plan (NBP), the economic and social benefits of the NBP have been dramatically proven in light of the pandemic. As the Government has outlined an aim to accelerate its roll out[12], the American Chamber would support a roadmap of how it could be accelerated, noting that the access to high speed broadband for all citizens and businesses is crucial to the delivery of digital public services.

Unless there is an acceleration of the NBP there is a risk heightened by the pandemic of creating yet another form of digital divide, that of access to this new infrastructure through devices. In a scenario analogous to the ability of

citizens to enjoy the benefits of rural electrification if only they could afford electric devices to use the new power, a parallel to the ESB finance option is needed to ensure all citizens can have access to devices to utilise the benefits of the NBP.

The NBP, as well as digital technologies, are key driving regional and rural growth, as well as enabling a remote working culture as outlined by the Government in their recent Remote Work Strategy. An increase in local working will result in more money spent in the local economy, and digital hubs in villages and towns across Ireland will be part of the solution.

Cybersecurity

As set out in our previous paper on cybersecurity it is essential that the State continues to take cybersecurity seriously and invests the necessary resources in

- Sufficiently funding and resourcing the National Cyber Security Centre
- Modernizing legislation to deal with Cyber crime;
- training and equipping Gardai and the Judicial infra-structure to effectively detect and prosecute cyber crime;
- Developing a robust set of capabilities in the Defence Forces to detect, deter and counter attempts by State actors and non State Actors seeking to gain advantage in undermining Irish society whether by attacking our digital infrastructure or by deploying the tools of hybrid warfare against the national psyche.

Privacy and data sharing

- A comprehensive national debate needs to be undertaken on the nature of privacy in a digitalized society.
- Taken together with the possible approach of self sovereign identity we should establish a dialogue between the State and the citizen around the nature of privacy that goes beyond GDPR and forms the basis of the regulation of third parties and State agencies.

Digitalisation Priorities

Customs and Trade

The American Chambers notes that customs and trade would benefit greatly from digitalisation and that a suggested investment could be in the design of a frictionless, automated border customs compliance solution, based on consistent and digital data, that allows process integration and automation with exception-handling for road and maritime cargo transport, with no uniquely-associated physical infrastructure. The European Commission has outlined 'that customs and tax administration have to process vast amounts of data and currently lack the digital tools - and lack of reuse of interoperable building blocks – to conduct such processes in an efficient and error-proof manner'[13].

This type of investment should be viewed particularly in light of trade between Ireland and UK post Brexit, noting that the process for imports and exports between Ireland and UK is broadly a paper- based system that eventually updates two discrete systems. The American Chamber envisages that an investment in this area could allow an export declaration on one side to automatically trigger the creation of the import

documentation for the far side, areas for innovation should include:

- Make the current paper based cargo import/export crossing fully digital for all businesses with integration into freight forwarders.

- Enable the process with an easy to use 'App' with pre-populated form filling

- Through the use of blockchain technology, aggregate and present version-controlled, digitally signed and verified customs documentation on digital request to relevant authorities

- Automate the efficiency of cargo customs checks using vehicle/cargo tracking technology, automated checking of verified shipments from blockchain with preclearance possible without vehicle stops.

- Use artificial intelligent and machine learning to streamline all newly digital import/export procedures and greatly improve identification of noncompliant shipments or traders

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13   P7, Recovery and Resilience Plans, Example of component of reforms and investments, 'A public administration fit for the future', found at https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#example-of-component-of-reforms-and-investments

Education

If Digitalisation is to achieve the greatest benefits for society and the economy then we must provide the broadest possible range of education to citizens, both in the formal educational system and in retraining. The American Chamber recommends that education is an area that is further digitalised, the section below outlines what is needed in terms of reforms to school curriculum in this area but education will also need the required investment in infrastructure. To support the learning of digital skills and to aid digitalisation in education, an investment in digital equipment and infrastructure should be made in schools across Ireland which also addresses the digital divide that impacts on lower income areas.

1   If Digitalisation is to achieve the greatest benefits for society and the economy then we must provide the broadest possible range of education to citizens, both in the formal educational system and in retraining.

2   Digital literacy must be provided for all and must be accessible to all. The pandemic has proved that the ability of elderly and more vulnerable citizens to connect online is also important, and investments in a digital training and information awareness campaigns should be rolled out to target citizens who need it in the areas of accessing the internet, awareness on identifying and avoiding online crime, and personal security while online.

3   Ireland has significant work to do in relation to digital literacy (currently at 48% of the population according to the European Commission Digital Economy and Society Index 2019) to bring this rate to the EU average and then to the top 3 among EU member states. An ambition to increase our literacy rate would also tie into our Country Specific Recommendation of 2019 to 'facilitate upskilling, in particular for vulnerable groups and people living in households with low work intensity' [14].

4   Digital education is broadly robust within the state school curriculum but needs to be enhanced in the areas of:

   • Personal security
   • Application of analytical thinking to the interpretation of online content – media literacy initiatives
   • Identifying and avoiding online crime

5   Accelerating public interest in Digital apprenticeships through better career guidance and a public awareness campaign

6   Developing public awareness of, and access to, digital retraining opportunities through a partnership between the State and private enterprise.

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14   Country Specific Recommendations, Ireland'. p14, found at https://data.consilium.europa.eu/doc/document/ST-10160-2019-INIT/en/pdf

Healthcare

Covid-19 has accelerated the digital transition in many areas, and this includes in healthcare which has witness a significant growth in the use of digital tools since the onset of the pandemic. For example, many citizens have had their first virtual interaction with a GP or remote monitoring of patients at home has become an important tool for the HSE. Likewise the HSE has also sought to accelerate its digital transition, announcing recently that it has launched nine digital health labs across the country working to address issues such as Covid-19 and using AI in healthcare[15]. The importance of digital in healthcare has been recognised by the European Commission noting that 'the limited digitalisation and low interoperability leads to repeated tests, increased costs for the budget, low access to healthcare and limited use and re-use of health data'[16]. Ireland's 2019 country specific recommendations also stated a need to address the expected increase in age-related expenditure by making the healthcare system more cost-effective.

The American Chamber recommends that Ireland continue to invest in digitalising the healthcare system to ensure greater efficiency, and build on the momentum we have witnessed during the pandemic to enable it to be come a digital health leader.

15   found at https://www.hse.ie/eng/services/news/media/pressrel/digital-health-living-labs-accelerate-healthcare-solutions.html

16   P7, Recovery and Resilience Plans, Example of component of reforms and investments, 'A public administration fit for the future', found at https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#example-of-component-of-reforms-and-investments

Accelerating Digitalisation

In order to accelerate digitalisation a new paradigm must be adopted, using concepts akin to Design Thinking and Agile development. In this approach multidisciplinary teams would work across Government agencies and in conjunction with the private sector to implement initiatives at speed but with the necessary legislative rigour. The key functions needed to support and enable this approach are:

- **Procurement**
- **Legislation**
- **Training**
- **Sustainability**
- **Co-ordination**
- **Private Sector Partnerships**

Procurement

Procurement needs to be adapted to enable iterative development and piloting of new initiatives within Government Departments. As many of the initiatives would be cross agency, a strong centralized function would be needed to facilitate this. The American Chamber recommends that such a team would ideally come under the Office of Government Procurement and would need to address barriers to innovation such as IP, indemnities for data breach, licensing models for Cloud and SaaS etc.

Legislation

- All projects should proceed in parallel with legislation as opposed to following legislation. The current sequential model is too cumbersome to allow for the pace of digitalisation we advocate.

- Therefore all projects should have legal expertise embedded within their teams and an Oireachtas committee should have oversight of the candidate programmes.

Training

- The proposed approach to accelerating digitalisation will require significant training for the Public Sector staff engaged in this work

- This training would be needed both in the concepts proposed but also in the techniques needed.

- This could be done using conventional approaches or through a specially constructed Innovation Unit staffed with Public Servants and a range of Private Sector specialists drawn from multiple companies as opposed to a single provider.

Co-ordination

- Accelerating digitalisation is a whole of Government programme but it must be tightly co-ordinated and the current division of responsibilities for different aspects of digitalisation and the digital agenda across multiple Government Departments is inefficient and confusing;

- This approach requires a lead department who will drive the digitalisation of public services and ensure delivery, and a cross departmental delivery board should be created once Ireland has a roadmap in place

Sustainability

Digitalisation has the power to accelerate our move to a truly sustainable future economy and society. Enabling and transformative technologies, properly marshalled, can facilitate sustainable business platforms by providing low energy smart workflows, intelligent automation and deep insight into both energy usage and environmental impact in real time. By combining large scale data analytics with AI we can predict societal and physical demands and adjust Government policies to meet these demands, harnessing our physical and financial resources more efficiently and effectively. Through digitalisation, positive impacts can be made for the provision of greener energy but more importantly the reduction of emissions through smarter use of technology.

The key enabling digital technologies to drive a move to a truly sustainable economy are:

- AI – Artificial Intelligence
- IOT – Internet of Things
- 5G – and mobile devices
- Advanced Analytics
- Blockchain
- Hybrid Multi Cloud

Government has a role to play by encouraging both research and innovation in these areas through programmes such as the Disruptive Technologies Innovation Fund (DTIF) and by encouraging Enterprise Ireland funded startups to concentrate on these areas.

Private sector partnerships

While this paper has concentrated on the actions we believe the state should take to accelerate digitalisation, we are conscious that this programme cannot be successfully completed without the active engagement of the private sector and, in our case, the MNC sector. American Chamber members have a wide range of capabilities, CSR programmes and experimental initiatives available to help the state accelerate digitalisation. As we have discovered over the last few months these initiatives, especially in education, often duplicate efforts in some areas while leaving wide gaps in others.

It is our recommendation that, as mentioned above, the responsible Minister for digitalisation also be tasked with setting up a unit to harness and, where possible, align the efforts of the MNC sector around the priorities set out in this paper.

- It is not intended that this would be a mandatory programme but rather a voluntary one whereby MNC organisations would participate on an opt-in basis.
- This would bring a clarity and longevity to these programmes to the benefit of the economy, the state, citizens and the participating companies.

Example of private sector CSR initiatives

Many private sector organisations donate unwanted yet perfectly usable IT equipment (mainly devices), these can be refurbed and issued to local authorities (LA) to distribute to schools. This is a low cost, more sustainable solution, and devices can be given to those most vulnerable than the current modus operandi, as well as to help with home schooling/home work/remote learning. COTS (commercial off-the-shelf) solutions are available today to make this a reality, and the decentralisation of ownership will help scale and make sure this solution is fit for purpose to meet the requirement of each Local Authority (LA). The LA can also, if applicable, be service provider so that the burden is not on the schools which would also lead to job creation for each LA.

Summary of Recommendations

Socialising digitalisation

- The Government must seek to socialise digitalisation including communicating, and setting out publicly the rationale for an acceleration of digitalisation via a properly co-ordinated and consistent public information campaign that highlights the benefits and safe guards that are put in place for digitalisation.

- The Government must tackle misconceptions relevant to digitalisation, for example, in the areas of privacy, security, employment replacement through AI, and future employment opportunities.

- The Government must engage civil society on digitalisation to gain the widest possible acceptance, assessing and coordinating private sector contribution in the area should also take place.

- The Government must seek to tackle the digital divide and help ensure all people are connected, respected, and protected in the digital age.

Digitalisation infrastructure

- Implement a public-cloud first policy requiring public sector bodies to first consider public cloud, before any other options, when upgrading or introducing a new service.

- To facilitate this transition to public cloud-driven public services, a uniform data classification model needs to be put in place.

- A clear, competition-friendly cloud procurement framework needs to be established by the Office of Government Procurement.

- Ireland should invest in self-sovereign identity management, this being a logical extension of the capabilities in MyGovID and the Government Digital Postbox and offers the citizen all the capabilities of the former while extending access and control to the citizen themselves.

- The Government should outline a roadmap of how the National Broadband Plan will be accelerated.

- Both cybersecurity and data privacy and sharing need to be key elements for consideration.

Digitalisation priorities

- **Customs and trade:** would benefit greatly from digitalisation. A suggested investment could be in the design of a frictionless, automated border customs compliance solution, based on consistent and digital data, that allows process integration and automation with exception-handling for road and maritime cargo transport, with no uniquely-associated physical infrastructure.

- **Education:** an investment in digital equipment and infrastructure should be made in schools across Ireland to mitigate the digital divide that impacts on lower income areas.

  - Digital literacy should be provided for all and must be accessible to all.
  - Accelerate public interest in Digital apprenticeships through better career guidance and a public awareness campaign.
  - Developing public awareness of, and access to, digital retraining opportunities through a partnership between the State and private enterprise.

- **Healthcare:** The American Chamber recommends that Ireland continue to invest in digitalising the healthcare system to ensure greater efficiency, and build on the momentum we have witnessed during the pandemic to enable it to be come a digital health leader. '

Accelerating digitalisation

- **Procurement**: The American Chamber recommends that procurement is adapted to enable iterative development and piloting of new initiatives within Government Departments, and responsibility for this should fall within the Office of Government Procurement.

- **Legislation**: All digitalisation projects should proceed in parallel with legislation as opposed to following legislation.

- **Training**: Investments will need to be made in the training of public sector staff, which could be done using conventional approaches or through a specially constructed Innovation Unit staffed with Public Servants and a range of Private Sector specialists drawn from multiple companies as opposed to a single provider.

- **Sustainability**: The government has a role to play by encouraging both research and innovation in key enabling digital technologies that can also contribute to sustainability.

- **Coordination**: There needs to be a whole of Government approach to Digital, with a lead department who will drive the digitalisation of public services and ensure delivery, and a cross departmental delivery board should be created once Ireland has a roadmap in place.

Private sector CSR partnerships

- This programme of work cannot be successfully completed without the active engagement of the private sector. American Chamber members have a wide range of capabilities, CSR programmes and experimental initiatives available to help the state accelerate digitalisation. The Minister responsible for digitalisation should also be tasked with setting up a unit to harness and, where possible, align the efforts of the MNC sector around the priorities set out in this paper.

Please contact Aisling O' Donoghue, Public Affairs & Advocacy Manager, (a.odonoghue@amcham.ie) if you have any questions on this paper.