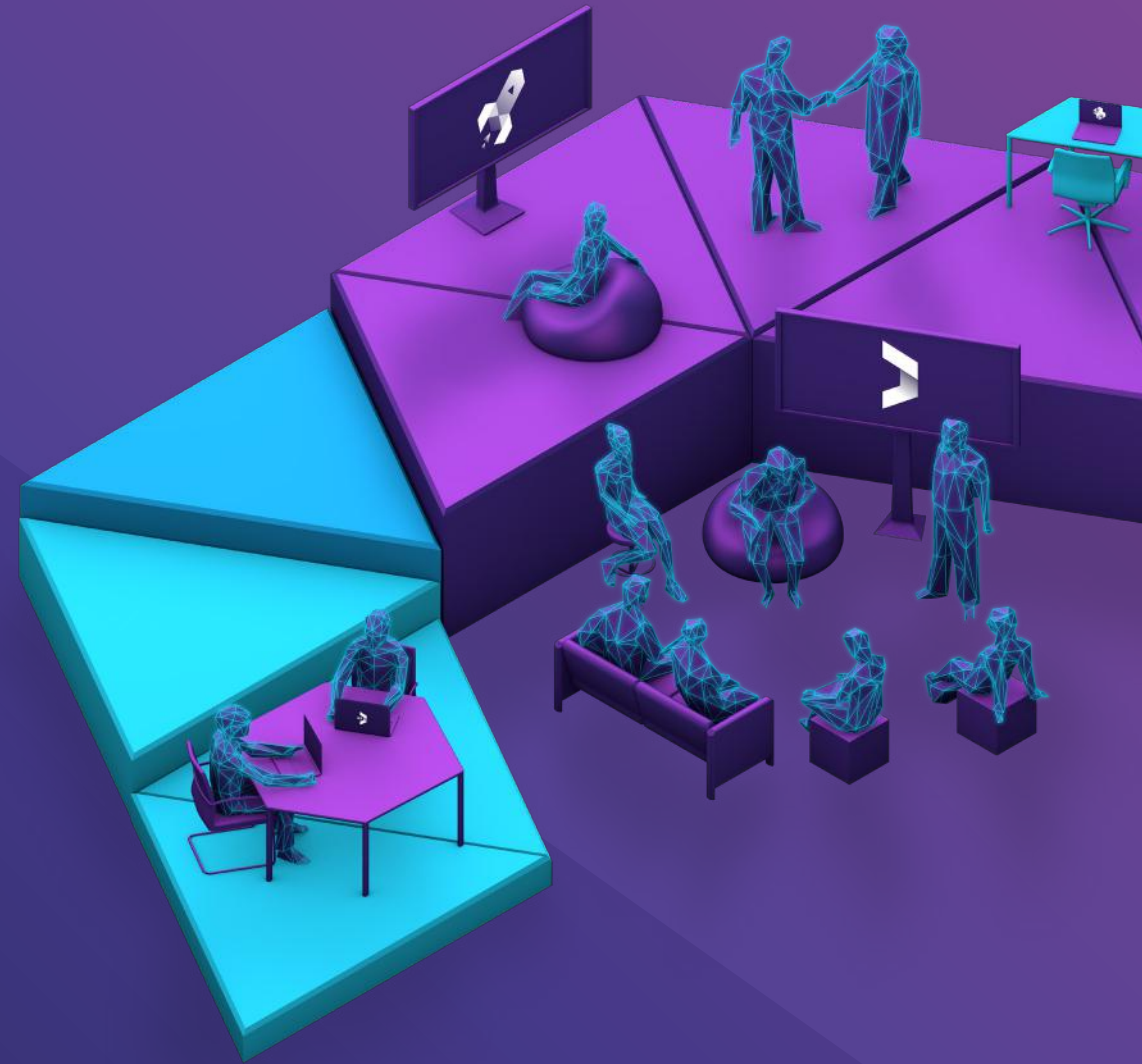


5 Year Strategic Plan

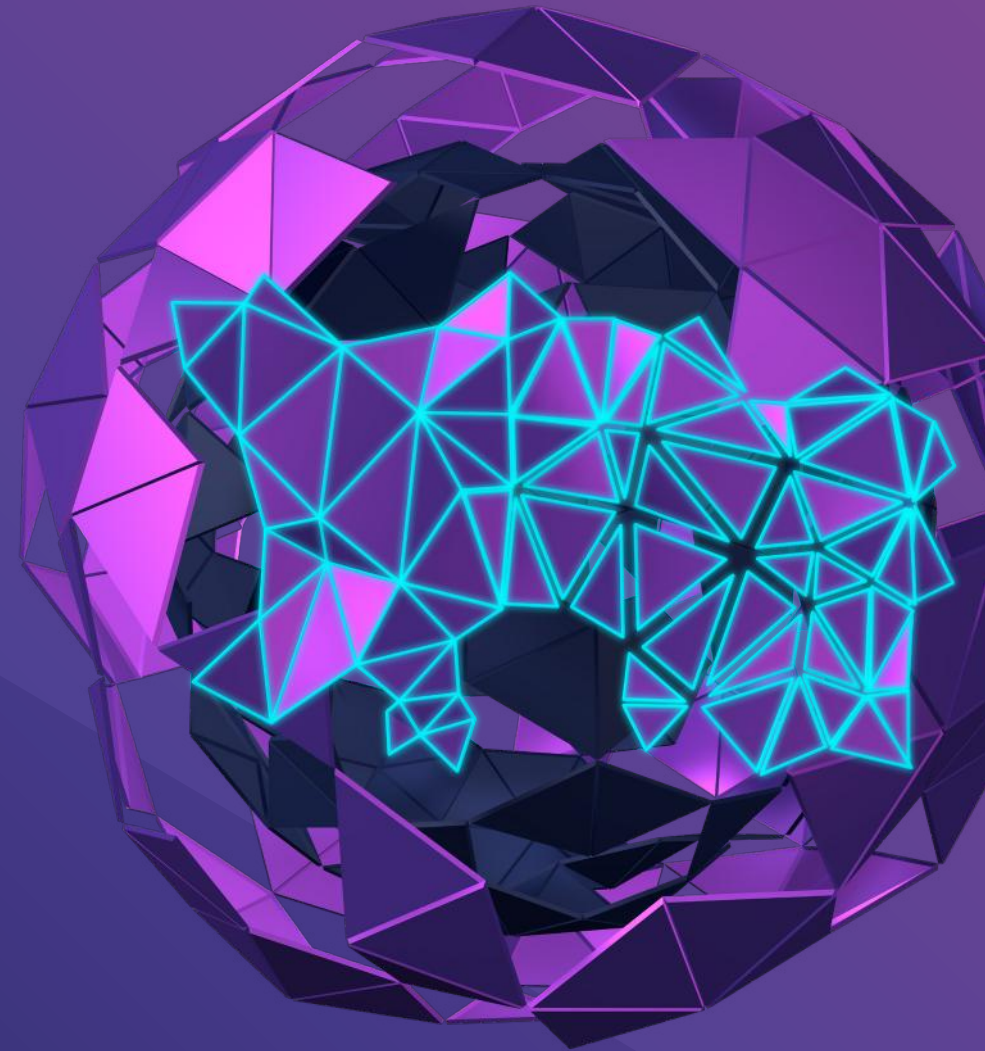
2021 - 2026

Draft for Consultation



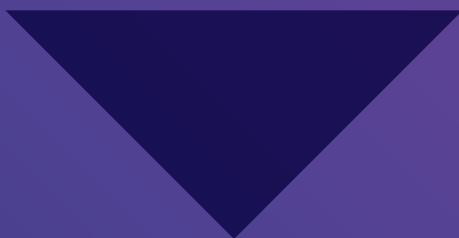
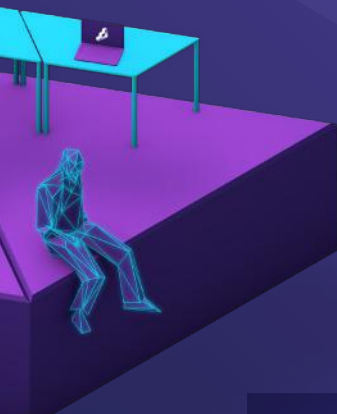
Contents

5 Year Strategic Plan.....	1
Tomorrow's Jersey	3
Digital in Figures 2021	4
Section 1 Executive Summary.....	5
Jersey in 2026	6
A New Approach	7
Transforming Business	8
Growing Infrastructure	9
Upskilling People	10
Accelerating Government	11
Conclusion	12
Section 2 Detail.....	13
Preface	14
The New Economy.....	15
Where Jersey is Today	16
Overview.....	17
Business	18
Infrastructure.....	22
People.....	26
Government	30



Tomorrow's Jersey

Our vision is for Jersey to prosper from the technology revolution.
In achieving this, we will:



Improve economic
sustainability



Improve the quality
of Islanders' lives



Create new and
exciting employment
opportunities



Support the provision
of public services

Digital in Figures 2021

11.54%

Employment activity that are digital tasks¹

14.7%

Of all skills in demand are digital²

£42,000

Average advertised digital salary

16

Industry Mentors

4

Tech co-working spaces

190

Digital job vacancies in 2020

2nd

Fastest internet speeds globally

64%

Of Jersey's population use social media

+23%

Higher average advertised salary in digital

27%

Of Jersey jobs at risk of automation by 2035

42

Digital Jersey Ambassadors

60

Academy Undergraduate Students

750

Digital Jersey Members

12.5%

Digital Tech Talent³

180^M

GVA of the digital sector

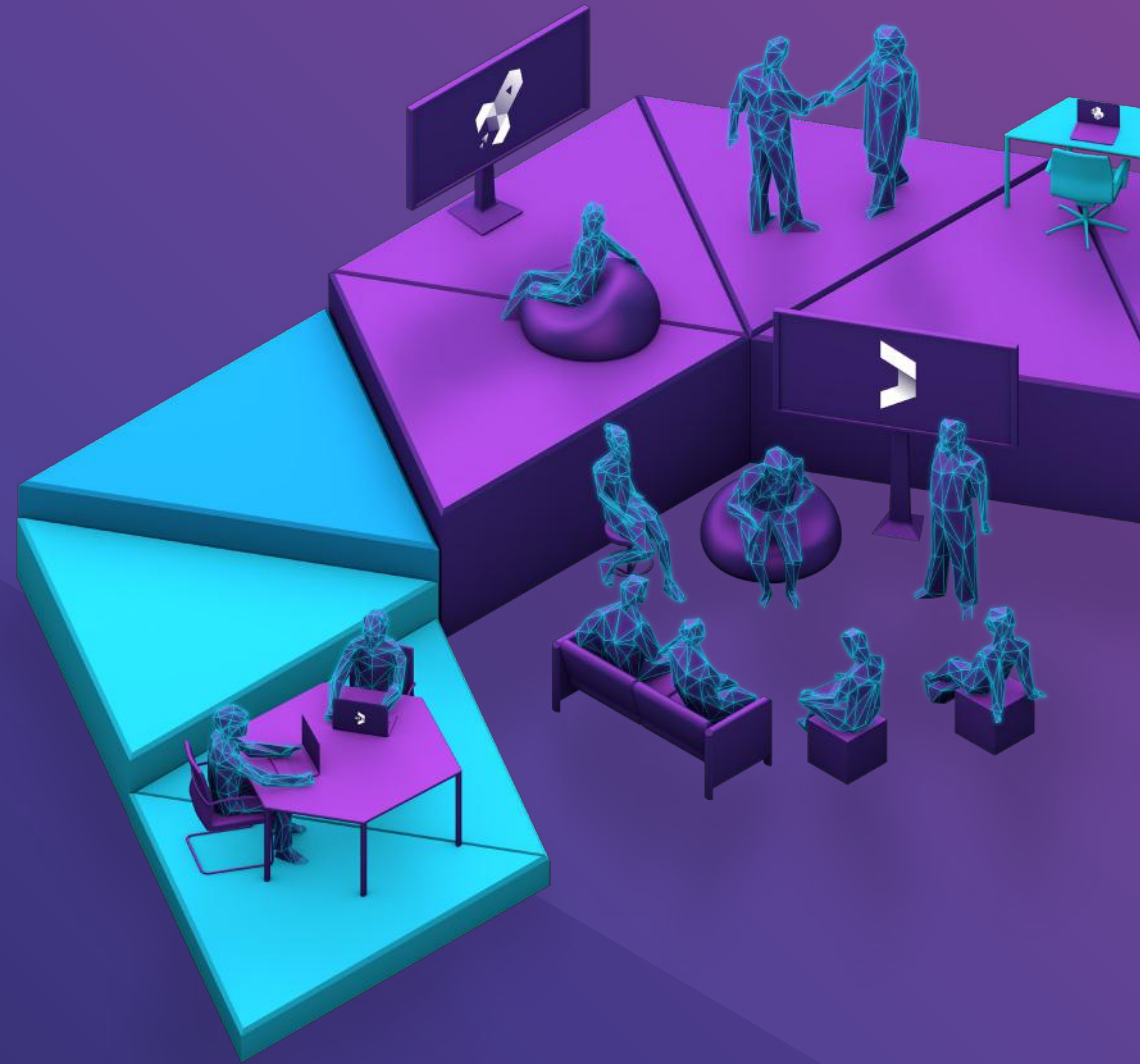
¹ **Employment Activity:** An experimental statistic that measures workforce activity based on employment time spend on digital tasks vs non-digital tasks, weighted by the relative size of the sectors employment. This incorporates adjustments metrics such as average sectoral churn and employment change which is updated twice yearly.

² **Skills in Demand:** 12-month rolling percentage for digital skills in demand, measured by the proportion of digital skills advertised as a percentage of all skills.

³ **Digital-tech talent:** A measurement of the proportional prevalence of digital skills relative to all other skills in supply (crawled from multiple LMI sources).

Section 1

Executive Summary



Jersey in 2026

This strategic framework sets out our **vision** for Jersey to adapt to and prosper from the technology revolution and to play its part in the new economy. Our **mission** is to make Jersey a leading hub for International digital businesses to develop, test and grow by fostering entrepreneurship, innovation and international connectivity.

Our aspiration is to improve economic sustainability through productivity boosting tech and the growth of 'digital' as a pillar to the economy; to improve the quality of Islanders' lives by creating new, exciting and inclusive job opportunities that provide meaningful employment, and; to support the provision of public services by increasing tax-revenue. Yet, as a wealthy and fully developed economy, Jersey cannot achieve these aspirations by competing in the global digital economy on cost. Instead, the Island needs to compete with human capital, innovation and the presence of sophisticated businesses.

For Jersey to be successful in the coming decades, it is vital that we not only react to economic shifts, but proactively accelerate the adoption of technology. This was the case during previous periods of economic and technological expansion, when locations slow to adopt new technologies experienced economic and social decline.

In curating this strategy, we brought together the views of a broad and representative cross-section of our community. We identified our Island's strengths and weaknesses within the context of the evolving digital economy.

Jersey already has a compelling offer to internationally focused digital entrepreneurs, micro-businesses, and distributed companies. The Island boasts a safe and high standard of living, combining natural

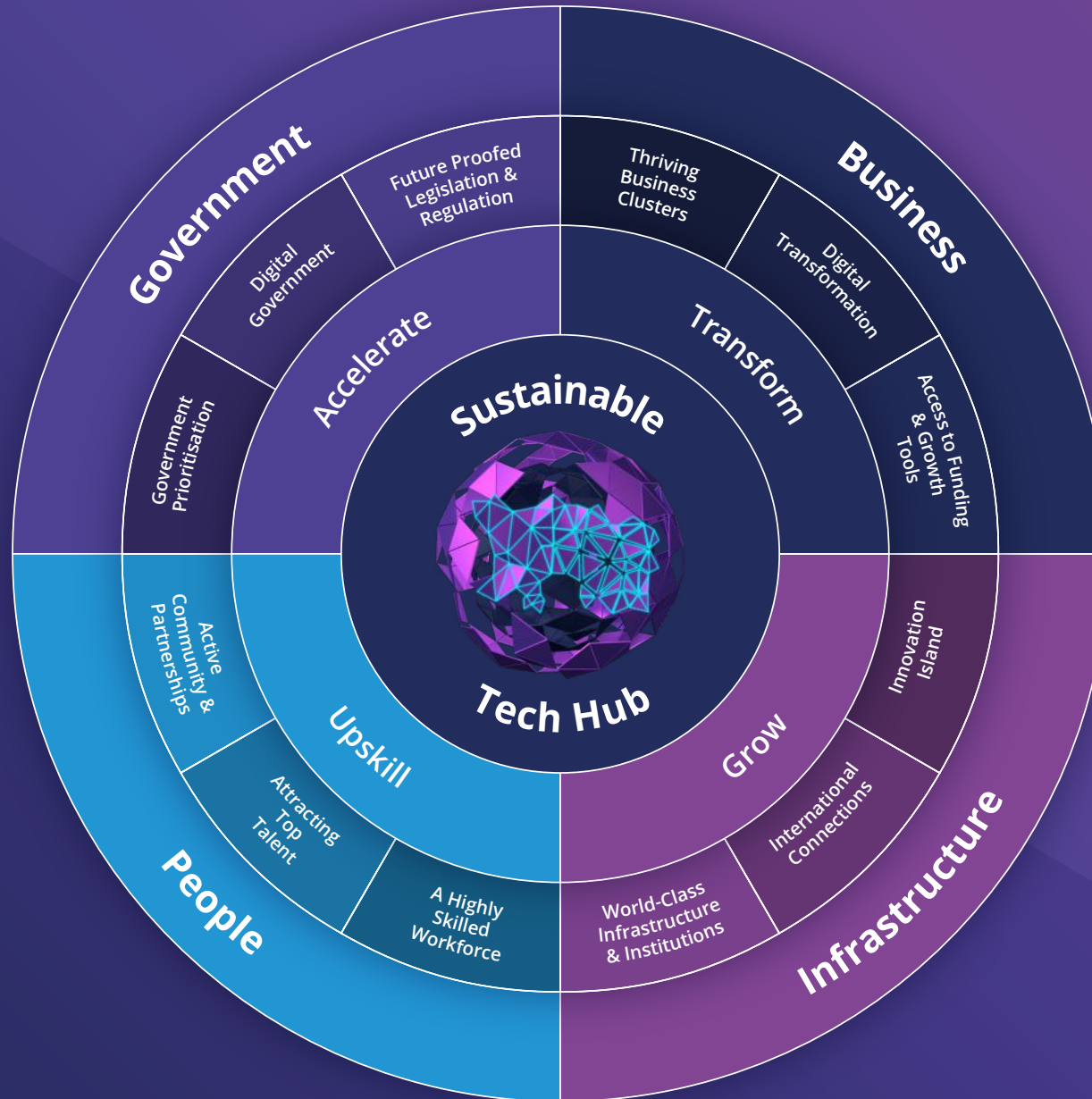
beauty with heritage; speaks the global language of tech (English); has an international workforce; in many respects an attractive business and personal tax regime; convenient time zone to trade with the Americas and Asia; and world leading digital connectivity with a short flight to London. Combined, these features also make Jersey a compelling location to test, develop, and launch new products before going global – a microcosm of a country, with all its infrastructure and regulators, but bordered by cliffs and beaches.

However, the Island also has many limitations. It has a small internal market, poor air transport connectivity with non-UK hubs, a small workforce, limited pool of talent, tight population laws, and by international standards a high cost of living. Nonetheless, many of these constraints can be mitigated for. For instance, where population laws limit workforce growth, the deployment of technology can lessen demand for people while increasing productivity. Further, what we lack in scale we can make-up for with connectivity to other tech hubs. To do this we recognise the need for local institutions and partners to plug into the global start-up community.

In this strategy, we set out a clear ambition to be a world-leading digital community. The 12 pillars of our framework reinforce one another along that path. Weakness in one area has a negative impact in another. This ultimately undermines progress through the stages of development. This vision seeks to unify and focus activity, building a stronger international brand and creating clarity of purpose.

The strategy is intentionally ambitious and comprehensive, boosted by recent increased investment in Digital Jersey to expand its scope and increase its influence on the Island's digital transformation. While Digital Jersey does not directly deliver all 12 focus areas, it is incumbent upon the strategy and Digital Jersey to advocate, facilitate, and support all actors responsible for driving forward Jersey's digital transformation.

A New Approach



Transforming Business

Thriving Business Clusters

Why: To grow digital as the fourth pillar to the economy. To ensure the island's economy is prepared for jobs automation, facilitate rewarding and meaningful employment opportunities, and a more resilient tax base for Government.

Goal: To become a compelling hub for internationally focused digital entrepreneurs, micro-businesses and distributed companies; with employment, expertise and export revenue in specialisms where we have a comparative advantage.

Digital Transformation

Why: Jersey businesses have a lower digital utilisation than their counterparts in the UK - on average, a third less. Compared with Edinburgh and London, Jersey's digital adoption is two-thirds lower.

Goal: To ensure a 'digital first' approach across all sectors of the economy whereby businesses harness technology to improve services and productivity; in turn enhancing their international competitiveness.

Access to Funding and Growth Tools

Why: A vibrant funding landscape is vital to a successful start-up eco-system. In the absence of a mature funding landscape, local start-ups do not have the capital to invest in their growth.

Goal: To improve access to finance and financial services by brokering local and international investor relations, and ensuring global accessibility to digital banking/payment.

Grow Digital Sector GVA

Improve Sectoral Digital Density

Increase Business Investment

By 2026 will have **doubled** economy-wide adoption of **technology**

*Technology adoption is measured by the density of digital skills employment across all sectors. Increasing from 12% in 2020 to 24% in 2026.

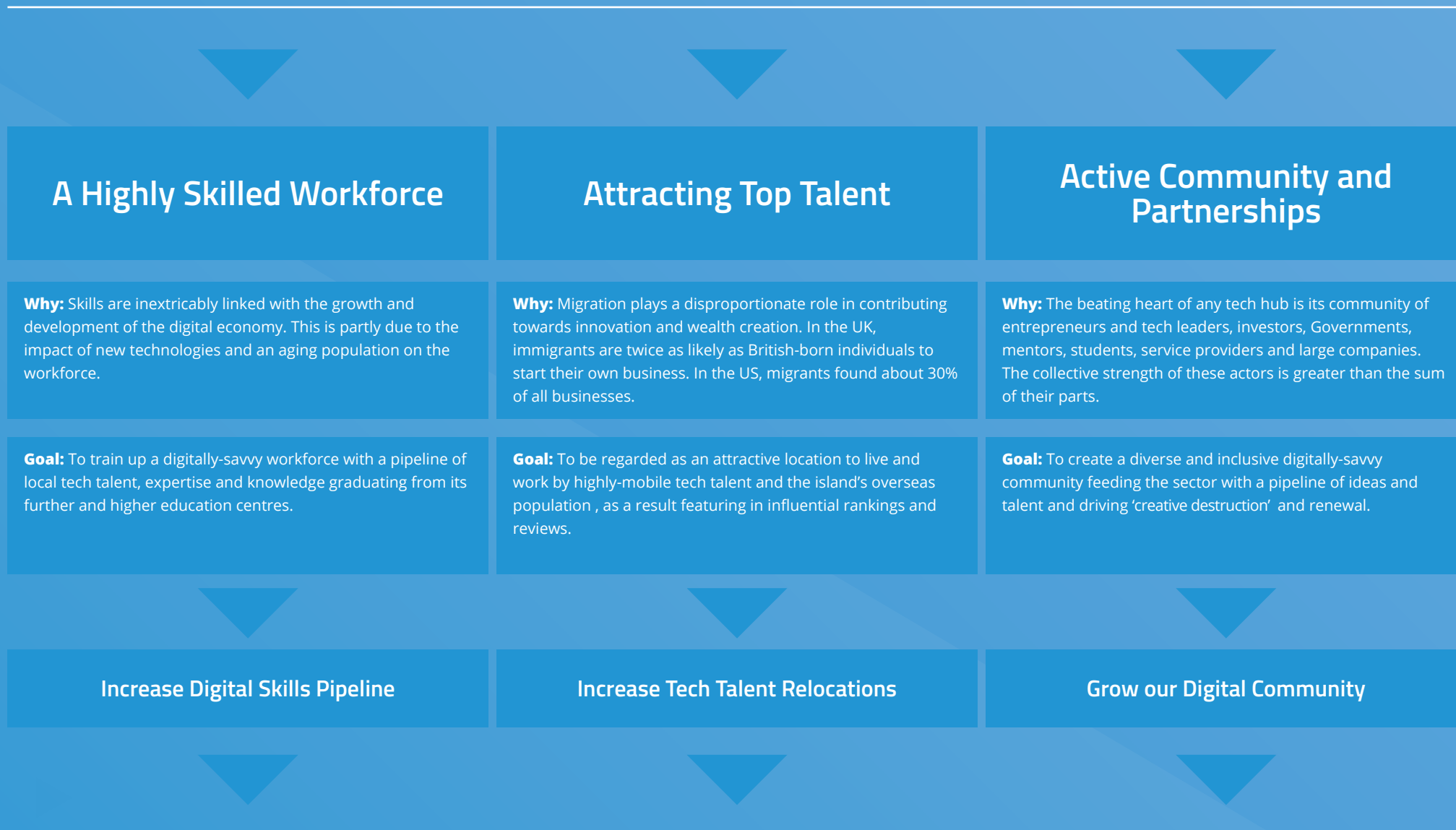
Growing Infrastructure



By 2026 we will have increased digital sector productivity by 25%

*Productivity is measured by gross value added (GVA) per full time equivalent (FTE) employee of digital businesses. Estimated at approximately £75k in 2018.

Upskilling People



By 2026 we will have **increased** local digital-tech talent by a **third**

* Digital-tech talent is measured by the proportional prevalence of digital skills relative to all other skills in supply (crawled from multiple LMI sources) increasing from 12.5% in 2020 to 16.5% by 2026. These figures are subject to change as we improve data quality.

Accelerating Government



By 2026 we will have a digital Government

*Measured by a score above 6.5 in the OECD Digital Government Index.

Conclusion

Over the centuries, Jersey's economy has transitioned from one industry to the next. As the digital economy continues to grow, leadership, real change and coordinated interventions are needed to secure Jersey's part in that new economy.

To maintain the Island's standard of living, Jersey must reverse its decades long poor productive performance to create a new generation of prosperity. To do this, we need to create fulfilling employment opportunities, targeted learning provision, and attract global talent - as Jersey has successfully done in the past.

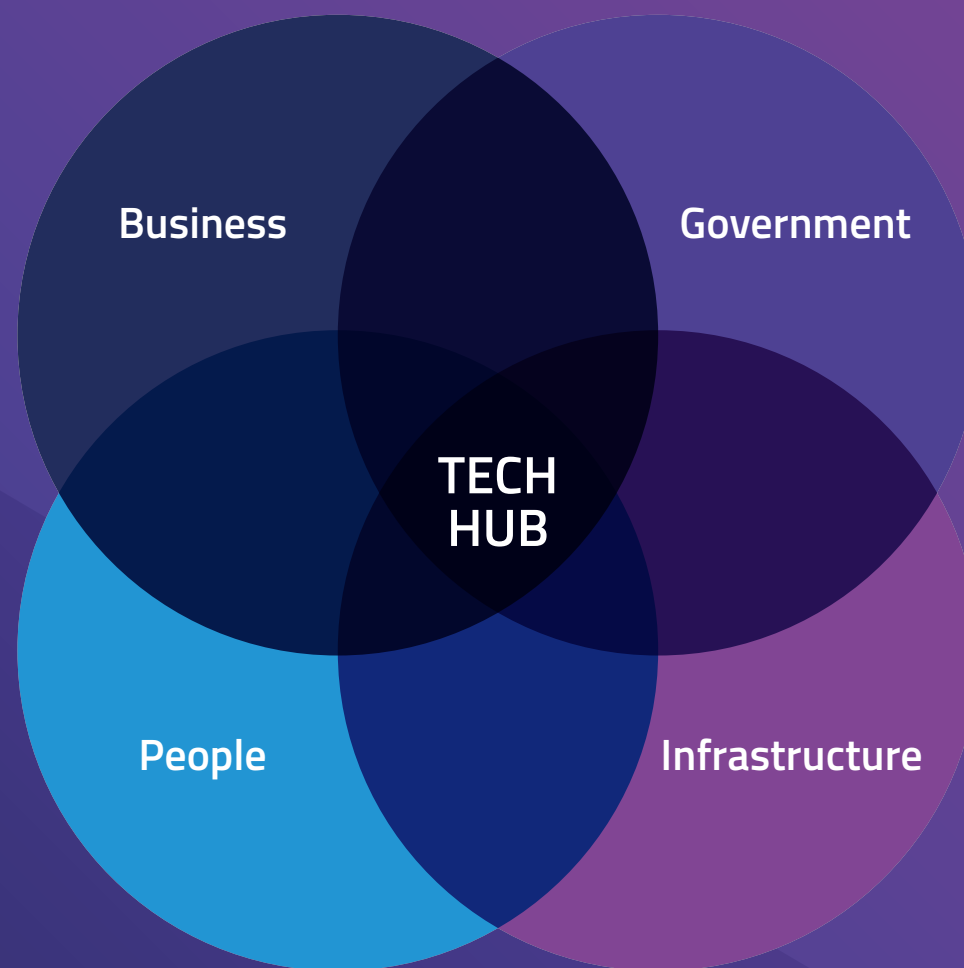
Government and business need to consider and act on the opportunities afforded by data, our favourable geographical location and our world-leading infrastructure.

Businesses that place their customers' experience first, that build on digital economies of scale and create new value, will thrive. Equally, workers of all ages will need to be encouraged and supported to continually develop new skills and to take on different types of jobs in new industries.

The pandemic of 2020 has clearly accelerated the adoption of technologies and our reliance on them, both locally and globally. More than ever before, there is a need for coordinated support and investment into Jersey's digital economy to ensure that the Island continues to thrive in the 21st century.

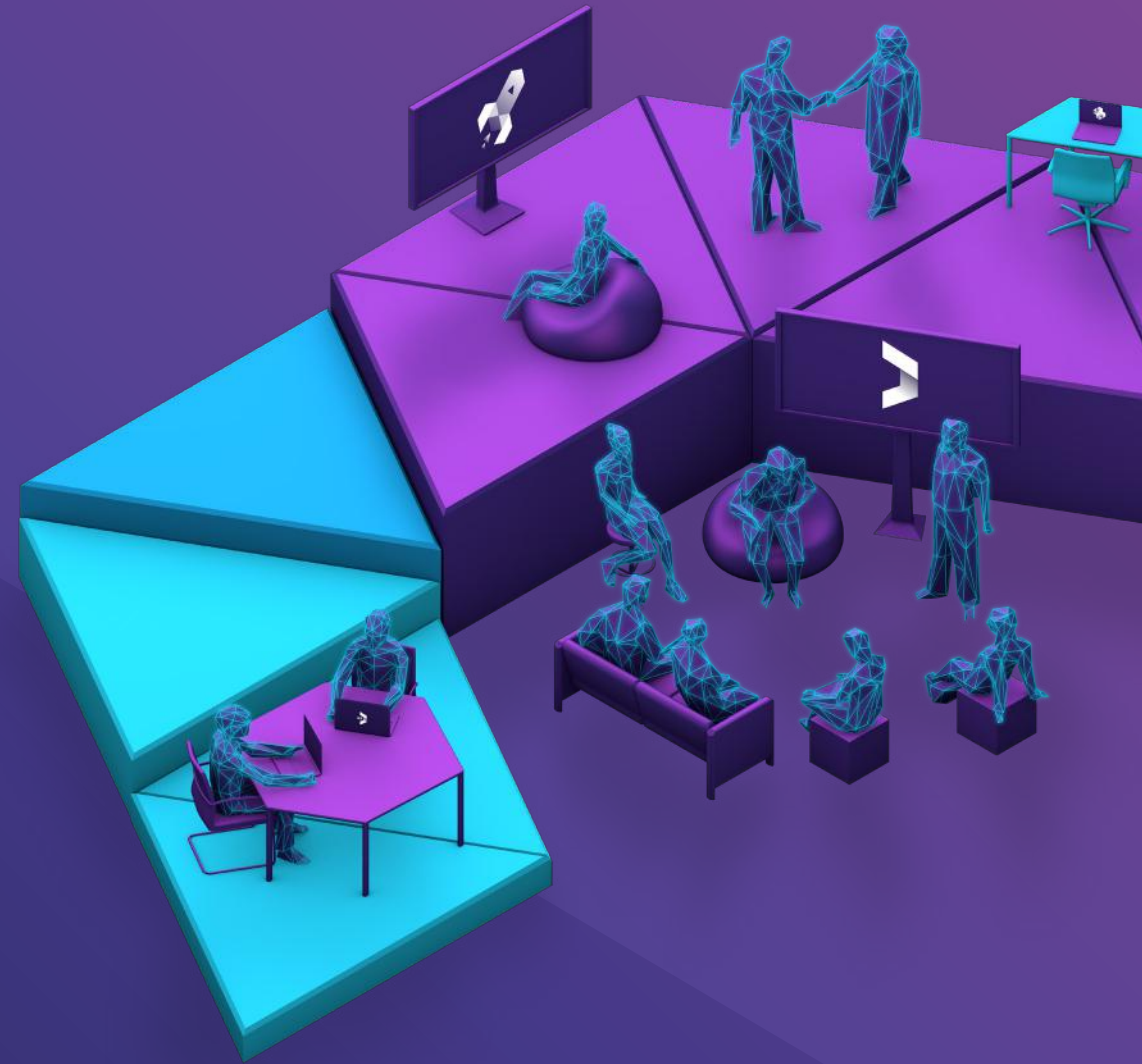
As government delivers its economic response to the pandemic, it is clear that technology and being part of the new economy will be at the heart of any successful recovery. Digital Jersey recognises the critical part we have to play in that response.

Within this framework we have outlined how Digital Jersey will help local businesses, people and Government seize the opportunities of the new economy for the benefit of all. More detail of our strategic focus areas is set out overleaf.



Section 2

Detail



Preface

As the island looks to the future growth of its economy, experience suggests that there is a need for a coordinated approach to spur long-term innovation and growth. This is needed to guide decision-making, giving clarity, direction, and confidence behind the motives of individual, public, and corporate investments.

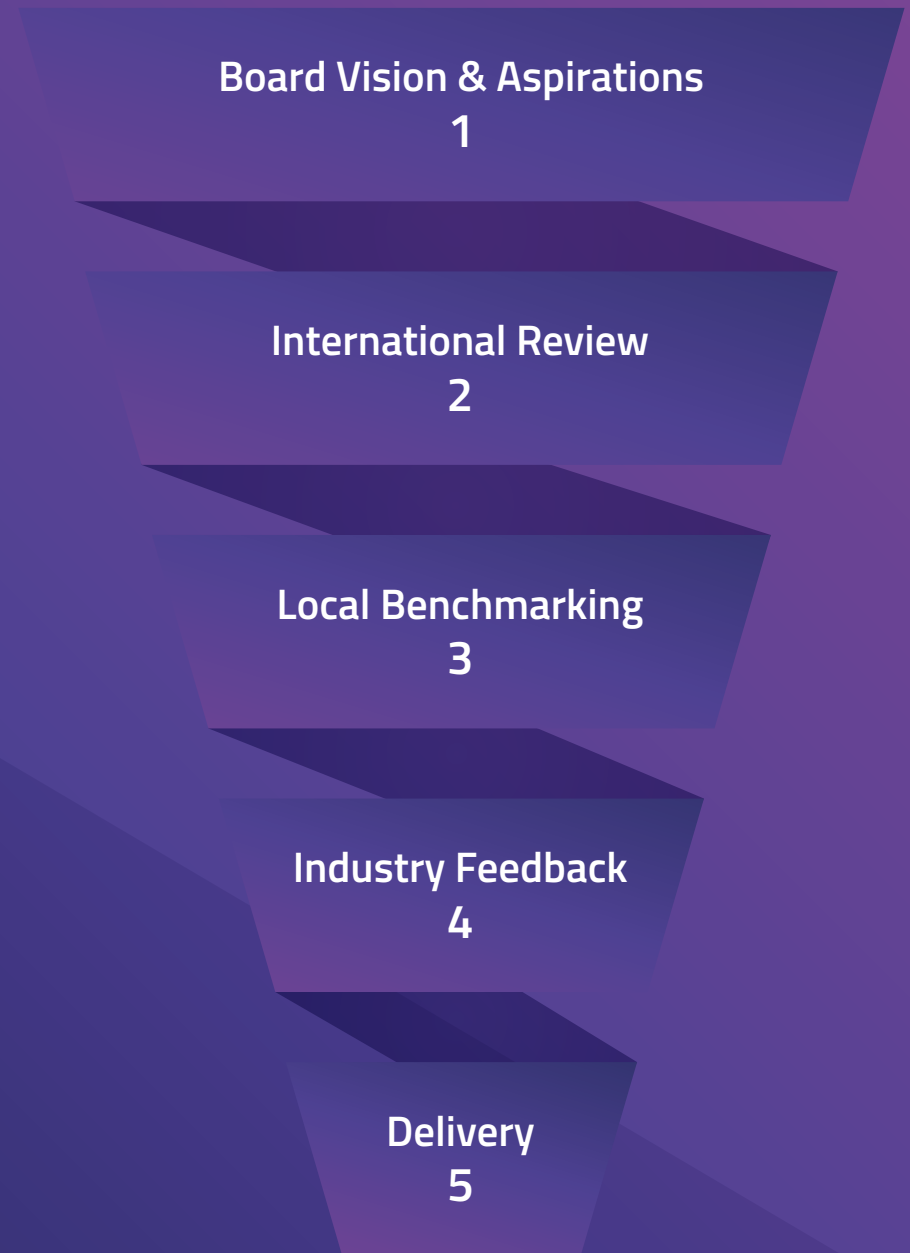
Our strategy responds to the challenges posed by technology, including its impact on the labour market, and a digital economy/society. This strategy articulates a vision for the digital transformation of Jersey and our role in accelerating it.

This Strategic Plan seeks to:

- Reinforce our core mission
- Set clear strategic priorities to achieve the vision
- Communicate the strategy to our key stakeholders.

In pursuing this work we would like to particularly acknowledge the input of Dr Alan W. Brown, an independent digital transformation consultant, author, and Professor in Digital Economy at the University of Exeter, UK.

Development Process



The New Economy

Economic Value

Today, the global gross domestic product (GDP) of the Information and Communications Technology sector is growing twice as fast as the global economy - giving it a larger role in the economic and social fabric of nations worldwide. While we don't fully understand the impact that Covid-19 will have on the global economy, it is generally expected that the pandemic is accelerating this trend.

New digital businesses are creating unprecedented wealth and employment for high skilled, high wage workers. However, in contrast to other sectors, the wealth generated by technology businesses does not amount to similar levels of employment. The combined value of Toyota and JP Morgan Chase is significantly less than half that of Apple, and yet those two businesses combined employ close to 5x as many people. In other words, the technology industry is creating huge value, albeit shared between fewer people. This, in part, is because the technology revolution gives the smallest companies unprecedented reach into new markets and a level playing field across many markets.

This trend is likely to accelerate with the adoption of emerging technologies. Specifically, the Fourth Industrial Revolution which is now taking shape. It is predicted that the use of big data and AI will transform economies and deliver a new wave of productivity growth.

These benefits also pose several challenges to society and the economy; in particular:

- a. A divergence between geographic regions driven by technology;
- b. The concentration of start-ups and their value; and
- c. Growing inequality among different types of workers because of that concentration; particularly as technology-driven job creation has been mostly concentrated among high-wage workers, worsening labour market polarisation.

The Geography of Tech

The geography of innovative tech clusters is very concentrated. This may seem contradictory to the principle that the internet will decouple innovation from people and places, as access to information becomes borderless.

These clusters have formed in three main ways:

- Around large companies when they relocate
- Around local talent, skills, or resources
- In response to economic incentives created naturally or artificially

Yet, evidence suggests that locations are more important than ever, and innovation tilts itself to specific places. Accordingly, the success of early-stage start-ups has become highly dependent on their surrounding start-up ecosystem; this has resulted in only a handful of places in the world capturing most of that value creation, such as London, Silicon Valley, Cambridge, and New York.

There are three complementary and non-exclusive frameworks which explain this phenomenon.

- In Geography, places that have a tolerance for new ideas and a culture of experimentation, attract concentrations of creative individuals; such as educators, entrepreneurs and artists who collaborate to create new forms.
- In Sociology, horizontal networks create a culture of openness and cultural exchange where borders between companies become porous. This facilitates open information exchange and labour mobility between companies, which underpins densely networked communities and clusters that respond nimbly to changing market needs.
- In Economics, co-location drives external economies of scale for common inputs, including specialist service providers, office space, and labour pools. This lowers the costs of shared fixed costs. The benefits of external economics of scale creates a network effect whereby each additional member to a network adds additional value to existing members.

Where Jersey is Today

Jersey has a rich social and economic history, based on fisheries, agriculture, shipbuilding, and tourism. In recent decades, its transition from a rural to urban economy has accelerated with the growth of the now-dominant financial sector and increasingly digital economy.

Today, we have over 3,000 people employed in the digital-tech economy (e.g. digital business, plus IT roles in non-digital businesses) which is growing by approximately 100 jobs per-year. The digital sector alone generates more than £180 million in GVA annually and growing. The Island boasts the second fastest internet speeds in the world and is home to many globally successful businesses. This includes home-grown successes, such as CPA Global, JT, and Sanne/JTC; as well as global corporations like HSBC, RBC and RBSI.

The Island also played a globally significant role in the emergence of e-commerce in the late 1980s onwards, giving rise to the world's first e-commerce site and Europe's first electronic payment system – Worldpay, which was acquired for \$43bn in 2019. Thereafter, the Island played a pivotal role in the fulfilment industry – helping to drive the use of e-commerce.

However, despite many advances over recent years, several important economic indicators highlight that the Island's economy has performed poorly in both absolute terms and relative to other developed economies. Specifically, Jersey's total economic output has plateaued since 2000; which compounded by an ageing population and diversification into lower productivity sectors has caused output (GVA) per-capita to fall by over a fifth.

This long-term trend has been impacted by Covid-19 and the associated economic lockdown. This will likely be compounded by the United Kingdom's decoupling from the European Union - which in the medium term will have a downward pressure on economic growth.

* Tech Nation – Jersey's digital tech ecosystem; <https://technation.io/insights/digital-jersey/>

** Jersey's Fiscal Policy Panel: Advice for the 2020-23 Government Plan (March 2019)



These economic challenges are occurring within the broader context of major societal change. Specifically, in most developed economies including that of Jersey's we see a **rapid aging of the population**.

This means that any strategy cannot solely be predicated on the supply of young talent – instead, focus must also be on equipping older generations with the digital skills needed to benefit from the technology revolution. This will also pose a challenge to 'innovation' as typically older populations are more socially conservative and risk averse.

These demographic changes are to be accompanied by the **accelerated adoption of labour substituting technology** which is leading to an erosion of opportunities within middle management and low skilled occupations – further driving inequalities and the need for retraining and redeploying. A recent PwC Channel Island's report estimated that 16,900 jobs in Jersey are at risk of automation between now and 2035. Similarly, an analysis by Digital Jersey and the data consultancy, Geek Talent, revealed that (i) many of the Island's most highly paid professions are most at risk to automation; and (ii) that the Island is a digital laggard in terms of technology adoption and skills utilization by industry.

Alongside these new demands on society will be the need to respond to a **shifting innovation and economic landscape** with Sino-Asian nations increasingly playing a leading role. This will necessitate that Jersey adopts a pragmatic approach to generating new trading relationship and connectivity with emerging hubs of innovation.

And lastly, we need be mindful of the potential impact that a repeat of the Covid-19 **pandemic** or similar, and **climate change** will have on our economy and the role of digital in helping to overcome these challenges.

Overview

Digital Jersey's existing programme of work will support the refocused 12 areas outlined below, reinforcing one another along the digital transformation journey.

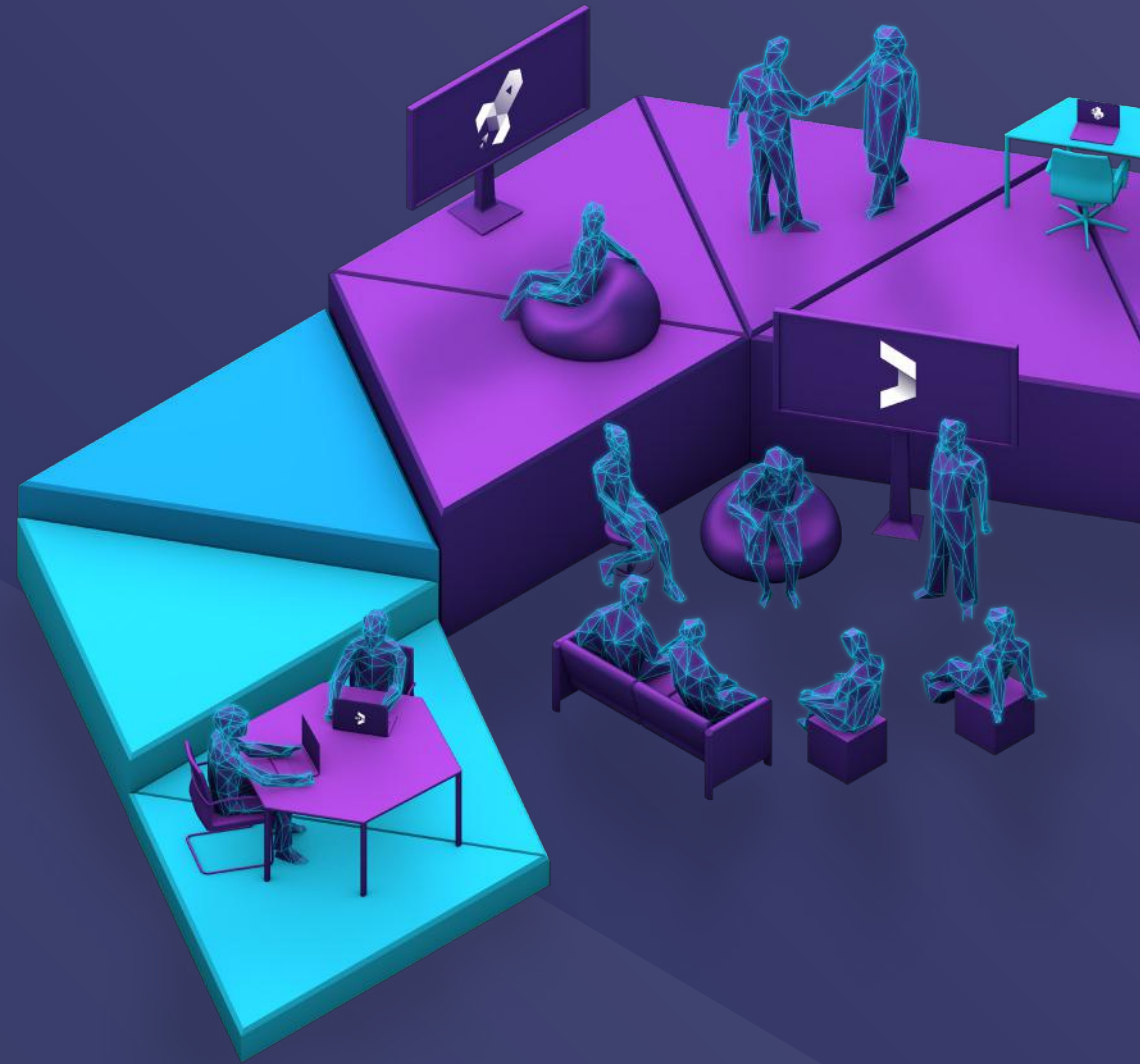
Themes		Strategic Focus Areas	Deliver ¹	Drive ²	Support ³
Business	1	Thriving Business Clusters		✓	
	2	Digital Transformation		✓	
	3	Access to Funding & Growth Tools	✓		
Infrastructure	4	Innovation Island	✓	✓	
	5	International Connections	✓	✓	
	6	World-class Infrastructure & Institutions		✓	
People	7	A Highly Skilled Workforce	✓	✓	
	8	Attracting Top Tech Talent		✓	
	9	Active Community & Partnership	✓		
Government	10	Government Prioritisation		✓	
	11	A Digital Government		✓	✓
	12	Future-proofed Legislation & Regulations			✓

Deliver - It is incumbent on Digital Jersey to actively lead, manage and run the initiative.

Drive -To proactively encourage and support other actors to convene and work towards achieving the objective.

Support - To be reactive in supporting actors to deliver on the stated objective.

Business



1 Thriving Business Clusters

Mission

Goal: To become a compelling hub for internationally focused digital entrepreneurs, micro-businesses and distributed companies; with employment, expertise and export revenue in specialisms where we have a comparative advantage.

Success measure: Total economic value of the digital industries to Jersey, measured by gross value added.

Rationale: It is incumbent on Digital Jersey to develop a fourth pillar to the economy through growing the Island's digital businesses. In doing so, the Island's economy will be better insulated from the adverse impact of jobs automation on its existing employment, the Government's tax base will be more resilient, and residents will have greater opportunities to pursue rewarding and meaningful employment.

Internationally, cities and regions are increasingly realising their economic potential by leveraging comparative advantages in niche knowledge areas. For example, Cheltenham in cyber security, where the knowledge, resources and spending power of GCHQ is driving economic growth; Manchester in the form of the newly launched National Graphene Institute; and Exeter in big data, benefiting from the significant employment of data scientists at the National Met Office.

Partners

- Local industry leaders.
- International trade bodies and similar economic development agencies.
- Locate Jersey / Jersey Finance.
- Digital Jersey members.
- Government of Jersey.
- Institute of Directors / Jersey Chamber of Commerce.

Background

Digital Jersey has a well-established Digital Health Strategy and newly created Fintech Roadmap. However, efforts are needed to better understand Jersey's value proposition to different horizontals and verticals of the digital industries; particularly given issues arising from having a small internal market. More work is needed to consider and act on the opportunities afforded by data, our favourable geographical location and our world-leading infrastructure.

Digital Jersey commissioned KPMG in 2015 to undertake an opportunities analysis. The analysis considered a broad range of digital opportunities and 12 digital sectors*. It found **cross-cutting concerns** to include; data protection law; access to early stage funding; investable start-ups; tech talent; government leadership; active networks and mentoring; and culture. Jersey's **value proposition** to industry was identified as; legislative independence; lifestyle/environment; western demographics; low/simple tax rates; and proximity to key decision-makers. The research concluded by recommending that Digital Jersey prioritise support for Fintech, Digital Health, IoT and Test-bed opportunities. These recommendations have been the basis for Digital Jersey's intervention over the past five years. During this time we have also supported Jersey Finance in their journey to make Jersey the easiest international **finance** centre to do business with **remotely**, in a digital world.

Early Digital Jersey Activity

1. **Drive** business growth by engaging with members and running a dedicated scale-up programme, modelled on the success of Tech Stars (Boulder) to target growth of high-potential businesses.
2. **Deliver** Digital Industry Growth Roadmaps that explore the opportunities and growth trends in Jersey's digital industries.
3. **Deliver** an evaluation of whether Jersey has business development opportunities in the global market for data stewardship. To be achieved by analysing the legal, regulatory and policy implications of this initiative, and whether a commercial case can be identified for local firms.

* **KPMG Opportunities Analysis:** Fintech; Internet of Things; Data Analytics; Home Health Tech; Cloud Computing; Cybersecurity; New-media; Digital Payments; Big Data; 3D Printing; Wearables; Robotics.

** **Industry:** Information Technology; Communications and Networking; Computer Hardware; Storage (IT); IT Services; Software; Other Information Technology. **VERTICALS:** AdTech; AgTech; AI & Machine Learning; AudioTech; Autonomous Cars; Big Data / Data Analytics; CleanTech; Cybersecurity; E-Commerce / Marketplace ; EdTech; Ephemeral Content; FinTech; HealthTech; InsurTech; IoT; Marketing Tech; Mobile; Robotics and Drones; SaaS / Enterprise Software ; VR / AR; Wearables & Quantified Self; Digital Agencies; E-gaming / E-Sports.

2 Digital Transformation

Mission

Goal: To ensure a 'digital first' approach across all sectors of the economy whereby businesses harness technology to improve services and productivity, in turn enhancing their international competitiveness.

Success measure: Advanced sectorial adoption of new technology, measured by the average digital density of skills by industry.

Rationale: The productivity of Jersey has been in steady decline for two decades, (18% since 2007) largely driven by falls in productivity within the finance industry. In the UK, low productivity/performance in SME's is attributed as one of the reasons the UK has poor productivity when compared with other G7 nations. 10%-30% lower in some cases. For this reason, it seems sensible to accelerate the adoption of productivity boosting technology by Jersey's established businesses, especially in SMEs with between 20-100 employees.

Parallel to this has been the continued aging of the Island's population. This will, however also demand increased efforts to upskill the population across all age groups. Though this poses many challenges, it also offers opportunities to become a leader in silver economy innovations, adapting the Island's services to meet growing demand. The European Commission has calculated that the silver economy — spending by people aged 50 years old and above — will reach €6.4tn by 2025, up from €3.7tn in 2015, and **be responsible for nearly 40% of the jobs created.**

Partners

- Industry associations.
- Jersey Business.
- Digital Jersey members.
- Government of Jersey.

Background

A key determinant of business productivity is technology adoption, and yet Jersey businesses have a lower digital utilisation than their counterparts in the UK. On average, a third less. Compared with Edinburgh and London, Jersey's digital adoption is two-thirds lower. Even when compared with similar seaside locations, such as Brighton, the Island performs poorly. The gap in digital adoption is not only evident in emerging technologies, such as Artificial Intelligence (AI), but also now common SaaS products, such as Building Information Modelling (BIM) and Cloud computing. This gap in digital adoption represents lower productivity; less internationally competitive businesses; and a less resilient workforce to the challenges posed by automation.

Despite this, there is currently little support for non-digital or financial services businesses looking to adopt new technology on-island. This in part, explains the overall decline in the productivity of the non-finance industries in Jersey over the past two decades. Specifically, productivity in the non-finance sectors has declined by 6% in real terms since 2007 and has been relatively unchanged over the longer term (2% higher in 2018 than 20 years earlier, in 1998). Without intervention, these declines could accelerate in the coming decades as the Island's population continues to grow older, increasing the dependence ratio (those of working age compared with those in retirement/education), and driving employment diversification into lower value industries; such as leisure and health care (as a share of GDP).

Early Digital Jersey Activity

1. **Support** established companies in their digital transformation by acting as a broker between those companies and technology businesses
2. **Deliver** targeted digital competencies training towards non-digital SME's through the Digital Jersey Academy.
3. **Drive** the adoption of new technologies and recruitment of digital skills through showcasing activity and information dissemination.
4. **Deliver** Sector-by-Sector Technology Roadmaps to support the digital transformation of Jersey's core industries.

3 Access to Funding and Growth Tools

Mission

Goal: To improve access to finance and banking by supporting entrepreneurialism, brokering local & international investor relations, and ensure local accessibility to digital banking/payments.

Success measures: Total investment into digital businesses.

Rationale: A vibrant funding landscape is vital to a successful start-up eco-system. In the absence of a mature funding landscape, local start-ups do not have the capital to invest in their growth.

The impact of this can be grouped into two primary drawbacks, firstly high-growth potential start-ups are unable to materialise; and secondly, by their nature, digital entrepreneurs are highly mobile. This affords them the flexibility to follow the capital and talent, which would see Jersey's tech eco-system hollowed out. For this reason, both Guernsey and the Isle of Man have launched investment vehicles. The **Isle of Man** created a £50m Enterprise Development Fund (EDF) to provide grants, loans and equity to fledgling start-ups; accelerate SME growth; and support relocating companies.

Similarly, the **Guernsey** government provided seed funding to the Guernsey Investment Fund whose primary purpose is to (a) generate profit for investors (b) invest in projects and companies with a Bailiwick focus; and (c) serves as an economic enabler. The fund also onboards private sector capital to invest in projects.

Partners

- Local Investors & international VC's.
- Local lenders and related financial institutions.
- JFSC, Government of Jersey.
- Locate Jersey.
- International Financial Services and Growth Tool Providers.

Background

Jersey registered companies face barriers to raising capital when compared with counterparts elsewhere. These barriers include:

- Few opportunities to apply for public or charitable grants to support business investment
- Limited support for R&D activity and spending
- No provision of tax reliefs/rebates for investors or entrepreneurs
- Financial regulations which inhibit seed funding through consumer financing – such as crowd funding; and
- Reduced access to global payments providers, digital banking and related solutions.

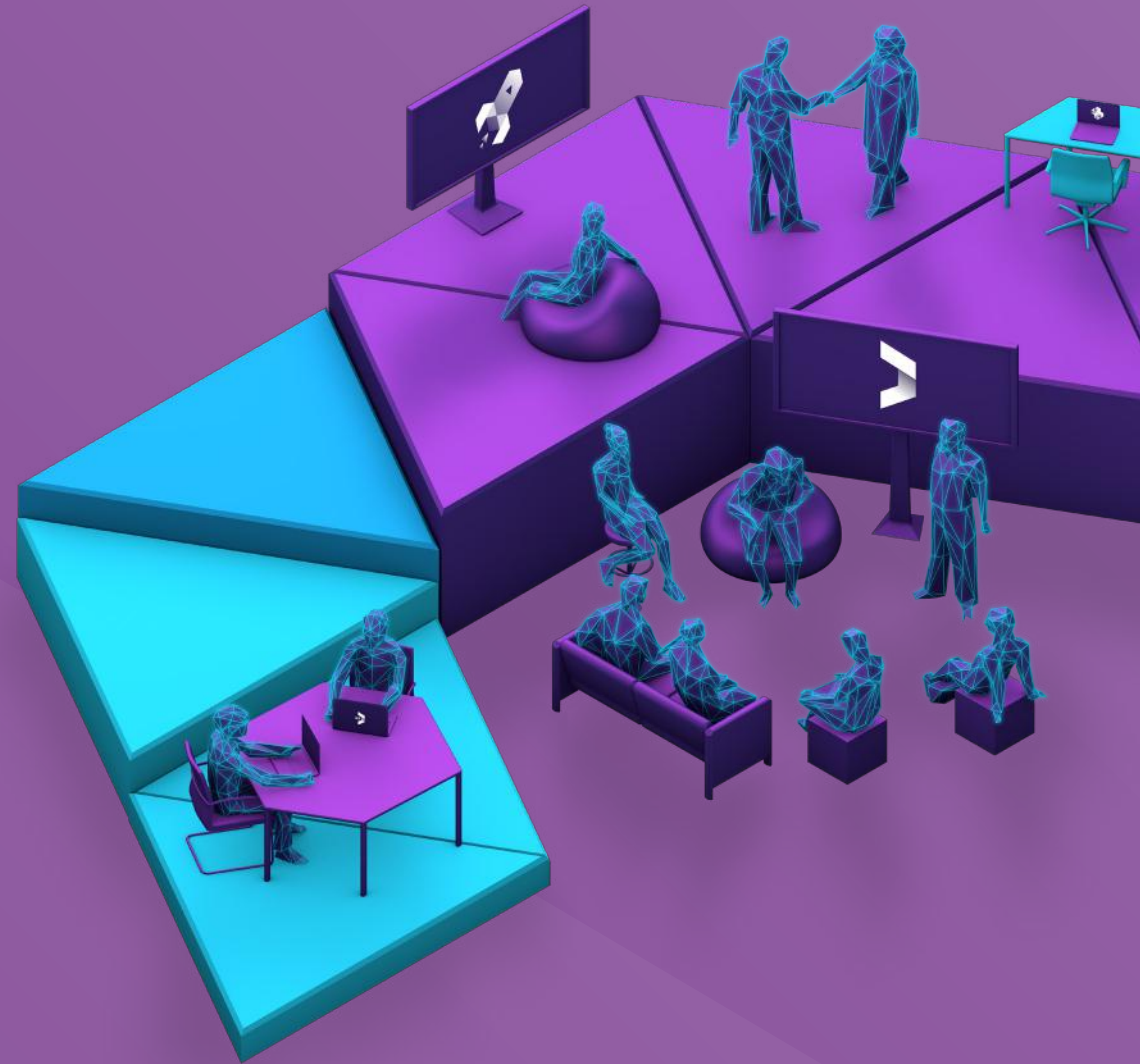
To help address these barriers, the Government of Jersey launched an Innovation Fund (JIF) in 2012 with an initial capitalisation of £5million. The aim of the fund was 'to deliver growth, improve competitiveness, diversify the local economy and create employment'. Despite good intentions, the fund had mixed results and has since been dissolved.

Consider together, the current funding landscape unfairly favours those who are better connected or who have existing personal, family or friend wealth to invest.

Early Digital Jersey Activity

1. **Deliver** a funding platform that will support local start-ups raise funding.
2. **Support** the creation of local angel investment networks, provision of digital banking/ payment solutions and the introduction of overseas investors to Jersey.
3. **Drive** Government to introduce incentives for local investment. This could include:
 - Income tax deductions against; investments made into start-ups; dividend income generated from companies invested in; or tax reliefs to offset losses from failed local investments.
 - Seed funding into a vehicle that would invest in local businesses, modelled on the Guernsey Investment Fund; British Business Banks. Etc.

Infrastructure



4 Innovation Island

Mission

Goal: To become an internationally recognised innovation hub by improving the local support infrastructure for entrepreneurs to test and commercialise products & services.

Success measure: Gross expenditure on R&D, measured as a % of GDP.

Rationale: Spending on Research, Development and Innovation is a key indicator of future productivity of firms and the broader economy. This rationale was recently reinforced by research commissioned by JFL and conducted by CEBR (2019). This found that local finance firms with productivity below their sub-sector average only invested **1.8%** of revenue on R&D (e.g. spending on developing new products or internal processes), compared with **9.4%** for firms with above average productivity. Similarly, the Fiscal Policy Panel has highlighted a lack of innovation as a possible cause of weak productivity; and the Innovation Review 2015 suggested that a lack of a local university or research institution means that domestic knowledge assets are limited.

Public authorities internationally play an active role in stimulating R&D spending, creating financial incentives and institutional capacity to facilitate innovation. For example, Estonia has a plethora of financial and institutional support; this includes their recently launched Nordic Digital Infrastructure Institute and the Global Information Society think tank. Accordingly, there are opportunities to leverage the collective interests, skills and funding of industry, academia and Government to develop expertise in targeted disciplines.

Partners

- Academic leaders.
- Schools, including primary; secondary and further education.
- International R&D association/bodies.
- Grant making bodies.
- Local industry.
- Government regulators (Health/JFSC etc.).
- Specific Government services, such as Health and the States of Jersey Police.
- Jersey Research Foundation.

Background

Jersey has little or no digital and technology research activity, nor the institutional capacity to deliver such activity. Current infrastructure is limited to Digital Jersey facilities, the Barclays Eagle Lab and spending on state-of-the-art technology by the finance industry. The Island does boast a full-fibre network, giving Jersey some of the fastest internet speeds globally. The comparative advantages of having world-leading connectivity presents Jersey with a window of opportunity before other locations catch-up.

There has, however, been siloed activity. For instance, the States of Jersey Police secured 320,000 euros of European Union funding to create a **Small Island Nations Centre of Excellence for Research and Education (SINCERE)** in Cyber Crime.

Further opportunities with significant digital economy implications are in the pipeline. This includes the planned new General Hospital which is earmarked to cost between £450-£500 million; and those arising from the expansion of the Digital Jersey Academy and creation of Jersey's Digital Twin.

Early Digital Jersey Activity

1. **Drive** Innovation credits/vouchers; Social Security rebates against product development expenses; and the launching of the Jersey Research Foundation.
2. **Deliver** specialised equipment and technical expertise to accelerate the prototyping phase.
3. **Drive** partnerships by showcasing advanced technologies (AI, Digital Twin etc.) and broker research partnerships and university collaborations.

5 International Connections

Mission

Goal: To become widely regarded as a digitally-savvy environment and business centre, attracting foreign direct investment, start-ups, entrepreneurs, and talent.

Success measure: Digital tech trade service exports, measured by % trade surplus.

Rationale: Jersey has a relatively small population with a workforce which is highly dependent on inward migration and a highly internationalised industry base. If Jersey is to grow and diversify its economy, access to new ideas, inward investment and talent will be vital.

It is estimated that businesses focused on foreign customers grow 2.1 times faster than others.

Perceptions of Jersey as a technologically-advanced place for doing business will be instrumental to its future success, both in terms of giving local business the prominence to drive international growth, and in attracting businesses to Jersey. Internationally, the public and private sector are increasingly working together to promote their respective locations as tech hubs. Examples of this can be seen in the recent promotion of London as a Tech Hub by **London & Partners**; and Lyon, by **La French Tech**.

Partners

- Government of Jersey, External Relations.
- Visit Jersey, Locate Jersey, Jersey Finance.
- Ambassador network.
- Industry associations.

Background

Jersey has been developing its own international identity since 2007, when a framework was established. More recently, the Island's digital proposition has been leveraged by the Government's External Relations Department to meet foreign policy objectives. This includes MoU's between Digital Jersey and Bahrain/New Jersey.

Despite these efforts, Jersey has a mixed international reputation. Among the general public overseas, the Island is associated with namesakes, such as Jersey cows, knitwear, beaches and the Royal potatoes; with less favourable perceptions associated with tax. Within the global and international financial services industries, Jersey is well regarded as a transparent, high quality, specialist centre for Funds, Trust, Banking and Wealth Management.

This mixed international reputation is mirrored in business and leisure visitors' experience when in Jersey itself. The Island is a paradox of extremes, where some of the world's fastest internet speeds and most savvy tech consumers are coupled with relatively poor adoption of tech across industry and government. This inconsistency creates a patchy experience for visitors, which can leave a view that the Island is somewhat backward. Therefore, effort is needed to create an immersive experience for visitors, augmenting their interaction between physical and digital channels.

In recent years, Digital Jersey has started to proactively promote the Island overseas as a testbed location, including holding targeted events with key decision-makers.

Early Digital Jersey Activity

1. **Deliver** opportunities that expose Jersey to a diversity of ideas, people and technologies, by hosting and attending international conferences.
2. **Deliver** a unique brand proposition for Jersey, promoted through digital marketing campaigns and submission of entries to international rankings, awards and accolades.
3. **Drive** connectivity with the distributed global tech ecosystem by promoting international trade and partnering with key actors, including knowledge corridors with UK Universities.

6 World-Class Infrastructure and Institutions

Mission

Goal: To benefit from an eco-system of enabling and accelerating hard, soft and critical infrastructure; hosting resilient physical networks, appropriate cultural and working amenities, and the institutions necessary to maintain long-run economic progress.

Success measure: Competitive business environment, as measured by institutional effectiveness, physical capital and liveability.

Rationale: Today value is generated from digital applications that require a diverse skills-set. This has given rise to the proliferation of dense tech clusters where the exchanging of ideas between firms and people is facilitated by proximity.

This phenomenon has closely tied the success of tech clusters to the towns and anchor institutions with which they cluster. These anchor institutions (such as HE, research bodies, knowledge institutions etc.) act as catalysts for knowledge-based and talent-driven economies. Adjusting to these sector dynamics requires intervention that will pay dividends for future generations. These lasting foundations of success can be grouped into:

1. **Critical Infrastructure:** assets that are essential to the functioning of a society and economy, including telecommunication and other related networks.
2. **Soft Infrastructure:** Institutions with absorptive capacity to drive actors in the system to work together and generate outcomes, such as funding mechanisms, universities and non-profit organisations.
3. **Hard Infrastructure:** physical assets that are necessary to run modern economies, including appropriate workspace, housing and a cultural offer.

The development and/or deployment of key infrastructure will provide Jersey with a unique opportunity to develop a comparative advantage in different verticals and horizontals of the digital industries.

Partners

- Telecoms and other utility providers.
- Government of Jersey (Performance, Policy, Population and Strategy).
- Jersey Development Company, Jersey Property Holdings.
- Leading Industry Advisers.

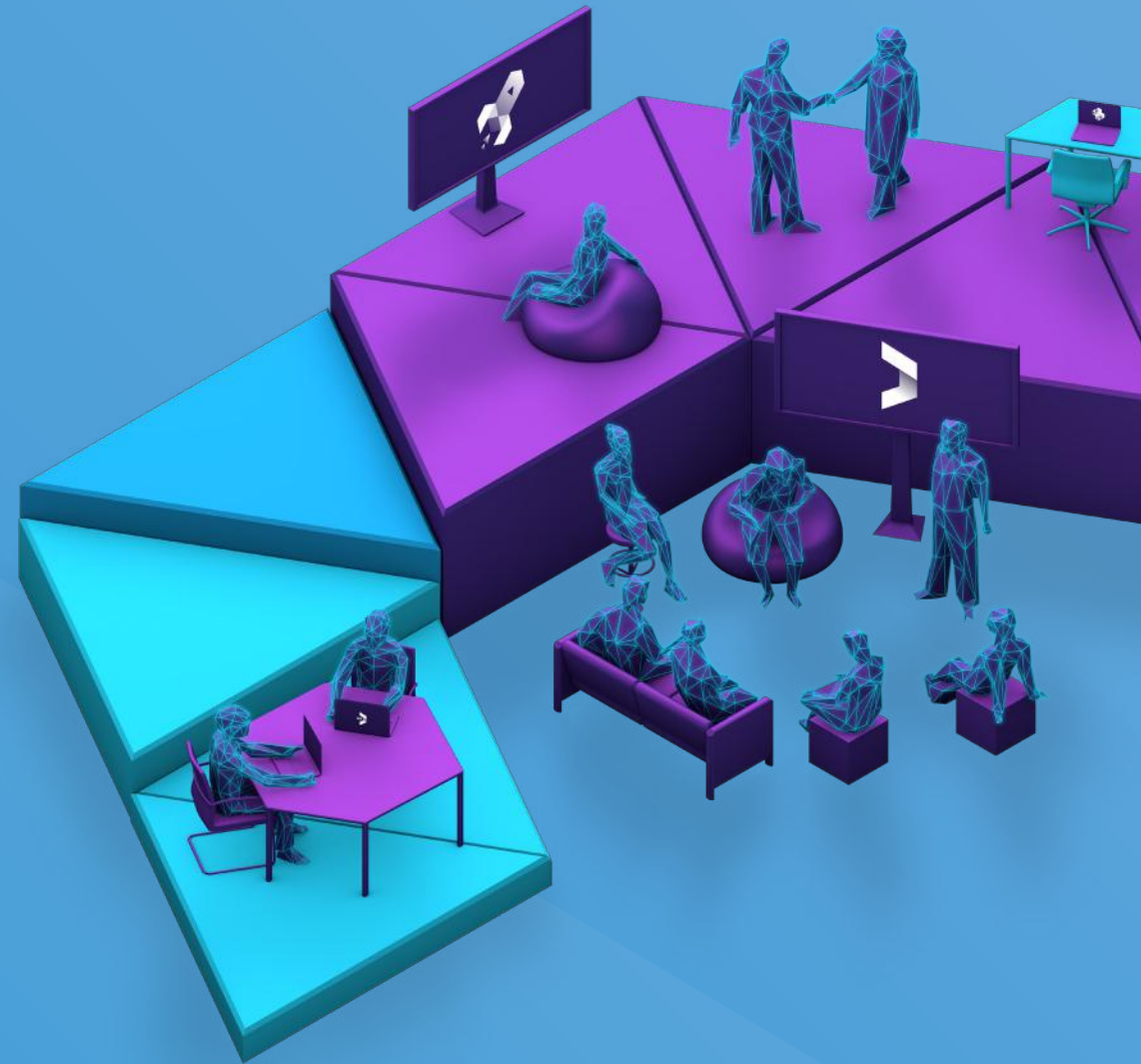
Background

Jersey has some of the fastest internet speeds globally, having become the first jurisdiction to boast 100% fibre to all premises. Digital businesses have access to a large portfolio of office accommodation on both short-term and long leases. Additionally, Digital Jersey provides accelerator space through its network of co-working and education spaces. However, access to appropriate and affordable office space to scale is limited. Housing suffers from the same challenges. The island also lacks key infrastructure typical of a university town or research centre (e.g., funding, educational opportunities, events). In part to address these gaps, the Government Plan 2020-2023 has specifically outlined plans to create a long-term funding mechanism to address the Island's need for infrastructure investment. Specifically, the proposed Island Infrastructure Fund will provide the enabling framework needed to support key Digital Jersey objectives.

Early Digital Jersey Activity

1. **Support** government and utility providers to deliver 5G and other critical digital economy enablers.
2. **Deliver** a digital twin of Jersey that provides an open access platform for business, government and community groups to prototype new products and services.
3. **Deliver** an Infrastructure & Institutions Review to uncover gaps in the key infrastructure and institutions needed to support the digital economy.

People



7 A Highly Skilled Workforce

Mission

Goal: To train a digitally-savvy workforce with a pipeline of local tech talent, expertise and knowledge graduating from its further and higher education centres.

Success measure: Digital readiness, as measured by the human capital metrics on the prevalence of digital skills.

Rationale: Skills are inextricably linked with the growth and development of the digital economy. This is partly due to the impact of new technologies and an aging population on the workforce. These changes have increased demand for low and high-skilled jobs with fewer medium-skilled jobs. This trend is expected to accelerate as companies continue to make substantial investments into labour-substituting AI. This is also driving new demands on the workforce, not only for digital staff, but also non-digital staff. However, in the absence of a University, Jersey is disadvantaged when compared to most towns and cities with whom we compete. This includes Malta, Gibraltar and similar UK counties such as Cornwall which host specialist Universities.

University support for tech clusters can be grouped into five areas:

1. **Students:** Steady stream of undergraduates, graduates, and adult learners who bring new ideas and perspectives, and either go on to start businesses or join the sector.
2. **Professors:** A body of highly skilled and curious professionals who often involve themselves in the local economy, advising start-ups and in some cases creating their own ventures.
3. **Research Labs:** The intersection of academic teaching with research, that brings together professors and students from different disciplines to work jointly on research.
4. **Entrepreneurship Programmes:** Capitalise on the R&D capacity of universities, link students to industry, and incorporate business enablers* (co-working spaces, funding etc.)
5. **Technology Transfer Programmes:** A central hub that facilitates the process of licensing new technologies to start-ups.

Partners

- CYPES.
- Minister for Education & Minister for Housing.
- Secondary and further education schools and colleges.
- Leading International Universities for Technology.

Background

Pre Covid-19, the labour market in Jersey was characterised by having more jobs than people available. Exacerbating this was a workforce widely regarded as having inadequate skills to meet the needs of the digital economy; with school leavers graduating without the competencies and skills expected by employers. The Digital Skills Strategy found that only one-third of the Jersey workforce hold level-4 qualifications or above. This is marginally higher than in England. Additionally, only 20% have degree or above qualifications (census 2011). If compared against Britain's top 20 biggest tech hubs, only Birmingham has relatively fewer degree level graduates. This relatively poor skills base is partly due to the absence of a University; resulting in significant loss of young talent aged 18+ and compounded by the absence of an international student body to counteract this.

Furthermore, the Island is a digital laggard in terms of technology adoption and skills utilisation by industry. Accordingly, in order to close the gap with the UK and elsewhere, the Island needs to train the innovators and wealth creators who will drive forward industry adoption of new technology.

Early Digital Jersey Activity

1. **Deliver** the internationalisation and growth of the Digital Jersey Academy.
2. **Deliver** a Technology Pact with local employers and education providers to accelerate the adoption and use of digital skills.
3. **Drive** the introduction of a financial mechanism to widen access to digital training.
4. **Deliver** a local growth roadmap for higher and professional education in digital skills, learning from and partnering with specialist digital Universities overseas.

* In 1987, Cambridge University, opened Europe's first innovation centre and the UK's oldest incubator, called the St Johns Innovation Centre. Today, Cambridge boasts one of Europe's largest concentrations of technology businesses.

8 Attracting Top Talent

Mission

Goal: To be regarded as an attractive location to live and work by highly-mobile tech talent and the island's overseas population pursuing higher education, as a result featuring in influential rankings and reviews.

Success measure: Workforce diversity, as measured by the hiring of global talent.

Rationale: Migration plays a disproportionate role in contributing towards innovation and wealth creation. In the UK, immigrants are twice as likely as British-born individuals to start their own business. In the US, migrants found about 30% of all businesses, even though they make-up 14% of the population. More than half of US "unicorns" (start-ups valued at more than \$1bn) were founded by immigrants, as were 40% of Fortune 500 companies. The same pattern repeats itself elsewhere. For these reasons, many countries proactively seek out the highly skilled and mobile to relocate.

Yet, as a small island, the talent pool of the workforce is greatly determined by that of its migrant workforce. According to the 2011 Census, of the working age population, just 30% of the Jersey born population had graduated from higher education. This compares with over 40% for British and Irish, and 50% for non-EEA countries. The relatively lower figure is in part, due to the Jersey born population following HE overseas, and remaining there upon graduation. Accordingly, this alumni population offers Jersey a unique and relatively untapped opportunity to enhance Jersey's international network, address local skills shortages and much more.

Partners

- The Population Office.
- Population Minister; Migration Policy Development Board; Housing Minister.
- Immigration Department.
- Representative bodies of minority groups and gender equality organisations.

Background

Like many places, much of Jersey's population depart the island to pursue careers and opportunities elsewhere. This more often not, stems from higher education decisions. The vast majority of school leavers that pursue higher education, do so at overseas institutions. Past trends indicate that just over half of these students will return to work in Jersey post-graduation.

Efforts to connect, engage and involve our island's overseas population has already started with the recent launch of our Ambassador network.

Early Digital Jersey Activity

1. **Drive** Government to adopt tech-talent friendly migration rules *
2. **Deliver** and define the Island's value proposition to tech talent; and promotion of the island for tech talent relocations.
3. **Drive** a campaign to improves equality and diversity in digital occupation/skills to widen the talent pool.
4. **Drive** efforts to attract international students to Jersey through exchange programmes and HE provision.

* **2(1)(e):** The introduction of new migration pathways could be modelled on the residency-through-investment programme ran by the federal state of Quebec. The Quebec Immigrant Investor Program (QIIP) launched in 1986. Applicants are required to invest \$800,000 over 5-years into the regional 'Invest Quebec Fund'; after which the investment is returned with no interest and a \$15,000 processing fee. Proceeds from the fund are distributed as grants and loans to local businesses.

Active Community and Partnerships

Mission

Goal: To create a diverse and inclusive, savvy community, made-up of entrepreneurs, tech talent, investors and service providers; feeding the sector with a pipeline of ideas and talent and driving 'creative destruction' and renewal.

Success measure: Grow Digital Jersey member base by 50%

Rationale: The beating heart of any tech hub is its community of entrepreneurs and tech leaders, investors, Government, mentors, students, service providers and large companies. The collective strength of these actors is greater than the sum of its parts. Together, these actors create a pipeline of new ideas, perspectives and innovations. This drives 'creative destruction' and the renewal of industries by giving momentum and scale to new opportunities.

In any tech community, there are usually key actors that evoke new ideas, collaborations and visibility in the community. To date, Digital Jersey has been the primary facilitator. However, elsewhere, universities play a more active role. For example, in Boulder a similarly sized city in Colorado (USA), the University Law School is the catalyst of tech activity. Today, Boulder is home to a thriving start-up community and blue-chip tech businesses, including Google, IBM, and Apple. In 1999, the Law School launched Silicon Flatirons, with the aim of:

1. Supporting entrepreneurship
2. Preparing and encouraging students to take advantage of opportunities in the digital sectors
3. Raising the level of discourse on technology policy.

Separate to this, there is scope to activate community partnerships, events and networking groups to address the current gender imbalance within the digital industries and to better involve local community groups.

This in turn will create a larger base of talent, ideas and innovations with which the tech economy can grow; in turn helping industry to meet their recruitment needs.

There is a significant opportunity to work with higher education providers on-island to organise and leverage the existing student body into a single community, and pipeline of talent to feed the tech eco-system. This extends to broader efforts to better connect, engage, and involve the existing tech community, minority groups, and gender equality, giving greater visibility to community groups and creating a welcoming environment for new members.

Partners

- Colleges and Higher Education.
- Community Groups.
- Arms-length organisations.
- Digital Jersey members.
- Overseas digital industry associations.

Background

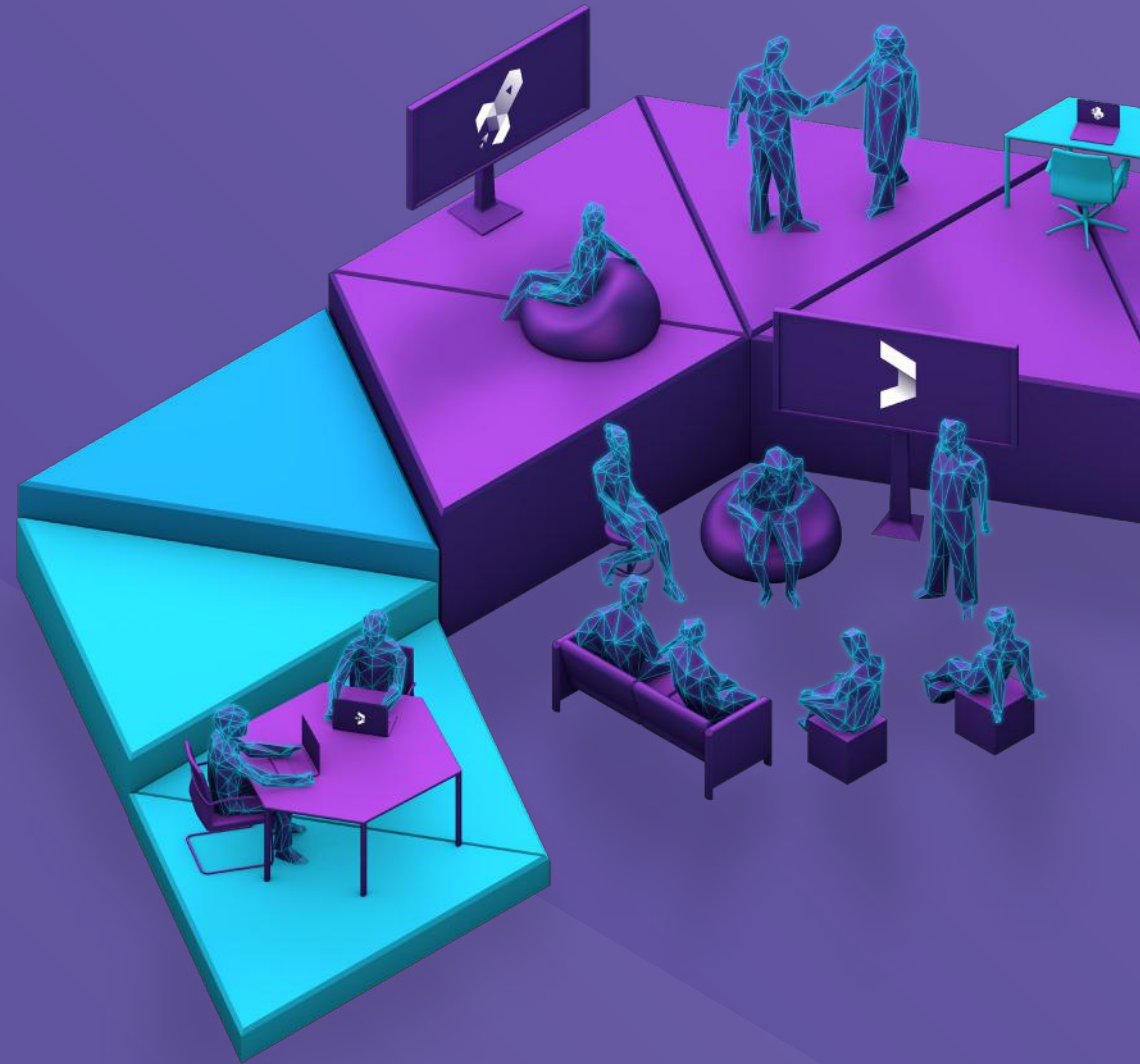
Jersey can be characterised as having a highly networked and strong community, both from a civic and professional standpoint.

Since Digital Jersey's inception in 2013, there has been significant progress in efforts to organise and leverage the local tech community, building on existing strengths in parallel sectors. This has been enhanced in 2016 with the inauguration of Woman in Tech, and in 2019 by the launch of the Ambassador network and mentoring scheme.

Early Digital Jersey Activity

1. Deliver community programmes which drive collaboration, for example Diaspora engagement; mentoring and the ambassador programme.
2. Drive event activity by running networking events, competitive challenges, course alumni meet-ups and round tables etc.
3. Drive tech for good initiatives by acting as a broker between non-profits and techies to address charity needs.

Government



10 Government Prioritisation

Mission

Goal: For Government to prioritise investment and resources into the digital economy, providing strategic investment that will underpin long-term growth.

Success measure: Increased digital economy investment, measured by Government spending on industry specific stimulus.

Rationale: Digital is a pervasive enabler for all five of the Government's Strategic Priorities, be it the use of technology to reduce our impact on the **environment**; improving **social mobility and inequality** through enhanced job opportunities; creating a **vibrant economy**; as a tool to underpin self-paced and independent learning for **children**; and to enhance, motivate and measure **islanders' wellbeing and physical health**.

Government has a critical role in determining Jersey's future economic and digital competitiveness. Nations that simply implement reactive solutions to economic shifts and are slow to embrace technological advances, risk being left behind and unable to compete in today's global economy. It is therefore incumbent on Government to advocate, facilitate, and support the development of the digital economy.

The challenges the Island faces in adapting to the ever-progressing digital landscape, and its impact on the way in which we work, socialise and travel, is only going to accelerate. For this reason, it's vital that we manage associated risks and fully leverage opportunities. To achieve this requires change to the Island's economic architecture, social fabric and Government behaviour, all of which require spending to support.

With clear goals and a roadmap of investments, Government can ensure technology is not an afterthought, but something embedded within all the Island's infrastructure and institutions. For instance, by encouraging the emergence of new services by opening more Government data or managing crucial parts of the data economy as public infrastructure.

Partners

- Department for the Economy.
- States Assembly.
- Children, Young People, Education and Skills (CYPES).

Background

The Government Plan 2020 - 2023 recognises that 'change is happening at an increasing pace and while this brings with it risks, it also offers new opportunities'. Similarly, the Common Strategic Plan commits Government to 'create a sustainable, vibrant economy and skilled local workforce for the future'. Lastly, the Economic Council (2020) emphasised the need for 'Jersey to truly embrace the importance of the new economy, being created globally through technology, artificial intelligence and data'.

By Government committing to support Digital Jersey, it is providing targeted intervention to grow, innovate and diversify the Island, helping to stabilise and reverse recent declines in productivity. Similarly, Digital Jersey is proactively supporting Government to realise the benefits of digital. In 2020 Digital Jersey and the Department for Strategic Policy, Performance & Planning signed an MoU committing both parties to support one another in delivering a broad range of common goals.

Equally, commitment by Government to continue investment into the delivery of the Digital Policy Framework is vital to the wider success of the future digital economy. Underpinning this is a strong regulatory environment promoting competition and enabling infrastructure to support and encourage the adoption of new and emerging technology. However, often Government struggles to prioritise investment into digital over other demands.

Early Digital Jersey Activity

1. **Support** Government in the proposed creation of a Trade and Export function to help efforts to internationalise the Island's digital sector.
2. **Support** Government in launching the planned Island Infrastructure Fund and direct funds at key digital economy infrastructure & Institutions. For example, 5G and continued investment into Digital Jersey.
3. **Support** Government to launch the Productivity Support Scheme, directing investment into helping non-digital businesses adopt tech. Other incentives could include:
 - Income tax deductions against: investments in start-ups; Dividend income from companies invested in; or tax reliefs to offset losses from failed local investments.
 - Seed funding into a vehicle that would invest in local businesses.

11 A Digital Government

Mission

Goal: To become a 'digital-by-default' Government, recognised by industry and residents for its quality and efficiency in the delivery of services.

Success measure: E-participation, measured by the % of and use of Government online services.

Rationale: Government has a clear role to play in accelerating the adoption of new technologies across society. For this reason, the modernisation of government services has a mandate to work with partners in industry to expand their capabilities, playing an instrumental role in the wider digital transformation of the economy.

For example, the UK Government has sought to make public services a platform available to the private sector. This is enhancing Government services and generating macro efficiencies. To do this, it has focused not only on the interpretability of data, but also of basic public sector components/services to enable integration with industry.

Partners

- Department for Strategic Policy, Performance & Planning.
- Chief Operating Office, Modernisation and Digital.
- Parishes.

Background

In 2013, the Government of Jersey launched an eGov programme that invested £10 million into digital transformation. However, like many disruption initiatives, the return on investment has divided opinion. Many consider the previous eGov programme to have failed in delivering substantial progress. The Public Accounts Committee claimed that it lacked a 'clear and comprehensive strategy document' to act as a focal point.

Despite its checkered past, the approved Government Plan 2020 – 2023 has committed resources to a multi-year technology transformation and modernisation programme. The plan outlines the creation of a Centre of Excellence for Information Technology Services, and the implementation of a digital care programme. The investment aims to enhance capabilities in (a) business architecture (b) information management (c) IT service support, and (d) change management. Recent examples of Government effectively harnessing technology for public good includes its rapid response to the pandemic of 2020. The civil service efficiently transitioned to full remote working and a world leading track and trace programme was delivered - all to tight timelines and underpinned by technology.

Government's ambition to transform into an 'efficient and technology-led organisation' will not only underpin efforts to foster a digital society but also create opportunities for local technology suppliers.

Early Digital Jersey Activity

1. **Support** Government in realising the benefits of its modernisation programme by acting as an advocate and broker of change.
2. **Support** and inform Government policies on local procurement, encouraging the use of local digital suppliers as a preference.
3. **Support** Government in the delivery of Open Government, by advocating and informing the standardisation, interoperability and usability of its data via the Jersey Digital Twin.

12 Future-proofed Legislation and Regulations

Mission

Goal: To deliver a regulatory and legislative environment that is agile and flexible to the needs of the digital economy; supporting and accelerating the sustainable & regenerative economy, new forms of business models, and the emergence of new modes of transport.

Success measure: Adopt Digital Supportive Legislation.

Rationale: Public authorities and regulators from the UK and Luxembourg to Dubai and Singapore, are proactively working with industry and lawmakers to adjust and enhance their legislative frameworks to meet the changing needs of the digital economy. For example, in 2011 the Danish authorities launched the Agency for Digitisation (within the Ministry of Finance); a supervisory enforcement body charged with driving the Government's digitisation policies. To do this, it made mandatory that all newly drafted legislation can be fully or partly administered digitally and appointed a Minister for Public Sector Innovation.

For Jersey to become an internationally recognised digital centre that leverages technology to improve productivity and public services, appropriate regulations and governance will be needed. Agility and flexibility in adapting legislation to the emerging digital economy are key to business growth.

Partners

- Respective Policy Development Boards (Jersey Competition & Regulatory Authority)
- The Council of Ministers/Assembly
- Departmental offices & the States Greffe
- Parishes

Background

Like elsewhere, many of Jersey's rules and regulations were designed for business models which are increasingly being disrupted by technologies, start-ups and innovations. To this end, Jersey's current legislative landscape poses many barriers to digital innovation. Inhibiting regulations include rules that prohibit crowdfunding, micro-transport, and online marketplaces, such as Airbnb. Digital Jersey has helped drive policy change to support innovation. This includes population, immigration and taxation rules. Recently, Digital Jersey and the Department for Strategic Policy, Performance & Planning signed an MoU committing both parties to support one another in delivering a broad range of common goals.

Not with standing, the need for improvement, parts of Jersey's regulatory frameworks have adapted to the changing needs of industry. In particular, the JFSC has worked closely with local industry and international regulators to create legal frameworks, guidance notes and dedicated resources to support the growth of new finance. This includes crypto currencies, Initial Coin Offerings and digital signatures among much else.

However, there is a wider need to address market issues arising from the growth of the data economy. Specifically, guidance notes and frameworks for the ethical use of data, AI and machine learning, privacy regulations, and transparency for the data economy for issues of security and trust.

Early Digital Jersey Activity

1. **Drive** the formation of a Government committee/working group whose remit is to constantly review existing regulations and identify opportunities to support digital adoption/innovation; including the adoption of 'digital first' legislation.
2. **Drive** the adoption of digital-friendly regulations by moving away from 'precautionary principles' in favour of the 'innovation principle'.
3. **Drive** the creation of a 'Digital Ethics Council' whose primary function is to provide oversight and guidance to legislators and regulators in relation to AI and its use in data/algorithm-based decision making. Central to this will be commitments to the principals of Fairness, Accountability, Trustworthiness and Ethicalness (FATE).

Consultation Next Steps

Please get in contact with any thoughts, comments and feedback by 5th March 2021.

James Linder
Strategy Manager

E james.linder@digital.je

