



DIGITAL JERSEY

PROMOTING TECHNOLOGY AND INNOVATION

DEVELOPING A DIGITAL JERSEY

October 2013

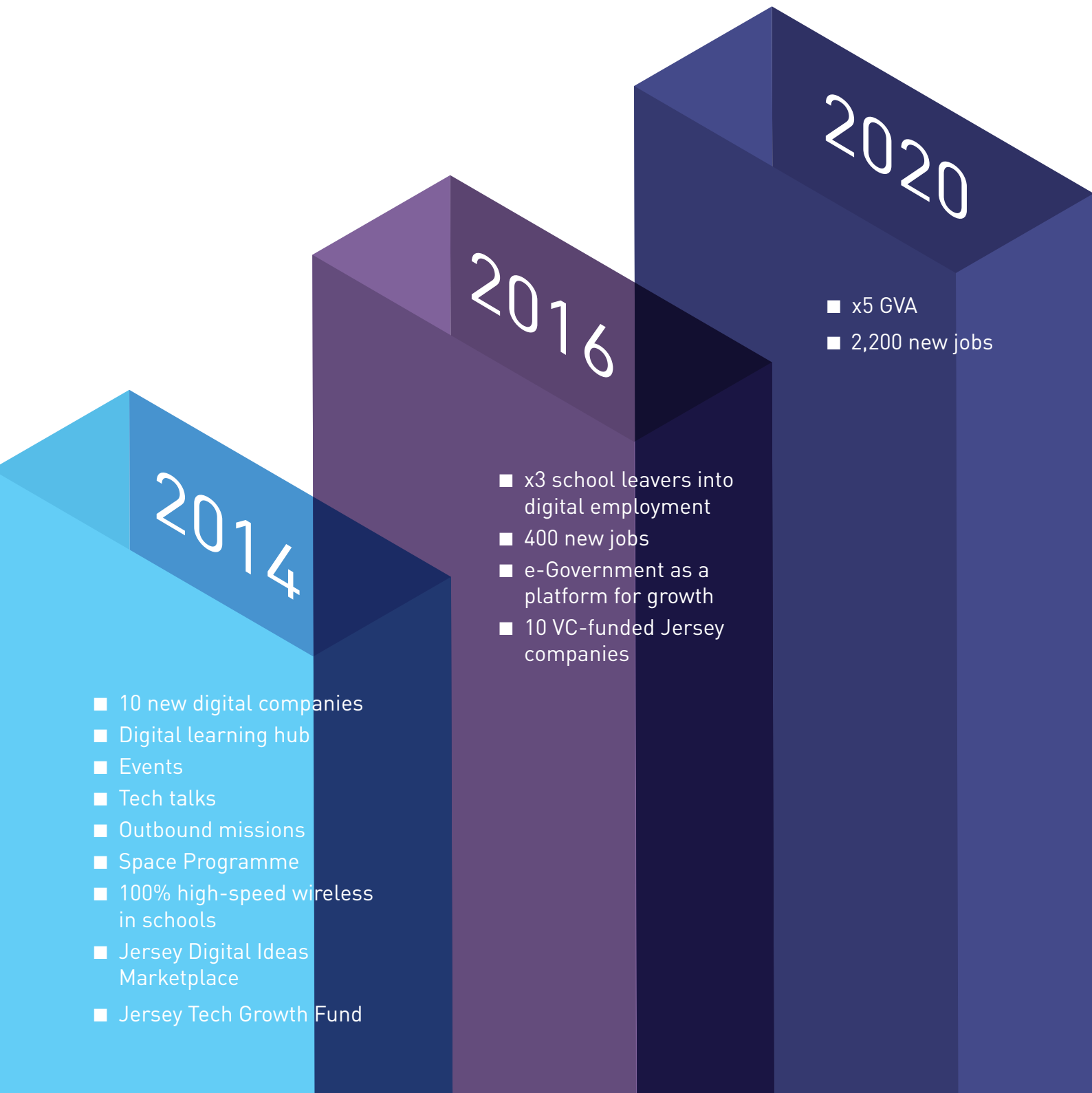


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Executive Summary

Purpose

The purpose of Digital Jersey (DJL) is to act as an accelerator for the digital economy **and** as an accelerator for a digitally enabled and connected society. The 'digital economy' includes both the digital sector itself and the application of technology across all sectors. 'Digital sector' is a broad term and includes communications, information, technology, media and creative endeavour executed or delivered electronically. A connected society is one where individuals benefit from easy and low-cost access to digital technologies and the skills to use it.

Objectives

Digital Jersey has three primary objectives:

1. To support sustainable economic growth in Jersey's digital industry, as measured by sector contribution to gross value added (GVA), job creation and the number and sustainability of digital businesses.
2. To enable a connected, digital society and enhanced quality of life in Jersey, as measured by an increased provision of online services by government, changes in the education curriculum, improved skills and awareness in the general population, and the development of essential 'digital' infrastructure.
3. To establish Jersey as an internationally well-regarded 'digital centre', as measured by ranking in key indices, recognition in target media and online statistics, the results of industry surveys, and sector-specific inward investment.

These objectives flow into the four priorities established by the States of Jersey's Economic Development Department (EDD) draft Enterprise Strategy:

1. Improving the productivity of business in Jersey and reducing the dependence on inward migration.
2. Support for high-growth firms in high-value activity.
3. Attracting inward investment in high-valued-added activities.
4. Ensuring that regulation does not impede business.

Digital Jersey's primary objectives translate into the following targets:

- By 2016, there will be 400 new jobs in the digital sector in the Island
- By 2017, Jersey residents will use innovative services that can enhance their health and well-being, delivered over an e-government platform that gives equal access to all
- By 2018, there will be five times more Jersey students finding work in Jersey's digital sector than in 2013
- By 2020, employment in the digital sector will be increased by 2,200 people – four times higher than its 2013 level of 560
- By 2020, the digital economy will have grown by a factor of five from its 2013 level
- By 2020, Jersey will have a reputation as a preferred jurisdiction for investment target sectors, including e-health, e-government, data ownership and e-gaming

Successful delivery of these objectives requires that the critical dependencies identified in this plan are in place. Without these, the ambition for growth and employment will be materially reduced. Progress towards the primary objectives will be measured by the programmes and key performance indicators detailed in this plan.

The digital sector represents a clear and compelling opportunity for economic diversification for Jersey, offering the potential for high growth, even though Jersey is late in commencing a digital growth strategy and faces stiff competition from jurisdictions that are well advanced in this arena, and those able to offer significant, long-term incentives.

Digital Jersey has developed long-term objectives for a five-fold increase in economic activity by 2020, supported by a four-fold increase in employment and definable social benefits. These long-term objectives are founded on, and complemented by, detailed programmes and clear targets and attainments.

With the aligned support of all stakeholders, the digital sector can become a vital pillar of Jersey's economic and social strength.

1. Role of Digital Jersey

Digital Jersey was created to support and grow the digital sector in the Island and to enable a better-connected and skilled society

Over many years, Jersey's economy and standard of living have been supported by the development and growth of different industries, including fishing, agriculture, tourism and finance. Over the past 20 years, the finance industry has become the dominant economic driver in Jersey, this dominance being compounded by declining contributions from agriculture and tourism.

Jersey is heavily dependent on the continued success of finance to maintain required economic growth and expected standards of living and government services. The risk of this dependency was made abundantly clear during the recent economic downturn and by the continued significant global pressure on, and increased regulatory challenges to, offshore financial centres.

In response to these challenges, the Island has developed economic growth and diversification¹ strategies, designed to increase high-value employment in other sectors. Development of the digital sector has been identified as a major potential contributor to this. To make a material difference, the digital sector needs to grow significantly from the current position where it is reported to contribute between 1-2% GVA to the economy.

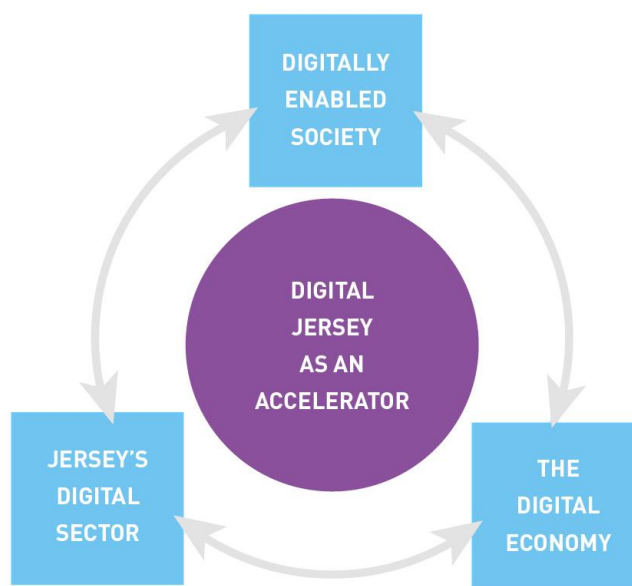
A connected digital society has wide access to public services over the internet and easy access to a broad range of services and applications that enhance daily lives. The development of a broad platform for e-government is a basic requirement for this and one that also enables the use of innovative services focused on health, wellbeing and learning, with equal access for all.

1.1. Introduction

Digital Jersey is the independent organisation, funded by the States of Jersey, responsible for promoting Jersey as a leading centre for digital excellence.

The purpose of Digital Jersey is to act as an accelerator for the digital economy **and** as an accelerator for a digitally enabled and connected society. The 'digital economy' includes both the digital sector itself and the application of technology across all sectors. These areas are closely tied, driving each other as follows:

¹ Strategy for Growth and Diversification, 2012: P55/2012



Working alongside government and industry, Digital Jersey coordinates activities that markets and promotes the Island, represents the industry and lobbies for change; Digital Jersey also addresses all of the needs for creating a healthy environment (the 'digital ecosystem') for 'digital' success in Jersey; these activities include skills development, technical innovation, research, regulation and legislation infrastructure needs and marketing.

Digital Jersey will not create companies itself but will coordinate strategy and activities so that:

- The Island develops and attracts digital businesses
- The digital sector provides sustainable employment
- Digital business makes a substantial contribution to the Island's diversification strategy

Today, the digital sector in Jersey is primarily based on provision of ICT services. The future will see a broader industry including, but not limited to:

- Software engineering
- e-health
- e-commerce
- e-gaming
- Website and user interface design and build
- Creative digital content
- Data management services
- Cybersecurity
- Information and Communications Technology (ICT) services
- Digital Rights Management (DRM) and Intellectual Property (IP) management

- Information Technology (IT) and telecommunications infrastructure.

In addition to growing the digital sector, Digital Jersey has an important role in supporting existing sectors in the Island, not least Finance, Tourism and Retail.

As well as supporting existing industry, Digital Jersey will work to position the Island as the jurisdiction of choice for companies looking to develop in digital industries identified as being aligned with Jersey's strengths and long-term interests.

To achieve these aims, Digital Jersey will leverage Jersey's existing advantages including: its competitive tax base, excellent legal system, strong public finances, high-quality workforce and internationally competitive finance sector.

1.2. Our objectives will be SMART

Digital Jersey will measure its impact on three key areas: economic, social and reputational. In developing these primary objectives and the programmes, initiatives and processes that will deliver them, Digital Jersey has adopted the SMART process for setting targets.

Specific:	clearly identifiable
Measurable:	delivery and achievement can be monitored
Achievable:	within the resources and influence of the stakeholders
Relevant:	coherent with the aims of all stakeholders
Time constrained:	we know when it's underway and then complete

1.3. Economic objectives

Economic progress will be measured by contribution to GVA, job creation and the number and 'health' of digital businesses. The long-term objectives are to:

- Increase revenue from the digital sector by a factor of five² by 2020, by increasing economic activity from the Island, encouraging inward investment and stimulating entrepreneurship
- Create up to 2,200 new jobs in the digital sector by 2020, including 400 by the end of 2016. This represents a four-fold increase in employment over the current level of 1.3%
- To attract 40 inward investment opportunities by 2016
- Create a broad portfolio of funding and investment mechanisms, including a Jersey Tech Growth Fund

² The economic return of the digital sector was generally accepted to be around 1.5% of GVA in 2012, but it should be noted that measurement of GVA, falling within the aegis of the statistics department of the States of Jersey, is a difficult figure to measure precisely as it relies upon accurate self-reporting of company data outside the mandatory requirements of the taxation systems.

1.4. Social objectives

Progress towards a connected, digital society will be measured by an increased provision of online services by government, changes in the education curriculum, improved skills and awareness in the general population and the development of communications infrastructure. The key objectives are:

- A full-service e-government platform by the end of 2016, with services delivered by the private sector
- £50M growth in the digital sector to deliver e-government and innovative services over the platform by 2020
- Establishing skills development programmes for students and those in work from 2014
- 75 students per year employed by Jersey's digital companies from 2018
- All students to have free high-speed connectivity available by mid-2014

Digital Jersey recognises that developing a broader set of social objectives is required to measure progress towards a digitally enabled and connected society. These objectives are more challenging to cast in a SMART format, but will be developed as this plan evolves.

1.5. Reputational objectives

Establishing Jersey as an internationally, well-regarded 'digital centre', will be measured by rankings in key indices, recognition in target media, online statistics and commissioned surveys. Reputational targets include:

- For Jersey to register in the top twenty in appropriate international indices (e.g. WEF, ITU) for network readiness and inward investment attractiveness by 2017
- Jersey is recognised as a centre of excellence for target industries
- Jersey establishes a recognised and regarded annual digital conference programme by 2015

1.6. Our objectives flow into EDD's strategic priorities

The States of Jersey's Economic Development Department (EDD) Enterprise Strategy/Action Plan, due for publication in 2014, creates structure around four priorities:

- Improving the productivity of business in Jersey and reducing the dependence on inward migration
- Support for high-growth firms in high-value activity
- Attracting inward investment in high-valued-added activities
- Ensuring that regulation does not impede business

The actions and objectives in this plan align with and support this Enterprise Strategy.

2. Digital Jersey is based on core values and stakeholder engagement

Constituted in 2012, DJL became operational in February 2013 following the appointment of the Board and Chief Executive Officer.

DJL is a States of Jersey-funded, independent organisation incorporated as a limited company. Our stakeholders include: industry, government, students, communities of interest, and the residents of the Island.

2.1. Digital Jersey operates to a set of core values and behaviours

Digital Jersey conducts itself according to core values as follows:

Communication:	Open communication with all stakeholders, partners and contacts, on-Island and off-Island.
Innovation:	To bring opportunities for innovation to businesses and students, innovative services to the community and thought-leadership to the digital sector.
Catalyst:	To catalyse growth in economic activity and employment, whilst creating a more digitally enabled society.
Support:	To support the Island's existing businesses and to facilitate inward investment by successful companies.
Equality:	To ensure that the future of the digital Island is not polarised by a digital divide either through the availability or cost of services to all communities.
Ethics:	Digital Jersey will operate in an exemplary way. Its corporate governance terms of reference adhere to Nolan's seven principles of public life: Selflessness, Integrity, Objectivity, Accountability, Openness, Honesty, and Leadership.

2.2. We have a three-part structure

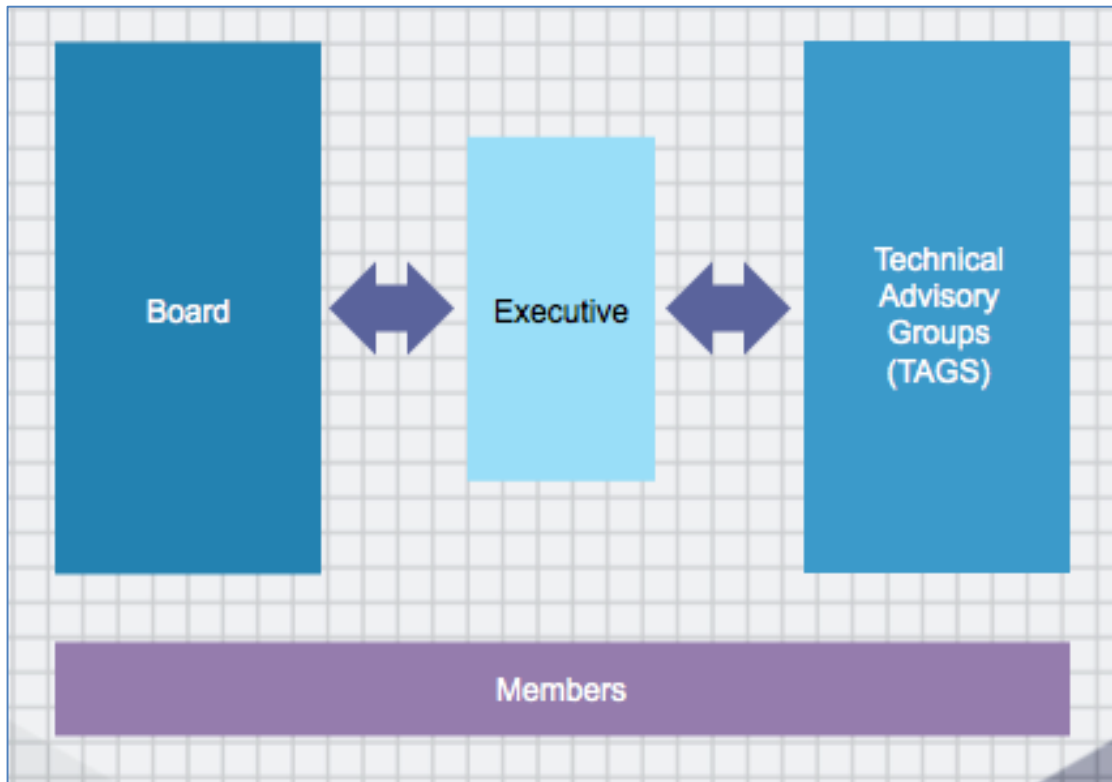
Board: The Digital Jersey Board comprises a Chair, four off-Island non-executive directors with skills and experience directly relevant to the aims and objectives of Digital Jersey, two on-Island non-executive directors and the CEO (see Appendix 1).

Executive: A small executive team led by the Chief Executive.

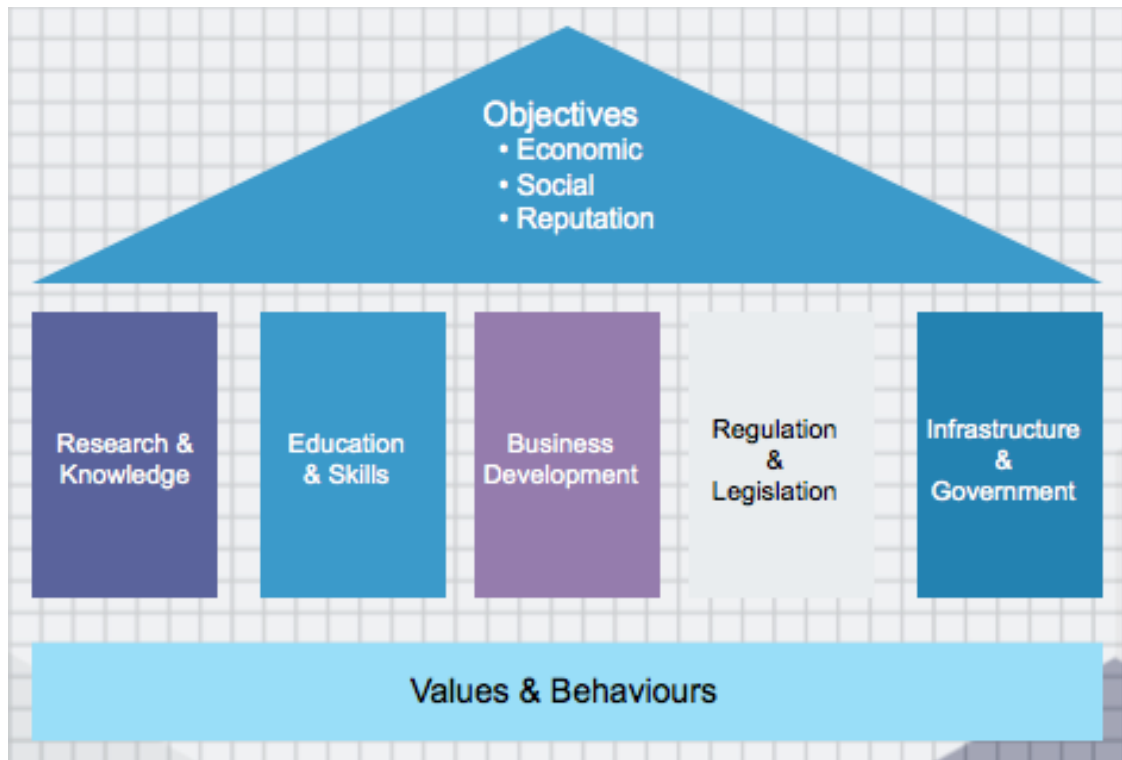
Technical Action Groups (TAGs): TAGS focus on development and execution of this plan. TAG members are voluntary contributors and provide Digital Jersey with a significant resource to both plan and deliver programmes through:

- i. Engagement with stakeholders
- ii. Knowledge of Jersey's business community
- iii. Expertise in technical areas

TAGs consist of chairs, appointed by the Nomination & Remunerations Committee, and members that are selected by agreement with the TAG chair and the executive.



The TAGs support the key work streams identified in the initial Digital Jersey's roadmap (published January 2013) and depicted below.



2.3. TAGs are set up to deliver five initial work streams to support our objectives

Research and Knowledge

This TAG's aim is to focus on identifying potential areas for sustainable, competitive advantage and to benchmark where Jersey should position itself in the marketplace.

Initial work has been focused on developing research and data that support key goals and outcomes. A series of practical research workshops were run to define and quantify specific actions and strategies for Digital Jersey.

Education and Skills

This TAG addresses the critical dependency of the lack of skills and capacity in Jersey to support the digital economy. The Education and Skills strategy will encourage effective engagement with schools and education providers and ensure that Island residents have the skills necessary to develop a digital, connected community.

The aim is to deliver a vision for the use of technology in 21st century schooling in Jersey, with a focus on innovation and creativity. The TAG will build positive links between students, schools and the business community. The creation of a learning hub is the first of many initiatives, to foster the development of digital skills in interested secondary school students as an addition to what they are currently doing in school. Other strategies include a BYOD³ initiative in schools, an assessment of the use of a 'trust-based' internet access policy and investigations into how to improve technology usability.

The group is also looking towards developing training and skills programmes within the broader community.

Business Development

The Business Development TAG assists existing Jersey-based digital companies and startups to succeed, whilst also attracting new technology businesses to the Island. For any companies providing technology based products and services considering Jersey as a location to develop their business, Digital Jersey will help them to assess the benefits and use its on-Island connections to make this process easier.

For existing companies already based in Jersey, the group will provide a community forum, promotional support, research, guidance and a channel that enables them to contribute directly to the development of digital strategy.

The group will also provide guidance to companies looking to access the Innovation Fund, as well as looking into alternative options for funding with a focus on helping those organisations that would benefit from investment support.

This group is also responsible for developing Digital Jersey's membership programme, ensuring benefits to participants.

³ Bring Your Own Device

Regulation and Legislation

This TAG will work in alignment with both the Research and Knowledge TAG and the Government and Infrastructure TAG for the purpose of making recommendations for legislation amendments required to support new business development.

To this end, the TAGs are now working together to establish any advantages and disadvantages in terms of the Island's competitive position that can be improved internally.

They will also develop close, constructive relationships with other bodies such as Jersey Finance and CICRA to ensure that Digital Jersey has the backing it needs to facilitate change.

Government and Infrastructure

This TAG ensures that the interests of the digital industry are represented and championed within government and with providers of essential infrastructure, including the communications and utilities.

The TAG considers potential issues with regards to off-Island connectivity and looks at opportunities to enable and aid positive States reform, with a special focus on e-government.

Another key area of focus will be working to better-understand the on-Island telecoms market in order to establish a clear industry position on the challenges regarding service cost, competition and regulation.

3. We understand the digital sector and our competitors' positions

In this section, we examine how Jersey compares to other jurisdictions with digital growth strategies. The competing jurisdictions have been selected on the basis of either contrast or parity.

In summary, while Jersey is late in establishing a growth strategy for the digital sector, there are characteristics that give the Island opportunity for competitive advantage. However, these specifically, and growth in general, are predicated on critical dependencies that are described in Section 5.

Positioning Jersey and developing the Island's strategic approach identifies that:

- A digital strategy needs to fit the environment
- We can learn from other jurisdictions and emulate parts of their strategy but shouldn't copy them
- Small jurisdictions succeed through focussing
- Jersey's social capital is a major advantage

Appendices 2, 3, 4, 5, 6 and 7 support this section with competitor positioned and impact summarised below.

DIGITAL JURISDICTION	BROAD STRATEGY	START POINT	ORIGINAL STRATEGIC PIVOT	CENTRAL FUNDING	FORWARD TARGETING	ON-GOING DRIVER	COMMERCIAL INVOLVEMENT	2012 GROWTH	SUPPORT STRENGTHS
SILICON VALLEY	Collaboration between Public and Private sectors	1950s/93	Stanford/Defence Industry	£2bn in JV	Continuous	Industry	225k+ jobs	4.5% pa	Skills/Finance
UK (Tech City)	Seed Digital Sector	2002/10	Government	£50m+ /S 2.1m TCIO ⁴	Continuous	Industry	1,400+ co's 5,000 (wider)	0.6% (UK) 10% (TCIO)	Data Science, Fin'cl Services
EUROPE (EC)	Employment ⁵	2012	EU Commission	£8bn gov	2020	EU Commission	15m jobs	4% to 5%	Government investment
FINLAND	Pooling Talent	1995	Government	Opaque	2020	Government	8,000+ co's	5.8%	Re-invention
SINGAPORE	Nation master-plan	2006	Government iN2015	£3bn NRF budget	2015	Engagement & E-Gov't	80k+ jobs	7% pa	Government, Nanotech
ISRAEL	R&D spin-offs	Post-war 1948 (gradual)	Tech workforce Education	£1.65bn 2013-2020	2020	Internet of Everything/ Digital Nation. Cisco fibre	Not published	9%	Industrial get up and go
DUBAI	Nation master-plan	2000	Government	Opaque	2020	E-Transform	8,000 jobs	8%	Investment
MALTA	Seed Digital Sector	2008	Government	£30m+fibre	2015	Creative Ind's	7,500+ jobs	2.8%	Private Sector Investment
BERMUDA	Regulatory Reform	1999	E-commerce	£70m	Continuous	E-Security	Not published	-5.7%	Vision
ISLE OF MAN	Regulation + Legislation	2001	E-Gaming	£70m+	2020	Legislation & Infrastructure	40+ co's	6%	Fin'cl Services
GUERNSEY	Published Digital Strategy	2012	Chamber of Commerce	£40m (JT) £2.7m (gov)	Continuous	R&D of 'Digital Guernsey'	29 staff by States for ICT development	?	Fin'cl Services
JERSEY	Seed Digital Sector to start up	99/2013	Government	£40m(fibre) + £1(1999) +£600K (2013)	2020	Digital Jersey + Industry	< 50 ? co's	?	Fin'cl Services

3.1. Jersey's digital picture: skills and schools

The 2012 Skills Jersey & Digital Jersey report 'The Digital Picture' gives a snapshot of the ICT industry in Jersey in 2012. Key points from the report are:

- There are approximately 1,500 digital professionals in Jersey; half were born locally
- 560 staff work in digital companies (as opposed to businesses that have IT departments), making up around 1.3% of the employed population
- The majority of these deliver to the financial services and public sectors

- There are 200 companies describing themselves as IT-focused. The majority are sole traders
- The GVA contribution for 2011 was £25m
- From an annual cohort of 1,000, less than 5% of school leavers each year pursue further education or jobs in ICT or computing
- Jurisdictions with successful digital strategies have strong university connections

The report sets out a number of recommendations, summarised in Appendix 8.

Long-term development of a digital economy requires major changes in education and skills development to support growth. Until then, digital sector growth will depend heavily on inward migration of skills.

3.2. The digital picture: connectivity

Data connectivity is a vital component to any country and an essential foundation for growth for digital economies.

Jersey's domestic IT/telecoms market is an average-to-good performer when compared to other jurisdictions. See Appendix 5 for details on penetration, pricing and speeds. However, while the Island demonstrates generally good levels for mobile subscriptions, domestic broadband subscriptions are relatively low. Jersey is also comparatively late in rolling out 4G networks.

Jersey has multiple service providers for fixed, wireless and mobile voice and data, with a high off-Island data capacity.

However, various factors, including the capital and operating costs of undersea cables and legacy pricing arrangements, mean that the data cost is high and uncompetitive with other jurisdictions in some circumstances; the cost of a leased line to London, for example, may be over five times higher than other jurisdictions.

This is a 'killer risk' for Jersey. Demand for bandwidth and capacity will continue to grow rapidly, as companies move greater and greater amounts of data, especially as new services and applications come online.

While low data costs will not in themselves attract business here, high data costs are a significant barrier. Further, data costs will also begin to challenge businesses already here.

As of September 2013, the Channel Islands Competition and Regulatory Authority (CICRA) is in the process of conducting and responding to a business connectivity survey. CICRA is working closely with Digital Jersey to better understand the views of industry and to help to find solutions that will make Jersey a more attractive place from which to conduct data-intensive business.

Being an Island with a small population, connectivity cost may never be the compelling offer, but neither should it be perceived as a deterrent to growth.

3.3. Competitive landscape and lessons for success

Jersey joins a list of jurisdictions with ambitions to become recognised as a 'digital centre of excellence'. The table in Appendix 2 gives a snapshot of some of the other countries vying for global business; Appendix 6 summarises typical incentive measures.

In general, a significant shift in the performance of the digital sector takes seven to ten years and requires significant long-term government commitment, with priority given to training and inward investment incentives.

Many jurisdictions, such as Malta with the EU, receive massive funding to support specific strategies, with high resultant employment and modest growth. Others, such as Toronto (not included in the appendix table) have offered compelling incentives such as 50% project costs and tax breaks for new businesses.

One common theme amongst broadly successful strategies is the early priority of e-government services, making the process of starting up and interacting with business services as efficient as possible.

Another theme running through success stories in the digital sector is that strategies should fit the environment. India's rise in software and generic biopharmaceuticals was driven by the enormous numbers of qualified graduates available to industry and, initially, relatively low cost.

The historic success stories of Nordic countries in the telecoms industry were driven by communications and high-value employment needs in sparsely populated, high-taxation regions where government support could optimise clustering by providing effective infrastructure that served the general population.

Silicon Valley was born of the post-war imperative to develop defence technologies, aided by talent from local universities and the availability of low-cost space. London's Tech City came from a need to create, and then monetise, innovative services from the internet, with a strong sense of community coming from collaboration between tech companies and the creative community around Shoreditch. Dubai and Singapore are examples of state-sponsored strategies with high spend towards, respectively, incentives and infrastructure.

A final theme that underpins many of these success stories is strong social capital and the ability and intent for the population to collaborate.

4. Summary SWOT

Building on the points above, the position of Jersey from the perspective of Strengths, Weaknesses, Opportunities and Threats, is as follows:

Strengths	Weaknesses
<ul style="list-style-type: none"> • DJL is a well-conceived and supported project • Strong early engagement with DJ and good access to government • High-calibre board • Jersey strengths (tax, finances, skills, legislation and regulation, quality of life) • Social capital • Offshore reputation • Geographical location 	<ul style="list-style-type: none"> • Low numbers in digital sector • Small cohort in education • Limited capacity for population increase • Existing digital capability inward focus • Slow rate of change in States of Jersey • Lack of appetite for diversification • Low entrepreneurial activity
Opportunities	Threats
<ul style="list-style-type: none"> • Gigabit project and ‘walled garden’ test-bed proposition • Focused development of new sectors (data, e-health, social gaming, e-government) • Competitive regulation and/or legislation • University of Jersey • Well-integrated skills pipeline fit for Jersey’s employment needs • Tech investment from Jersey • Potential to move quickly 	<ul style="list-style-type: none"> • Lack of engagement by industry • Constraint on inward migration • Global competition in new markets • Other jurisdictions’ earlier positions • Legislation change too slow • Data connectivity cost

This SWOT analysis identifies significant challenges. However, Jersey’s strengths and the range of opportunities demonstrate that the Island has the potential to develop its digital economy.

See Appendix 9 for an expanding SWOT discussion.

5. Critical dependencies must be in place for this plan to succeed

To deliver the objectives of this plan, Digital Jersey will work with the States of Jersey and others to ensure that the critical dependencies below are understood and in place.

- No barriers to inward migration of essential skills and talent. Development of on-Island skills is a key priority but will take time to gain momentum. In the early years of the plan, these skills will need to be imported
- An education programme that accelerates employment of students and reskilling of employees towards the digital sector
- The communications environment must be exceptional in terms of service reach, domestic and business capability and competitive data pricing
- A compelling inward investment proposition for digital companies is financed by the States of Jersey
- Capacity and capability to make fast legislative and regulatory reform
- A funding regime that encourages investment in the digital sector, from ideas and start-ups to growth. This includes the immediate availability of the Innovation Fund
- The effective development of an e-government platform that delivers improved services to citizens and facilitates the development of new services and business opportunities
- Continued support by the States of Jersey for Digital Jersey

Many of these issues are longstanding and have been well discussed in various reports over many years including the JISC report and 2001 survey (see Appendix 10). Underlying factors that contribute to the lack of progress in addressing these fundamental needs include Jersey's political and administrative structure as well as a culture that resists change.

Our approach to these dependencies is detailed in Section 7.

6. We have identified a competitive position and initial strategic propositions for Jersey

Our competitor analysis and summary indicates that Jersey has strengths and opportunities to develop a competitive position for the Island. From this, a proposition has been formed as to why Jersey can attract and grow a digital sector, together with a range of initial opportunities and new business concepts to focus on.

At the same time, Digital Jersey is identifying the broad range of needs, capabilities, structures and processes, including legislation and regulatory needs, that are required to create the right set of conditions (known as a 'digital ecosystem') for this sector to grow.

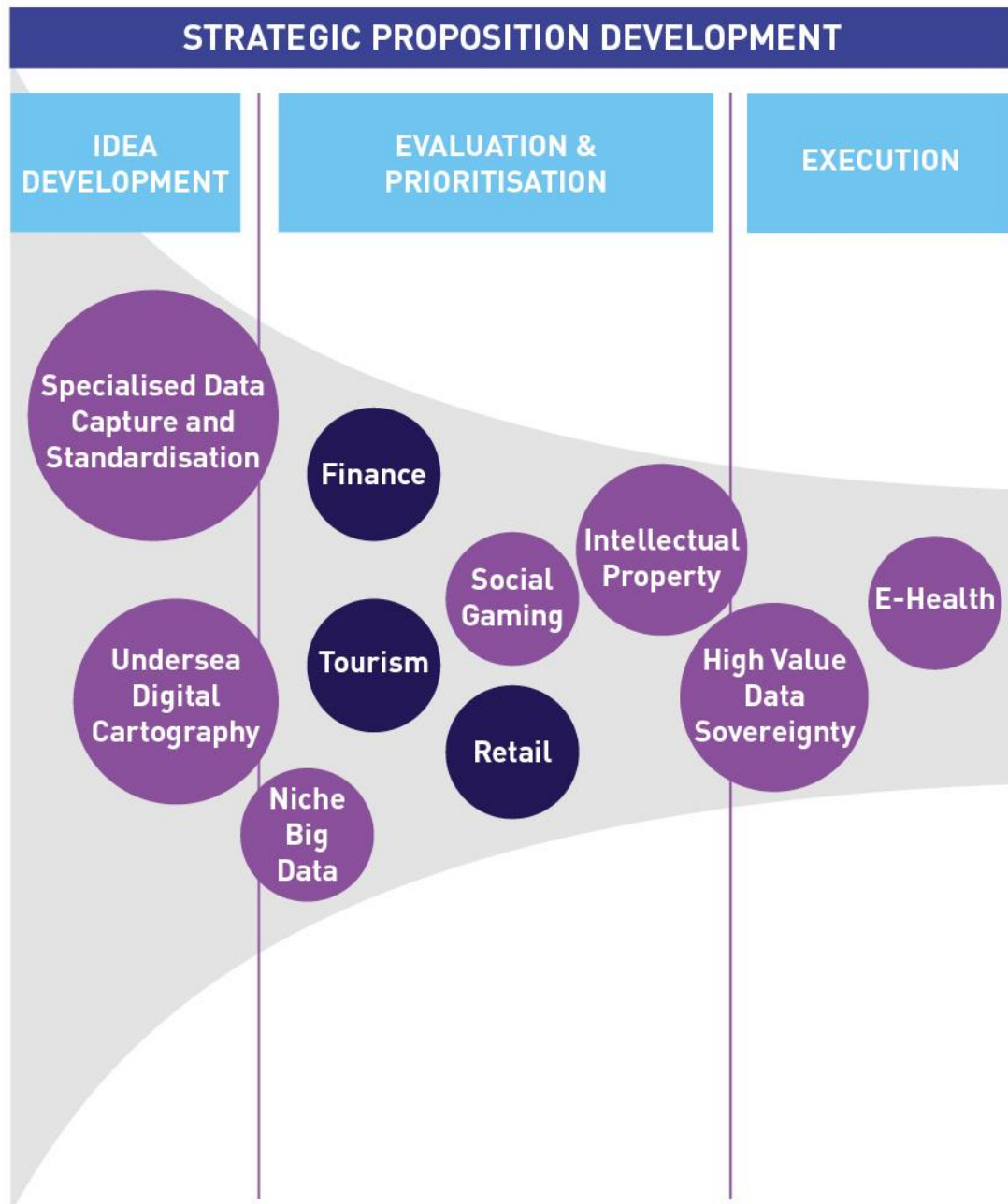
Digital Jersey recognises that in developing the digital sector, the Island cannot be 'all things to all people' and will need to focus on target areas, such as e-health, to succeed. However, it also recognises that this must not be overly prescriptive, as it is practically impossible to accurately predict where new business innovation will come from. The startling development of Facebook, Amazon and Google are evident examples of this.

To assist in determining both the areas of focus and to identify all requirements for Jersey's digital ecosystem, Digital Jersey is employing a strategic tool known as Outcome Mapping. Outcome Mapping identifies a future goal or state and then works backwards to identify all of the steps and capabilities required to achieve the target.

This strategic work is continuing but has identified that the competitive position for Jersey includes:

- Jersey should be positioned as an environment ideal for early movers to demonstrate product advantage in a highly connected population
- Jersey requires a dedicated funding regime for the digital sector that supports ideas, startups and growth
- Jersey should create favourable conditions to commercialise and manage digital assets such as intellectual property, knowledge and companies
- The Island develops as an exemplar in target areas such as e-health
- The ability to create favourable legislation and regulation that enables competitive advantage
- A leading investment market in digital technologies
- Excellent digital first-mover capability comprising:
 - low inertia for business operations and regulation
 - high-speed connectivity across the population
 - a connected early-adopter society benefiting from advanced e-government services
 -

6.1. The opportunity pipeline is building



Existing Jersey Industries

Digital and technology development play a vital role across all industries and sectors. Recognising this, Digital Jersey will support and co-ordinate with existing industry bodies, such as Jersey Finance and the new Tourism Board, and the States of Jersey, on growth strategies in these areas.

6.2. Jersey's competitive position is not prescriptive

Long-term-value-propositions that complement this position are outlined in this section. These are not prescriptive but strategic domains that will be targeted for long-term support by Digital Jersey, through:

- Near-term consulting with Jersey businesses
- Commissioning external research to better understand global markets addressable according to Jersey's strengths
- Inward investment actions such as awareness, marketing and creating incentive packages appropriate to the sector
- Supporting expert seminars and outbound missions
- Assisting Education, Sport & Culture and educational establishments in the Island with industry driven skills programmes

6.3. Summary of strategic propositions

The following propositions are under evaluation and development and Digital Jersey will publish the results of internal consultations and externally sourced reports on each as they are developed.

TOPIC	STATUS	NEXT STEPS
e-Health, including telehealth, telemedicine and adaptive technologies for impaired groups (see Appendix 11 for further details)	<ul style="list-style-type: none"> Existing activity in business Inward investment prospects New company prospect (Jersey) Under Business Development TAG 	<ul style="list-style-type: none"> ITT issue in 4Q2013 for external research commissioning to understand addressable market Tending existing prospects Identifying events to attract to Jersey or at which to promote the island
e-Gaming and social gaming (social gaming has no monetary prize)	<ul style="list-style-type: none"> Existing businesses in Jersey Business Development TAG active in researching opportunities, regulation and legislation Inward investment prospect 	<ul style="list-style-type: none"> ITT for external report being drafted for EDD by BD TAG Managing inward pipeline
Intellectual Property - The management of IP to commercial advantage from Jersey	<ul style="list-style-type: none"> BD TAG active in researching opportunities, regulation and legislation 	<ul style="list-style-type: none"> Stakeholder consultation facilitated by DJL to determine viability and next best steps
e-Government - The establishment of a platform to enable innovative services for Jersey's population	<ul style="list-style-type: none"> Government & Infrastructure TAG working closely with reform process Experts available to G&I TAG to advise on technical matters 	<ul style="list-style-type: none"> Continuing support to the States of Jersey from Digital Jersey to expedite e-gov't
High Value Data Sovereignty (HVDS) - The specialised administration of valuable data within Jersey	<ul style="list-style-type: none"> Existing business activity Some proposition research conducted by Research & Knowledge TAG 	<ul style="list-style-type: none"> Stakeholder consultation facilitated by DJL to determine viability and next best steps
Jersey Tech Growth Fund - An island-domiciled fund to complement existing funding mechanisms in Jersey	<ul style="list-style-type: none"> Planning fund underway Proposed team Meetings held with JFL and trust administrators Appendices 10 & 11 give a comparison of investment models 	<ul style="list-style-type: none"> Selection of Jersey-based services to support the fund administration The building of the fund, to launch in 2014
Existing sector support: Financial Services	<ul style="list-style-type: none"> Initial discussions with Financial Services Sector 	<ul style="list-style-type: none"> Identify channels to market for FSS innovation and opportunity areas
Existing sector support: Tourism	<ul style="list-style-type: none"> Island Games 2015 Showcase Pearl Izumi Tour Series 2014 sponsorship and showcase 	<ul style="list-style-type: none"> Build schools programme around event (June 2014)
Existing sector support: Retail	<ul style="list-style-type: none"> Individual approaches by companies requesting help Chamber of Commerce Retail working group 	<ul style="list-style-type: none"> Closer liaison with Chamber of Commerce, IoD, Jersey Business Ltd

6.4. Future opportunities

The list in the previous section represents known areas of interest. Digital Jersey is also tracking longer-term potential of development in the Island.

From a series of think tank sessions and initial research, propositions are being developed in the following areas.

Underwater digital cartography	See appendix 12
Niche Big Data	See Appendix 12
e-Learning	See Appendix 12
Specialised data capture and standardisation	Awaiting summary
Meeting global skills demand	Awaiting summary
Digital skills development faculty	Awaiting summary
Test-bed city of the future	Awaiting summary
Digital access for the impaired	Awaiting summary
Objectives to complete <ul style="list-style-type: none">• Two-four concept areas still to be identified• Priority ranking recommendations to Digital Jersey• Non-executive review and comments	Not all will reach the second stage gate but those that do will focus the commercial support of Digital Jersey.

7. Measures to improve capacity and capability

Section 5 highlighted critical dependencies that will directly impact Digital Jersey's success. Digital Jersey's actions to address these are:

7.1. The growth of economic activity will be led by employment.

As Jersey must engage in diversified business and new enterprise to grow, the sector needs new talent, as the majority of digital activity in the Island serves the States of Jersey and the financial services sector.

To embark upon new endeavour, there are four sources of skills:

- The independent developer community: numbering fewer than 50, these have a higher than average overseas business and generally greater agility than companies
- Students of ICT-related subjects: approximately 25 per annum come into employment or job seeking from Highlands College, whilst around 15 per annum return to Jersey within 10 years of graduating in the UK
- Imported, licenced professionals: the fastest way to establish new competencies in the Island. This has been a consistent strategy across other jurisdictions intent on driving growth in a new sector
- Diversification by existing businesses and reskilling of workers for digital endeavour: in general, existing ICT businesses have focused on the domestic market with marginally differentiated products and have not demonstrated an appetite for diversification

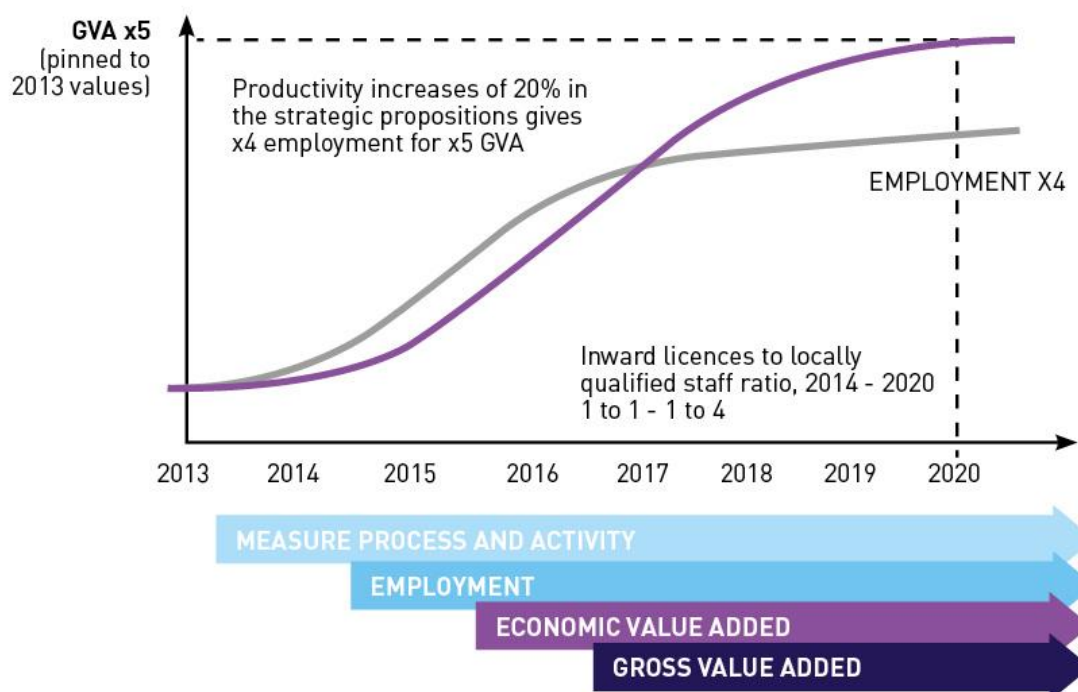
To meet the employment demands implicit by the 'factor five' economic growth target, we note that:

- Early activity increase in the sector will come primarily from imported talent
- Students make continuing education choices at an early stage and so any strategy, policy or incentive applied now will still see a delay before significant changes can be effected amongst school leavers - although the Digital Learning Hub could accelerate digital sector employment amongst those choosing not to go to university

Hence, in the initial stages of growth, the prime source will come from imported skills and the secondary source the migration of locally employed people to the digital sector, then school leavers and graduates. Enacting an achievable growth in these employment sources could create 2,200 new jobs by 2020, given the critical dependencies in place.

Looking at the composition of employment growth, we see the s-curve, below reflecting a slow start in both new employment and graduating students. This represents the difficulty in migrating skills to new endeavours in the digital sector and of the early career choices made by students, many of whom who will have made decisions now that will affect their education choices in 2017.

The critical dependencies will determine how quickly employment, and then economic returns, will flow from activities and processes to stimulate growth.



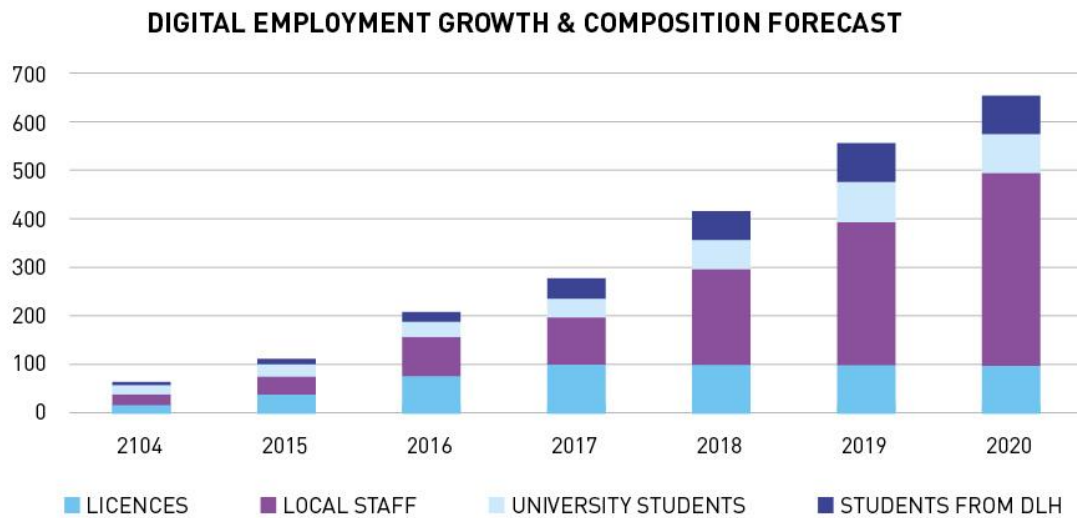
Key observations from this indicative graphic are:

- That support processes and activity can help to stimulate employment, the measurement of which clearly leads the measurement of resultant economic activity
- That the productivity of the sector should increase through support for high-value activities
- That the sector will need to prioritise rapid employment but aim to achieve a ratio of one license to four locally employed staff over time; this objective will be delivered by education and skills programmes

Therefore, to meet the employment demands implicit by the 'factor five' economic growth target, we note that:

- Early growth in the sector will come primarily from imported talent
- Students effectively make continuing education choices at an early stage, therefore any strategy, policy or incentive applied now will still see a delay before significant changes can be effected amongst school leavers

Hence, in the initial stages of growth, the prime source will come from imported skills and the secondary source the migration of locally employed people to the digital sector, school leavers and graduates. An indicative growth balance is summarised in the table below:

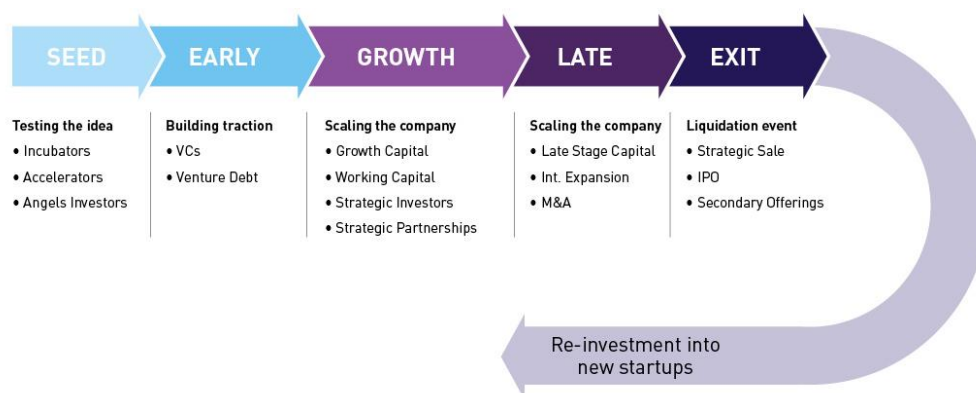


The chart above shows the figures as annual new employment, graphically broken down into these components.

7.2. Growth needs to be underpinned by a thriving investment market

The complementary resource required to drive the sector growth is funding. As a major player in financial services, Jersey should be ideally placed to position itself as a centre for tech funding.

Businesses require a complete pathway of funding, and this need presents a specific opportunity for Jersey with its deep expertise in financial services. The key funding stages are shown below:



Initial startup funding should be complemented by assistance from the Economic Development Innovation Fund.

Digital Jersey fully supports the Innovation Fund initiative and looks forward to it starting without further delay. It should be recognised that the Innovation Fund is open to all businesses and is not digital sector specific. Digital Jersey strategy recommends that.

- The Innovation Fund / EDD recognise the importance of the digital sector and 'ring fence' 50% of the fund for this area.
- A digital specific seed fund is created to be administered by Digital Jersey.

In the US, stage 2 funding is provided by the VC community, driven by serial technologists and entrepreneurs. In Europe, this community is far less developed, and so a funding "gap" has emerged.

Jersey, by virtue of its very high density of wealth and mature funds industry has the opportunity to provide funding services to bridge this gap. This could be achieved by encouraging higher reaching angel funding and enabling the establishment of technology specific funds.

The former already has some activity in Jersey, but should be enhanced by a positive fiscal stance, such as tax relief on investment. The latter may be achieved by amending the regulations for expert funds. Appendix 7 tabulates some typical investment parameters, demonstrating the gap in the market for early stage equity and growth funding

7.3. Incentives

In addition to making licences available and providing a comprehensive funding pathway for digital businesses, we must recognise the international mobility of both technology businesses and investment.

Jersey must therefore present a compelling case for technology investment. The Island already provides a business-friendly environment by virtue of its fiscal regime, for example absence of capital gains tax and 0/10 corporation tax.

Appendix 6 outlines some of the incentives available in other jurisdictions.

In order to stand out against jurisdictions competing for mobile investments, Jersey must demonstrate incentives specific to digital technology. These could include, for example:

- A local variant of the UK's EIS, including capped, time-limited relief on personal tax
- Startup support for facilities, training and travel
- Data connectivity cost reduction where it is a barrier to investment

Digital Jersey is in discussion with telecoms providers CICRA and EDD to address the issue of data connectivity cost.

7.4. Education

Critical to long term and sustained success Jersey must reduce its dependence on inward skills migration. Key to this is channelling more Jersey students towards the digital sector and establishing programmes or reskilling from other industries.

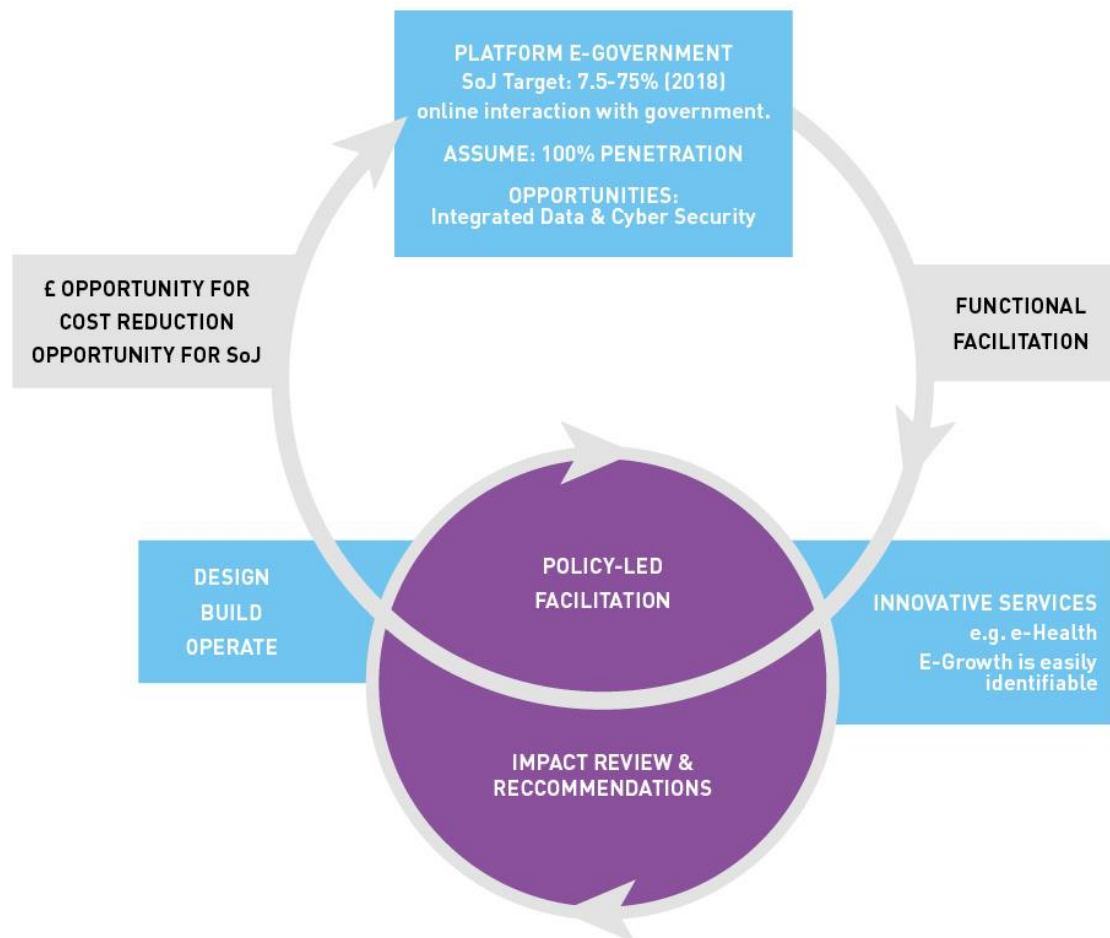
With a cohort of approximately 1,000, very few students come to employment in Jersey's digital sector each year. Jersey must support a mechanism to enable more school leavers to rapidly gain the skills that Jersey's digital industry needs.

Digital Jersey's plan includes a broad and deep series of programmes addressing this area.

7.5. The development of e-government is essential

Sustained growth in many digital jurisdictions is closely linked to strong government support and a move to an effective e-government platform providing services to residents. This also provides opportunities for economic and societal benefits through the delivery of innovative services.

Digital Jersey strongly supports the States of Jersey's reform programme and the planned development of an e-government platform. In its early stage in 2013, this, along with 100% fibre connectivity, will propel Jersey to the premier league of jurisdictions with regards to network readiness. Furthermore, it will link the population more closely to the digital sector.



The delivery of e-government in the States of Jersey presents a significant opportunity for local IS/Digital Suppliers to participate in the delivery and long-term maintenance of those services, stimulating the economic and skills growth of the local industry.

Digital Jersey is collaborating closely with the States of Jersey to ensure that the skills and capacity necessary are available locally to provide support for this programme. Additionally, Digital Jersey will be marketing the Island to companies providing services in this area, as an attractive market for investment and development.

8. Our programmes will deliver capacity building, capability increase and innovative business opportunities into short and long-term targets

The programmes and projects in this section are intended to build on the strengths of Jersey, realise opportunities and help to overcome some of the Island's inherent weaknesses and shortcomings. They fall into three categories:

- Capacity building, to facilitate scaling of digital industry and address the need to reduce dependency on imported skills
- Capability increase, to broaden Jersey's digital skills base
- Innovative services, to present new opportunities to businesses in Jersey and engage society with beneficial services

This section summarises the short-term targets for economic growth and social benefit, then expands the activities that will be implemented to achieve these and the 2020 targets.

The activities do not seek to emulate Silicon Valley, Malta, the Isle of Man or indeed any other jurisdiction. They serve to learn from experience and best practice, to employ best known methods to ensure that the digital sector will grow according to Jersey's strengths and not in the image of what has already been done elsewhere.

It should be noted, from the previous chapters, that the transition from inertia to growth is dependent upon criteria over which Digital Jersey has but partial influence.

The rate at which growth can occur will be enabled by incentives, funding and the ingress of new skills, but be limited by the numbers available for new employment. The early phase of growth will be a period of uncertainty at the bottom of the s-curve from in Section 7.

8.1. Short-term target summary

The following is a summary of specific metrics and their short-term targets. Further detail is given in sections 9.1 to 9.4, which cover the underpinning, or indirect, activities, outputs and outcomes that will complement the direct measures that directly address these targets.

Selected near-term activities and targets	To year-end 2014	2015
New employment in the digital sector	65	115
New companies created in Jersey	6	8
Inward investments – new companies	8	10
Outbound missions – companies attending	15	20
Growth incentive package and FDI proposition	Agreed with EDD, active	
Digital Learning Hub operational and working with students and school leavers	40 students	70 students
Jersey Space Programme	Initiate programme	In curriculum
Major tech conference hosted in Jersey	✓	Two
Co-working space for startup companies	Co-located with DLH	
Formation of Jersey Tech Growth Fund	Fund formed	Fund operational
Funding applications – Innovation Fund and other	8	12
Apple iTunes store in Jersey	✓	
Monthly tech seminars to extend the reach of the sector	✓	
3D printing programme in schools	✓	
Formation of Channel Island Info Sec Forum	✓	
Cisco NVI hub in Jersey		Yes/pending
Initiate target sector development	E-health, social gaming, e-money	
Establish baseline data for economic activity of the sector	Publish	
Create impact evaluation framework	Publish	Use

These targets address the rationale behind Digital Jersey. The following initiatives expand on WHAT we will do and HOW we will do it.

8.2. Detailed examples of three measures

Digital Learning Hub

As part of its commitment to actively support digital education in Jersey, Digital Jersey has begun to work with Education, Sport and Culture to create a digital learning hub where Jersey students will be able to learn technical skills in an environment that also prepares them for digital sector employment within a year of leaving school. The hub will help to drive a much-needed boost to the numbers of young people equipped to join Jersey's growing digital sector.

The Digital Learning Hub will have three distinct user groups: students still at school, school leavers and those wishing to learn new digital skills. School leavers will use the hub during the day, interacting with startup companies and learning to solve real problems for real businesses.

For school students, Digital Jersey took a lead from Stephen Heppell's open discussion in May, where he encouraged the community to engage children in shaping the way they learn. Digital Jersey hosted a workshop where students were asked to describe what they would like to see from a physical learning space that would promote learning, interaction and engagement.

Students emphasised a real desire to be taught digital skills by industry professionals with a passion for the subject matter. In addition to this, students have expressed an interest in wanting to learn about a wide range of digital subjects. The feedback they provided included:

- Students want a consistent physical space accessible after school as well as during the weekends and holidays
- The physical space must have completely unrestricted access to the internet
- The physical space should be designed to accommodate students bringing their own devices, as well as having hardware and software not typically available to students at home
- The culture should be informal and relatively unstructured; students should be treated like adults
- Those teaching should be industry professionals with a passion for the subject matter and an understanding of what skills are relevant in the workplace
- Students want a highly interactive project website, giving them exclusive access to educational material (videos, articles, games) that they can use in partnership with their on-site learning
- The project website should employ gamification mechanics, allowing students to track their progress easily and compete with their peers
- Students want to learn about a wide range of digital subjects, from web development to understanding Facebook's business model. Digital Jersey will need to focus on the broader, more popular requests (e.g. computer programming) before attempting to tackle some of the more niche requests

Based on this feedback, Digital Jersey has started to explore digital companies' employment needs, to establish the technical and organisational skills they need. These businesses cover areas such as software coding, web development, digital media and animation, but Digital Jersey will be asking all of the Island's digital businesses to consider how they could commit to the Island's future through the hub.

The Digital Learning Hub will launch in the first quarter of 2014, initially with the sessions taking place in schools around the Island. As the hub develops, sessions will take place in the new facilities and content will be closely aligned with the school curriculum.

Further developments will include courses for adult learners.

Jersey Tech Growth Fund

The principle is to respond to:

- The need for a congruent funding pathway for ideas, startups and growth from Jersey
- An increasing appetite amongst Jersey investors to have a tech fund available

End investments would initially be in Europe (the belief is there's not enough deal-flow in Jersey yet to have anything inward-pointing), but of course we would wish for Series A and subsequent growth companies in Jersey to have a strong chance of gaining investment. Digital Jersey would take on an investor-readiness mentoring role for digital companies.

The idea is to get 'tech' and 'Jersey' in the same breath, confluent with building new business.

The process of planning and building a c. £250m fund is in progress as of September 2013.

Jersey Space Programme

A five-year programme to engage school students in STEM subjects, collaborative projects and working with industry. The programme will include launching a Cubesat satellite for Jersey.

The programme will involve students from primary and secondary schools at every step of the way, with the intention of involving an entire generation of Jersey children in an exciting project that the world will see and admire. The intermediate steps along the way will include collaborative projects with space themes.

- Digital Jersey's intention is to integrate the Jersey Space Programme into school activities and the curriculum, and this is dependent on the support of Education, Sport and Culture
- We plan to launch after four years, pending launch vehicle availability, then have a year (at least) following this where activities will include writing software applications to exploit the satellite's data streams

9. Overview of short and medium-term activities

The following tables give an outline of the processes and activities planned by Digital Jersey. These activities all directly contribute to the high-level objectives. They do not constitute the full plans themselves but indicate the broad areas of activity, the background and the expected benefits.

The tables are a working reference document and will be subject to progress updates, with significant announcements made through Digital Jersey's website and press releases.

9.1. Awareness

TYPE AND OBJECTIVES	INITIATIVE	INPUTS/ STAKEHOLDERS	OUTPUTS	OUTCOMES	TIMESCALE
INTERVENTION: REPUTATIONAL SOCIAL	Apple iTunes Store: Requesting that Apple sets up an iTunes store for Jersey, giving legal access to educational content through iTunes U	<ul style="list-style-type: none"> Digital Jersey lead EDD Apple Inc. 	<ul style="list-style-type: none"> Jersey's population may access content more easily and legally More use of iTunes U MOOCs 	Greater resources for training of students and later learners in Jersey	In progress
SOCIAL	Digital Jersey monthly tech seminars: Regular seminars with both on- and off-island speakers on technology or policy matters	<ul style="list-style-type: none"> DJL Techtribes (some joint events) 	<ul style="list-style-type: none"> Engagement with different business and/or social groups around themes aligned with Jersey's strategic propositions Greater association of creative digital skills with Digital Jersey 	More measureable activity in the digital sector	27/9: Ben H 29/10: Ivan N
EVENT: SOCIAL	TeachMeet: ???	<ul style="list-style-type: none"> Digital Jersey lead Schools 	Teachers better-equipped for the challenge of teaching with digital technologies	Higher quality skills on graduating from education systems in Jersey	4Q2013
EVENT: ECONOMIC REPUTATIONAL	Channel Islands Information Security Forum (see programmes below)	<ul style="list-style-type: none"> Digital Jersey CIISF 	Seminar in 4Q2103	<ul style="list-style-type: none"> Increased inward investment opportunity Mission delegates for 2015 	4Q2013
EVENT: REPUTATIONAL	Law Via The Internet 2013, Jersey Jersey hosting the worldwide conference	<ul style="list-style-type: none"> Digital Jersey; event sponsor 	<ul style="list-style-type: none"> Extended awareness of Digital Jersey across 200 participants and associated publicity 2 inward investment opportunities 	<ul style="list-style-type: none"> Establish Jersey as a preferred location for the administration of internet-enabled law 	Event: Sept 2013
EVENT: REPUTATIONAL ECONOMIC	DLD 2013, Tel Aviv An outbound mission with industry to the tech conference	<ul style="list-style-type: none"> Locate Jersey (lead) Digital Jersey Acrewite 	<ul style="list-style-type: none"> 6 export opportunities 2 inward investment enquiries 	<ul style="list-style-type: none"> 2014 2 export contracts 1 inward investment 	October 2013
EVENT: REPUTATIONAL ECONOMIC	Island Innovators 2014: Landing the annual tech 'unconference' in Jersey <ul style="list-style-type: none"> 10 Jersey companies attending by invitation Peripheral events with schools/students 	<ul style="list-style-type: none"> Digital Jersey Locate Jersey Acrewite 	<ul style="list-style-type: none"> 8 secondary schools attending Themed events 	<ul style="list-style-type: none"> 2014 5 collaborative projects 2 inward investments 5 School projects 	Planning in progress for April 2014 event
	Digital Shoreditch Mission, 2014 Outbound mission to Shoreditch for prearranged meetings and seminars	<ul style="list-style-type: none"> Digital Jersey 	<ul style="list-style-type: none"> 8 companies attending 	<ul style="list-style-type: none"> 4 export contracts 1 inward investment 	
REPUTATIONAL	Website phase 2: DJL website evolution to give additional functionality for showcase material, blogs and membership benefits	<ul style="list-style-type: none"> Switch Digital MalletCrane 	<ul style="list-style-type: none"> Membership Ideas marketplace 	<ul style="list-style-type: none"> 2014 5 collaborative projects 	September 2013
SOCIAL	Membership Proposition: A membership proposition that will allow differentiated interaction for businesses, individuals and students	<ul style="list-style-type: none"> DJL Digital Jersey 	<ul style="list-style-type: none"> 2015 500 Jersey registrations 50 paid registrations 100 off-island registered 2020 5,000 Jersey registered 5,000 off-island 	<ul style="list-style-type: none"> Membership income: £50k by 2016 	Membership available: 4Q2013 membership charge applied: 1Q2015

9.2. Programmes

OBJECTIVES	PROJECT	INPUTS/STAKEHOLDERS	OUTPUTS	OUTCOMES	TIMESCALE
REPUTATIONAL ECONOMIC	Jersey Tech Growth Fund: To set up a tech investment fund from Jersey to meet a need for funding for new business	<ul style="list-style-type: none"> Digital Jersey JFL Investors 	<ul style="list-style-type: none"> A fund with high visibility for Jersey companies A complete lifecycle funding package for Jersey 	<ul style="list-style-type: none"> Reputational advance for Jersey as a tech environment Investment in 10 companies by 2018 	Fund established 4Q2014 First investments 2015
SOCIAL ECONOMIC	Digital Learning Hub (DLH): A centre for connecting the employment needs of digital industry with students, creating pathways for digital skills to increase employment	<ul style="list-style-type: none"> DJL lead SoJ education Schools Highlands College Industry 	Targets for students going through DLH (students/school leavers): 2014: 30/10 2015: 50/20 2016: 80/40 2017: 120/60 2018: 200/100 2019: 200/120 2020: 200/120	Targets for employment by Jersey companies from DLH: 2014: 5 2015: 10 2016: 20 2017: 40 2018: 60 2019: 80 2020: 80	Business plan: 4Q2013 Commencing: 1Q2014 School leaver intake: 4Q2014 First employments: Q42015
ECONOMIC	Co-working space: A space within Digital Jersey set up as a flexible workspace where people with ideas and startups can mix with students to develop new ideas	<ul style="list-style-type: none"> DJL 	<ul style="list-style-type: none"> 12 spaces available from 2014 for startups Reciprocal rights with Tech Hub London Incubator functionality 	<ul style="list-style-type: none"> Increased entrepreneurial activity in Jersey Increased flow of young companies into Jersey 	Starting 1Q2014
SOCIAL REPUTATIONAL	Jersey Space Programme: A five-year programme to inspire and engage a generation of Jersey students	<ul style="list-style-type: none"> DJL All schools (P&S) Industry O3b 	<ul style="list-style-type: none"> 10,000 students with access to the programme O3b scholarships 	<ul style="list-style-type: none"> By 2020: 5 startups from students Contributing to the increase in uptake in STEM subjects at school Increased employment in the digital sector 	Announcement: Sept 2013 Business plan: 4Q2013 Starts: 4Q2013 Curriculum: 4Q2014 Sat Launch 2017 Completion 2018
ECONOMIC REPUTATIONAL	Channel Islands Information Security Forum: A group promoting cyber security skills and products in the Channel Islands	<ul style="list-style-type: none"> Industry Digital Jersey 	<ul style="list-style-type: none"> Digital Jersey to assist with the launch of CIISF and to support events Intent to become a leading group for infosec 	<ul style="list-style-type: none"> New businesses, new employment Increase in off-island business won 	Ongoing from Sept 2013
SOCIAL	3D Printing Roadshow: Evolving from pilot deployment in Grainville School	<ul style="list-style-type: none"> Digital Jersey Schools ESC Industry (mentors) 	In discussion with ESC	In discussion with ESC	Initiated in Grainville School: Oct 2013 Extension to other schools in 2014
ECONOMIC	Digital Jersey Ideas Marketplace: To link project ideas with resources (talent/funding)	<ul style="list-style-type: none"> Digital Jersey Businesses Entrepreneurs Investors/JIF 	<ul style="list-style-type: none"> Funded projects 2014: 5 projects 2015: 10 projects 	<ul style="list-style-type: none"> Diversified digital business New employment 	Starting Q4 2013

9.3. Projects

TYPE AND OBJECTIVES	INITIATIVE	INPUTS/STAKEHOLDERS	OUTPUTS	OUTCOMES	TIMESCALE
PROJECT: SOCIAL	Project: Be Very Afraid: Prof Stephen Heppell's format to encourage collaboration and creativity in school students	<ul style="list-style-type: none"> Digital Jersey lead All schools (P&S) 	BVA event with 12 projects taken to showcase	<ul style="list-style-type: none"> A startup business Future BVA events 	Starts November 2013 for showcase on 6 th March 2014
ECONOMIC REPUTATIONAL	Cisco NVI Hub: Jersey to host a Cisco NVI node, connecting with innovation centres around the world	<ul style="list-style-type: none"> Digital Jersey Cisco JT 	Connection with 150 innovation nodes globally by 2016	Increased export opportunity for Jersey business Enhanced opportunity for schools to interact with entrepreneurs	By 2016
PROJECT: ECONOMIC SOCIAL	Immersive environment Jersey: An augmented reality/3D environment for Jersey developers to create: <ul style="list-style-type: none"> Social media layers Commercial layers with revenue models 	<ul style="list-style-type: none"> DJL SoJ Developers Tourism 	<ul style="list-style-type: none"> An open, linked data environment for the development of new location-based services 	Increased economic activity	Project launch 2014
PROJECT: ECONOMIC SOCIAL	JASPA: Adaptive collaboration environment for autistic community. Pilot project for Digital Ideas Marketplace	<ul style="list-style-type: none"> DJL Autism Jersey Code/UX developers Investors 	<ul style="list-style-type: none"> A supportive product launched free to Jersey A company to scale and sell overseas 	Increased economic activity and employment	September 2013 – one year initial

9.4. Processes

TYPE AND OBJECTIVES	INITIATIVE	INPUTS/STAKEHOLDERS	OUTPUTS	OUTCOMES	TIMESCALE
REPUTATIONAL ECONOMIC	Index presence for Jersey: To establish Jersey on international ICT/telecoms indices for better long-term progress assessment and visibility of Jersey for advantageous metrics (e.g. IP connectivity, investment availability)	<ul style="list-style-type: none"> Digital Jersey lead States of Jersey 	<ul style="list-style-type: none"> Listing in WEF and ITU data Benchmarking data for assessing growth in the digital industry 	<ul style="list-style-type: none"> More accurate evaluation of impact Enhancement to FDI offering 	In progress
INTERNAL	Impact evaluation framework: DJL will create an impact evaluation framework to assess the impact of its operation. This will use UK Treasury's Green Book guidelines for publicly funded programmes	<ul style="list-style-type: none"> DJL SoJ/EDD 	<ul style="list-style-type: none"> ROAMEF evaluation framework 	Quantified justification of investment in Digital Jersey	By 1Q2014
INTERNAL	Alignment with Enterprise Strategy: The Enterprise Strategy is in draft form at the time of publication of this document. Following its publication, we will correlate our outputs and outcomes appropriately	<ul style="list-style-type: none"> DJL SoJ/EDD Published Enterprise Strategy 	<ul style="list-style-type: none"> Aligned outputs and outcomes, giving read-across from Digital Jersey's performance monitoring to EDD's Enterprise Strategy 	<ul style="list-style-type: none"> Clearer evaluation of impact 	Following publication of EDD 2013 Enterprise Strategy
REPUTATIONAL SOCIAL ECONOMIC	Digital Ecosystem support: A compelling inward investment incentive package, including competitive data pricing on- and off-island to stimulate growth	<ul style="list-style-type: none"> DJL G&I TAG SoJ/EDD Connectivity providers CICRA 	<ul style="list-style-type: none"> Short-term measures to enhance the Jersey proposition for new digital business A long-term strategy for volume-driven competitive pricing 	<ul style="list-style-type: none"> Increase in inward investment 	2014
	Support to reform process: Expert positions from Digital Jersey on data and e-government	<ul style="list-style-type: none"> G&I TAG 	<ul style="list-style-type: none"> Advice, positions, papers to SoJ 	<ul style="list-style-type: none"> E-Government platform for services and innovations Cost reduction for SoJ 	By end 2016

9.5. Addressing present and past issues

As previously demonstrated in this Business Plan, Jersey has been presented with issues that it faces regarding the future. There are issues that are present in both the 2012 Digital Picture report and 2001 Jersey Information Society Commission that Digital Jersey's future initiatives will address. The combination of TAGs focusing on each of these different areas, along with programmes and creative initiatives to create paths to resolution, is demonstrated in the table below.

TAG (APPENDIX 3)	PRESENT AND HISTORIC ISSUES (2012 DIGITAL PICTURE REPORT, APPENDIX 2; 2001 JISC APPENDIX 4)	PATH TO RESOLUTION
EDUCATION AND SKILLS	<p>The Digital Picture report dedicates much of its time to addressing education and skills issues in the island. It recommended that Jersey adopt a new curriculum for ICT and computing skills at key stages 0 to 3; building on the existing work of IT companies to encourage young people into a career in computing; placing a greater emphasis on the development of the soft skills that will be in demand in the future.</p> <p>The JISC report claims that there is a lack of opportunities in Jersey, and that the ICT curriculum in the island is in need of innovation. It also scrutinises the lack of access to higher education for ICT students within the island, and the lack of engagement with younger people to encourage a career in ICT.</p>	<p>Programmes:</p> <ul style="list-style-type: none"> • Space Programme • Digital Learning Hub • 3D Printing • Be Very Afraid <p>The education and skills TAG is working to encourage the use of technology in 21st century schooling in Jersey. Engaging with the schools and education providers, and the provision of innovative programmes, will address the recommendations of the Digital Picture report as well as issues that have been present since 2001.</p>
BUSINESS DEVELOPMENT	<p>The 2012 Digital Picture report recommends that Jersey promotes programmes in productivity improvement to intensive IT users and managers across Jersey. This is a goal that the report recommends approaching through encouraging businesses to invest in ICT and develop the skills to maximise their impact, and developing the skills of intensive IT users/knowledge workers to improve their productivity.</p> <p>The 2001 report argues that more needs to be done to attract ICT businesses to the island and create incentives.</p>	<p>Programmes:</p> <ul style="list-style-type: none"> • Tech and Innovation Funding • Tech Talks • Events • DLH/Incubation space for startups <p>This action group aims to help existing Jersey based digital companies and startups to succeed, whilst also seeking to attract new businesses to the island. Existing companies will have access to a community forum, promotional support, research, guidance and the ability to contribute to the digital development strategy.</p>
GOVERNMENT AND INFRASTRUCTURE	<p>The 2012 report recommended the implementation of an Information Systems Strategy that can accommodate the current and future range of computers and mobile devices. It also points out that Jersey has the opportunity to use major projects to catalyse the development of new digital businesses.</p> <p>The 2001 report identified the need to have a cohesive ICT infrastructure in the States of Jersey.</p>	<p>Programmes:</p> <ul style="list-style-type: none"> • E-Government programme <p>This group will work to ensure that the interest of the digital industry is represented and promoted within government and organisations essential to the development of appropriate infrastructure. A key area of focus for this TAG is enabling positive States reform, specifically through e-government. This is an opportunity to catalyse development through such a major project.</p>
REGULATION AND LEGISLATION	<p>In 2001, the legislative issue was regarding e-commerce where Bermuda held the advantage by bringing in legislation before others. E-commerce may not be a key area of focus within Digital Jersey's business plan; the 2001 report underlines the importance of holding a competitive legislative advantage.</p>	<p>Programmes:</p> <ul style="list-style-type: none"> • Social Gaming <p>This Tag will work with both Research and Knowledge and the Government and Infrastructure TAGs to provide recommendations for necessary legislative amendments that will be needed to facilitate long-term change for Jersey, working closely with Jersey Finance and CICRA to ensure Jersey is effectively facilitating change.</p>
RESEARCH AND KNOWLEDGE	N/A	<p>The Research and Knowledge TAG focuses on activity that will identify potential areas for sustainable, competitive advantage and to benchmark where Jersey should position itself in the marketplace.</p> <p>The TAG works closely with all other Action Groups to further the research and proliferation of information and strategy towards areas of innovation and investment.</p>

10. Digital Jersey budget and evaluation framework

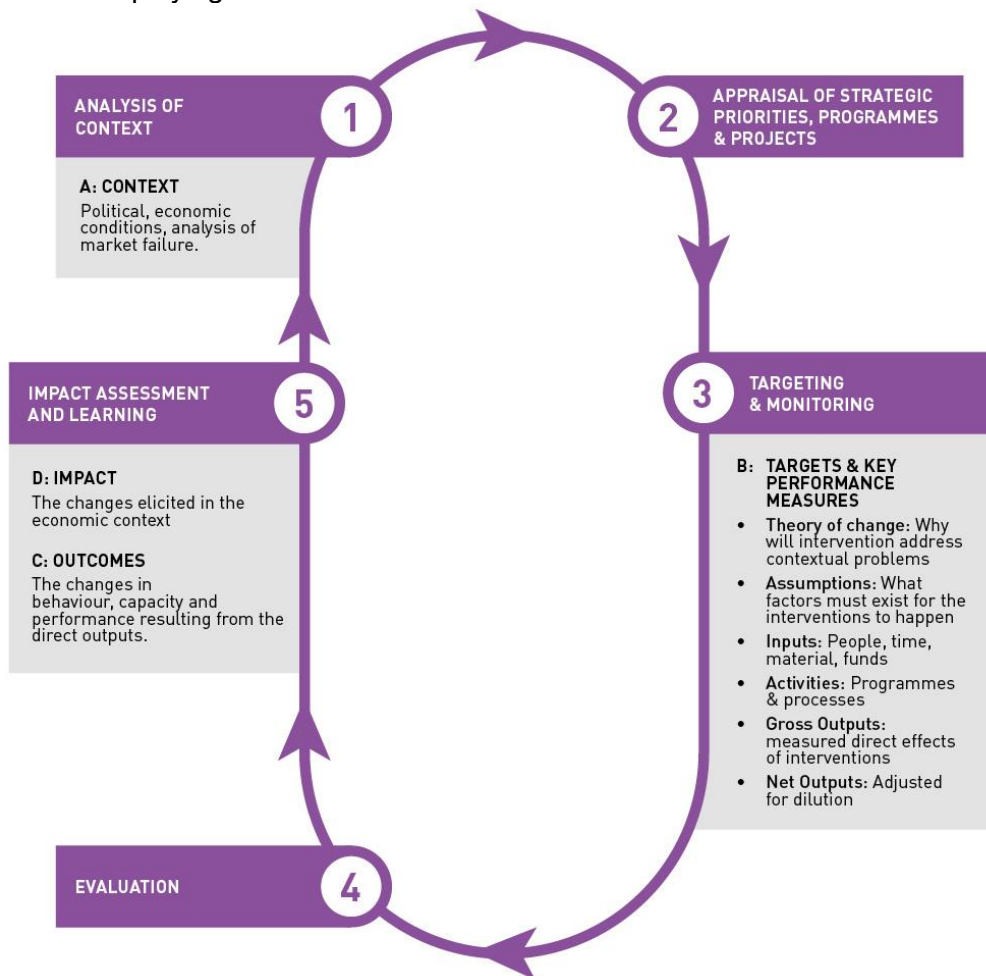
At its inception, Digital Jersey was grant-funded by the Economic Development Department (EDD) of the States of Jersey.

The initial grant for 2013 was £375,000, to cover the period January to the end of September 2013. This accounted for 1.6FTE staff, external support services, board costs, office costs and event support.

In its early phase of operation, DJL requested additional funds to enable the organisation to employ three coordinators to assist with TAG operation, helping to administer the effort of the 60 TAG members. The additional funds would also reserve £60,000 for externally commissioned research to be committed in 2013.

The total cost in 2013 will be £640,000, employing 4.8FTE and having sponsored monthly events. The budget request for 2014 is £922,000, which accommodates 7.8FTE and a significantly elevated budget to support technical seminars and three major technology events.

In order to understand and state the value of the programme, Digital Jersey will, by the end of 1Q2014, create an impact evaluation framework, based on UK Treasury Green Book principles and employing the ROAMEF model:



Appendix 1: Digital Jersey Board

Ted Ridgway Watt - Chief Executive Officer

<http://www.digital.je/digital-jersey/board/ted-ridgway-watt/>

Paul Masterton - Chairman

<http://www.digital.je/digital-jersey/board/paul-masterton/>

Mike King - Non-Executive Director

<http://www.digital.je/digital-jersey/board/mike-king/>

Mark Loane - Non-Executive Director

<http://www.digital.je/digital-jersey/board/mark-loane/>

Elisabeth Astall - Non-Executive Director

<http://www.digital.je/digital-jersey/board/elisabeth-astall/>

Ben Hammersley - Non-Executive Director

<http://www.digital.je/digital-jersey/board/ben-hammersley/>

Ivan Nikkhoo - Non-Executive Director

<http://www.digital.je/digital-jersey/board/ivan-nikkhoo/>

Stephen Heppell - Non-Executive Director

<http://www.digital.je/digital-jersey/board/stephen-heppell/>

Appendix 2: Jurisdiction digital strategies

The following table demonstrates the digital strategies and some key figures from what we have identified as competing jurisdiction

DIGITAL JURISDICTION	BROAD STRATEGY	START POINT	ORIGINAL STRATEGIC PIVOT	CENTRAL FUNDING	FORWARD TARGETING	ON-GOING DRIVER	COMMERCIAL INVOLVEMENT	2012 GROWTH	SUPPORT STRENGTHS
SILICON VALLEY	Collaboration between Public and Private sectors	1950s/93	Stanford/Defence Industry	£2bn in JV	Continuous	Industry	225k+ jobs	4.5% pa	Skills/Finance
UK (Tech City)	Seed Digital Sector	2002/10	Government	£50m+ I/S 2.1m TCIO ⁴	Continuous	Industry	1,400+ co's 5,000 (wider)	0.6% (UK) 10% (TCIO)	Data Science, Fin'cl Services
EUROPE (EC)	Employment ⁵	2012	EU Commission	£8bn gov	2020	EU Commission	15m jobs	4% to 5%	Government investment
FINLAND	Pooling Talent	1995	Government	Opaque	2020	Government	8,000+ co's	5.8%	Re-invention
SINGAPORE	Nation master-plan	2006	Government iN2015	£3bn NRF budget	2015	Engagement & E-Gov't	80k+ jobs	7% pa	Government, Nanotech
ISRAEL	R&D spin-offs	Post-war 1948 (gradual)	Tech workforce Education	£1.65bn 2013-2020	2020	Internet of Everything/ Digital Nation. Cisco fibre	Not published	9%	Industrial get up and go
DUBAI	Nation master-plan	2000	Government	Opaque	2020	E-Transform	8,000 jobs	8%	Investment
MALTA	Seed Digital Sector	2008	Government	£30m+fibre	2015	Creative Ind's	7,500+ jobs	2.8%	Private Sector Investment
BERMUDA	Regulatory Reform	1999	E-commerce	£70m	Continuous	E-Security	Not published	-5.7%	Vision
ISLE OF MAN	Regulation + Legislation	2001	E-Gaming	£70m+	2020	Legislation & Infrastructure	40+ co's	6%	Fin'cl Services
GUERNSEY	Published Digital Strategy	2012	Chamber of Commerce	£40m (JT) £2.7m (gov)	Continuous	R&D of 'Digital Guernsey'	29 staff by States for ICT development	?	Fin'cl Services
JERSEY	Seed Digital Sector to start up	99/2013	Government	£40m(fibre) + £1(1999) +£600K (2013)	2020	Digital Jersey + Industry	< 50 ? co's	?	Fin'cl Services

Appendix 3: Digital economy proportions

The following table demonstrates the sizes of the digital economy in both competing jurisdictions, and jurisdictions that have been identified by the World Economic Forum as world leading.

JURISDICTION	EIU E-READINESS RANKING 2010	WEF RANKING 2012	WEF RANKING 2013	ICT SECTOR AS % OF TOTAL EMPLOYMENT	ICT SECTOR AS PERCENTAGE OF GDP
FINLAND	4	3	1	1.6%	5.47%
SINGAPORE	8	2	2	2.8%	7%
SWEDEN	1	1	3	5.4%	6.4%
NETHERLANDS	5	6	4	4%	5.5%
NORWAY	6	7	5	4.7%	5%
SWITZERLAND	19	5	6	5%	8%
UK	14	10	7	3.6%	5.7%
DENMARK	2	4	8	4.4%	4.75%
SILICON VALLEY (US)	3	8	9	1.9%	4.3%
TAIWAN	12	11	10	Not published	2%
ISRAEL	26	20	15	6%	16%
MALTA	23	26	28	3.3%	4.9%
DUBAI (UAE)		25	30	0.1-0.5% ?	5%
BERMUDA	21			3.6%	4.4%
ISLE OF MAN				1.4%	12.9%
GUERNSEY				3.2%	3.1%
JERSEY				1.3%	0.7%

Appendix 4: e-Government deployment comparison

E-Government Strategies or Digital Government is defined by the UN as 'The employment of the internet and the world-wide-web for delivering government information and services to citizens and businesses'. The following table shows the extent of e-governance in competing jurisdictions.

JURISDICTION	UNIVERSITY OF WASEDA RANKING 2013	UN E GOV RANKING 2012	START DATE	CAPITAL EXPENDITURE	OPERATIONAL EXPENDITURE ON GOVERNMENT IS	NATIONAL PORTAL/ HOMEPAGE	ONLINE INTERACTION WITH PUBLIC AUTHORITIES	E GOVERNMENT ACCOUNTABILITY AND SUPPORT STRENGTH
USA	3	5	2001	\$660million ⁶	\$82bn	usa.gov high integration	40%	Strong. CIO council
UK	5	3	1994		£16bn	Gov.uk high integration	40%	No longer CIO, but Government Digital Service - Strong
Finland	2	9	1994		€890m	Suomi.fi high integration	58%	Strong. Ministry of Transport and communications
Singapore	1	10	1980s		\$950m	Egov.gov.sg high integration	88%	Strong – infocomm development authority.
Israel	32	16	1996		\$25million	Gov.il high integration	Not published	Strong. CIO and eGov unit, part of the ministry of Finance
Dubai (UAE)		29	1999	0opaque		Dubai.ae high integration	Not published	Dubai smart government department. Strong, led by DG
Malta		35	1998	\$4.1mil 2011 ⁷		Gov.mt high integration	54%	Malta Information Technology Agency - Strong
Bermuda			2002	\$5.3mil 2002 ⁸		Gov.bm, outdated site,	Not published	Department of e-government, ministry of home affairs
Isle of Man			1995		£23 million	Gov. Aiming for high integration	Not published	Information Services Division - Strong
Guernsey			2001		£14 million	Gov.gg – aiming for high integration	Not Published	ICT Department creates guidelines. No E-Government strategy.
Jersey			2012		£25 million	Being rebuilt	75%	Autonomous departments with individual Information systems.

Appendix 5: Connectivity metrics

The following table demonstrates the current most well connected Digital Jurisdictions. The connectivity of a Digital Jurisdiction is considered influential on the success of the digital economy in the country; connectivity is seen as an incentive by Digital Businesses.

JURISDICTION	WEF GLOBAL IT REPT (2013)	MOBILE NETWORK SIGNAL COVERAGE	BANDWIDTH (KB/S) PER USER	MONTHLY BROADBAND SUBSCRIPTN (PPP \$)	BROAD-BAND SUBS PER 100	MOBILE PHONE SUBS PER 100	HOMES WITH INTERNET ACCESS	INDIVIDUALS USING THE INTERNET	BUSINESSES USING INTERNET	FASTEST ADVERTISED DOWNLOAD SPEED KB/S
FINLAND	1	99.5%	118.4	\$28.85	29.5	166.0	84.2%	89.4%	98.7%	204,800
SINGAPORE	2	99.9%	343.7	\$37.09	37.9	150.2	84.8%	71%	80%	1.024,000
SWEDEN	3	99%	244.4	\$26.70	31.8	118.6	90.6%	91%	91.3%	1.024,000
NETHERLANDS	4	98%	162.5	\$29.74	38.7	115.4	93.6%	92.3%	90.9%	122,880
NORWAY	5	?	151.3	\$33.65	35.4	115.6	92.2%	94%	86.8%	409,600
SWITZERLAND	6	100%	167.6	\$23.41	40.0	131.4	85.0%	85.2%	98%	102,400
UK (Tech City)	7	99.6%	166.1	\$19.05	32.7	130.8	85.1%	82%	93.5%	102,400
DENMARK	8	97%	159.5	\$31.85	37.6	128.5	90.1%	90%	86.6%	110,000
USA	9	99.8%	47.2	\$19.95	27.4	92.7	71.6%	77.9%	78%	153,600
TAIWAN, CHINA	10	99.5%	34.6	\$28.88	23.7	73.2	82.5%	72%	?	?
JERSEY	n/a	?	?	Cheapest \$28.79	34.5	134.0	71.0%	69%	? Unclear	1.024,0 (gigabyte)

Appendix 6: Innovation incentives across other jurisdictions

The following table examines the investment incentives offered to entrepreneurs and investors by competing Digital Jurisdictions. This a key area of interest as attracting investment is key to Digital Jersey's business plan, and steps must be taken to compete against other jurisdictions.

DIGITAL JURISDICTION	FUNDING/SUPPORTING BODIES	TAX INCENTIVES
SILICON VALLEY	40% of US venture capital is derived in Silicon Valley.	Standard California rates, which actually constitutes a disincentive. Federal and state taxes on capital gains are up to 33%. Other states are attempting to compete with Silicon Valley by offering Tax incentives.
CANADA	Start-Up Visa Program offering permanent residency to foreign entrepreneurs with one year of college education and either CD\$75,000 from angel investors or \$200,000 from venture capitalists in Canada. Started in 2009.	Low Tax - 15% corporation Tax - 11% for small businesses. Canada's Video Games industry grew by 28% in 2008 as a result of offering Tax credits to Publishers.
UK	UKTI (United Kingdom Trade & investment) Global entrepreneur programme - \$200m in investment capital (2013). As well as Tech City, other regional enterprise zones exist.	Low tax - 20% corporation tax by 2015, 10% Tax on patents from April 2013
TECH CITY UK	Angel CoFund, £50m of Regional Growth funds; £100m fund to explore crowd-funding and mezzanine finance for SMEs; Technology Strategy board - Launchpad competition, £200m of matched funding for 20 winning companies.	Seed Enterprise investment Scheme - 50% Tax relief on seed investments up to £100-150k. Enterprise investment scheme up to £1m per investor; Entrepreneurs relief of £10m
FINLAND	SITRA (Finnish innovation fund), TEKES (Finnish Funding Agency for Technology and Innovation) yearly budget of €500m	Corporation tax of 24.5% - Capital income tax of 30% - Entrepreneurs can have tax lowered to 10%. Local business consensus that Finland is overtaxed.
SINGAPORE	EntrePass visa program for startups with \$50,000 in capital and registered to do business in Singapore	150-400% Tax Reduction on qualified R&D
ISRAEL	Office of Chief scientist offers support programmes, annual budget of \$300m. Israel has a large amount of available venture capital, with \$607m raised in 2012. Many major US multinationals are supporting a wide range of development schemes to aid new ventures in Israel.	Tax Benefits to new immigrants, returning residents and foreign investors (Tax exemption on capital gain from a sale of shares on Israeli stock exchange; dividend or interest paid on shares on ISE, on interest paid on bank deposits in foreign currency, in capital gains from a sale of shares in r&d companies, low tax rate on dividends to foreign investors)
UAE (Dubai Silicon Oasis Authority - Free Zone)	Venture capital is available but figures are unavailable. The Free Zone has integrated business support services which are a Dubai Government Authority. Mainstream bank lending is integrated into the government development initiative.	Zero income, corporate, import and export taxes. 50 year Tax holidays for entrepreneurs.
MALTA	Malta Enterprise - Innovation and development grant schemes as well as advice. US multinationals are supporting a range of development and university schemes to support the digital economy in Malta. EU investment is also significant.	Wide range of tax credit schemes.
BERMUDA	Bermuda Economic Development Corporation, loan guarantee programme, the BEDC can guarantee up to 50% of the agreed loan amount to a maximum of \$200,000.	0% corporation tax, 0% income tax
ISLE OF MAN	Isle of Man Angel Network - attracting Space companies	0% corporation tax, 10% income tax - 20% higher rate
GUERNSEY	Guernsey Enterprise - pro-active support	10% Financial services, 0% corporation tax
JERSEY	Potential for Angel Investment encouragement with tax reliefs.	10% Financial services, 0% corporation tax

Appendix 7: Examples of investment risk parameters

DIGITAL INVESTMENT SOURCES	HQ LOCATIONS	TYPE OF OUTFIT	FUNDS AVAILABLE	INVESTMENT MAIN FOCUS	SECONDARY CRITERION	INVESTMENT PARAMETERS				RISK APPROACH
						SIZE OF CO	LOCATION	INVEST Δ (PER CO)	INVESTING CYCLE	
TYPICAL Investment Co	Mostly USA Some EU	Traditional VC	Up to \$5bn	Growth acceleration	Exit realisation approaches	\$100m+	Global	\$10m-\$100m	Medium to long-term	Conservative
IVP	Silicon Valley	Digital VC	\$4bn	High growth	Market share	>\$10m	Mainly USA	\$10m-\$100m	Long-term	Conservative
BDMI (Bertelsmann)	Berlin & New York	Digital Media Grp	Not limited	Early-stage media	Potential for partnership	Not specified	N. America, EU, Israel	€0.5m-€3m + later-stages	Not specified	Collaborative medium risk
Social + Capital	Palo Alto, California	JV Funding Group	\$450m	Global value & change	Healthcare & Social Benefit	Not specified	Global	\$1m-\$100m	Not specified	Collaborative med/high risk
Cartesian Capital	New York	Private Equity Grp	\$2bn	Value Growth opportunities	Continuities & Dislocations	~\$250m revenue	Global & Internat'l	\$25m-\$125m	Long-term	Intelligent growth plans
Norwest Venture Ptnrs	Palo Alto, California	Tech VC Fund (US)	\$3.7bn	Early-stage tech ventures	Later-stage high-growth	Not specified	USA, India, Israel, China	\$1m-\$30m (\$100m late)	Long-term	Entrepreneur partnerships
Index Ventures	Geneva, London, Jersey	Tech VC Fund (EU)	€2bn	Mid-stage growth	Digital/IT & healthcare	>£15M revenue	Global & Silicon Valley	€5m-€100m	Long-term	Collaborative + Big Pharma
Delta Partners	Dublin & London	Tech Start-up Fund	€250m	Early-stage investment	Development & exit strategy	Not specified	UK, EU & Ireland	€0.5m-€5m	Medium-term	Mentor supported
IndieGoGo	San Francisco (+ New York)	Crowd Funding	Not limited	Achievable targets	Take 9% funds, but return 5%	Not specified	Global	Mostly \$1m and below	Short-term seeding	Crowd-source, high-risk
JERSEY LOCAL Innovation/Tech	Jersey	Equity & loans	tba	Start-up support		Not specified	Jersey-based Co's	tba	Short-term seeding	Conservative

Appendix 8: Recommendations from ‘The Digital Picture’

“The Digital Picture”, commissioned by Skills Jersey and Digital Jersey, published Sept 2012.

Recommendation 1 Adopt a new curriculum for ICT and computing at Key Stages 0 to 3

The current school curriculum for ICT is seen by most business leaders in Jersey to be too narrow and needs to include a greater emphasis on technology and computer science. A new ICT curriculum needs to be developed for students up to the age of 14. The need for change is recognised by many schools in Jersey and some are already reflecting it in their teaching. The new Jersey ICT curriculum should build on these developments and also the work undertaken by organisations such as Naace (see Appendix 11). The new curriculum must not only include more computing, but also enthuse girls as well as boys. Consideration should be given to adopting the Code Club approach for primary schools and Computing Club for Girls for secondary schools (see Appendix 12)

Recommendation 2 Build on the existing work of IT companies to encourage young people into a career in computing

A number of IT companies and Digital Professionals already support the development of ICT skills through after school clubs and by advising schools on the ICT curriculum. In doing so, they have brought the subject to life for students and provided valuable support to the schools. This work needs to be expanded to include more work placements and organised in a way that removes any barriers and minimises the administrative burden from the companies, professionals and schools. Digital Jersey should promote and administer the involvement of business in ICT education, using many of the approaches developed by Jersey Finance.

Recommendation 3 Implement an Information Systems Strategy that can accommodate the current and future range of computers and mobile devices

Ensure that the new ESC Information Systems Strategy enables the use of the widest range of computing and mobile devices (including the students’ own devices) and has the flexibility to cope with the likely developments over the next few years.

Recommendation 4 Place greater emphasis on the development of the soft skills that will be in demand in the future

It will become increasingly important for staff in the Digital sector to have a strong range of soft skills (e.g. adaptability, creativity, drive, global mindset, etc.). In addition, as working practices change in other sectors, individuals will need to take greater responsibility for their career and skills development. Schools and colleges must recognise these changes and develop students’ capability to cope with them.

Recommendation 5 Promote programmes in productivity improvement to Intensive IT Users and Managers across Jersey

Productivity in many sectors in Jersey is well below that found, for example, in the USA, and in some sectors it has been falling over the last few years. It is essential that productivity is improved by:

1. Encouraging businesses to invest in ICT and develop the skills to maximise its impact
2. Developing the skills of Intensive IT Users / Knowledge Workers to improve their productivity

Recommendation 6 Review the range of CPD available in Jersey for Digital Professionals

The rapid developments in the Digital sector make CPD extremely important for Digital Professionals. There are mixed messages in this area: trainers have cancelled courses due to lack of demand and employers have to send staff off-Island to get the required training. Digital Jersey, working with the BCS and Highlands College should review the range and frequency of professional ICT courses offered.

Recommendation 7 Create a graduate entrepreneurship programme

Jersey needs to create more Digital businesses, especially those that exploit the latest developments. A possible way to do this is demonstrated by the Alacrity Foundation in Wales⁴ and the Kauffman Global Scholars programme in the USA⁵. Both these programmes employ bright young graduates, supported by eminent researchers and business leaders, to transform research and business ideas into profitable businesses.

Other opportunities

In addition to these recommendations, the following opportunities were identified during the review and are presented here for consideration:

Opportunity 1 Encourage new IT start-ups and FDIs by developing a full-blown soft-landing service

Although Locate Jersey and Jersey Business have had some success in bringing new ICT businesses to Jersey, both organisations lack the soft-landing infrastructure and services which are offered by many countries and regions. For example incubation facilities, links to research teams and potential clients, comprehensive mentoring and business support services.

Opportunity 2 Use major projects in Jersey to catalyse the development of new Digital businesses

The States of Jersey is embarking on a number of transformative projects in Jersey. These should be used to encourage the development of new businesses, for example:

- The move towards community healthcare requires increased use of telecare and telehealth. These technologies could be the basis of new manufacturing and service businesses

⁴ <http://alacrityfoundation.co.uk/about-us/>

⁵ www.kauffman.org/entrepreneurship/kauffman-global-scholars-program.aspx

- The Gigabit Jersey project will enable vast amounts of data to be generated and used in Jersey. The States of Jersey can exploit this by creating an intelligent infrastructure for Jersey (e.g. traffic systems, ID systems, energy usage, analysis of police communications, community health, etc.) and in so doing trigger a range of Jersey-based businesses

Opportunity 3 Learn from other sector support organisations and researchers

Jersey Finance is an excellent example of a sector organisation which has provided significant benefits to its members and to Jersey. However, unlike the Finance sector, the Digital sector is difficult to define and the financial benefits of membership are not obvious. Digital Jersey will struggle if it focuses on Jersey's IT sector (which has only ten companies employing more than 10 staff), it must therefore find ways to generate benefits for the wider Digital community. Digital Jersey can learn from others. BioNow⁶ is an example of a support organisation for a disparate sector that has developed a number of services which have increased its membership and fully funded its operation.

⁶ www.bionow.co.uk/home.aspx

Appendix 9 Detailed SWOT

Strengths

- **DJL is a well-conceived & supported project:** the launch of Digital Jersey Ltd followed a two-year process of preparation and debate amongst stakeholders.
- **High calibre board:** Digital Jersey Ltd has a strong board, with experience of strategic importance to the Executive: Jersey business, government, global digital technology trends, education and funding. Composed of both on-and off-Island non-executive directors, the board has good contacts and knowledge for export.
- **Jersey strengths** (tax, finances, skills, legislation and regulation, QoL): Locate Jersey has a developed Jersey proposition, which articulates well the advantages of Jersey as place to do business.
- **Strong early engagement:** the company has invested time in understanding the positions and aspirations of stakeholders and has good engagement with them.
- **Good access to government:** Digital Jersey is able to communicate directly and efficiently with States departments
- **Social capital & offshore reputation:** Jersey has a very strong social capital in business. This is a critical factor in the sustainable success of any localised 'centre of excellence'. Its reputation as a high-performing offshore financial centre is also a strength, which could complement any diversification strategy.

Weaknesses

- **Low numbers in digital sector:** the number of people working to deliver digital products and services is low. There are only nine companies in the digital sector who employ more than ten staff; the total in employment is fewer than 600, with fewer than fifty independent developers.

Small cohort in education: there are approximately 1000 students in the cohort, with the number progressing through to computer science topics at **Highlands** College at around twenty per annum.

- **Limited capacity for population increase:** ref both Jersey migration debate and the EDD Enterprise Strategy: 1000 jobs – but how many licences?
- **Existing digital capability inward focus:** there are now only 9 IT companies employing over 10 people, delivering primarily to SoJ or FSS
- **Slow rate of change in States of Jersey:** The political structure of Jersey makes agile strategic support difficult to achieve
- **Lack of appetite for diversification & low entrepreneurial activity:** with the majority of IT employment delivering to the financial services and public sectors, there is little perceived need to diversify

Opportunities

- **Gigabit project & closed system:** The States of Jersey's investment in Gigabit Jersey will put the Island at the forefront of connectivity when complete in 2016. We know that a high-speed connected Island is attractive to overseas businesses looking to trial, prove and then scale services within a jurisdiction.
- **New markets (data, e-health...) and new enterprise:** Support for carefully selected sectors could encourage new business where Jersey has a real chance of exploiting its strengths. Digital Jersey should employ best known methods from worldwide success stories in order to reduce resource wastage.
- **Competitive regulation &/or legislation:** Jersey is within the geographical bounds of Europe and is part of the British Isles, yet is an independent jurisdiction, capable of legislating for advantage. Our research has shown that Jersey is capable of legislative change more quickly than EU countries.
- **University of Jersey:** A number of permutations have been discussed around the formation of a University of Jersey and there is no clear picture as to what is practicable in the short term. However there are existing connections with universities which could develop into the Island as a campus for specialised faculties, exploiting the Island's reputation in, for example, conservation.

- **Well-integrated skills pipeline:** Reducing the dependence on inward migration
- **Tech investment from Jersey:** There is a clear opportunity to develop a congruent funding pathway for Jersey companies, from start-ups to growth companies. The foundation of a Jersey-branded equity-based growth fund, making investments in Europe, could help to build the reputation of Jersey as a technology centre.
- **Low inertia:** with widespread support for a new strategic investment area for Jersey, the Island could move rapidly to advantageous positions around regulation, investment and the deployment of skills and resources.

Threats

- **Lack of engagement by industry/SoJ:** Jersey will need to act with intent to grow the sector and it is the adoption of modern e-government and innovative endeavour by industry which will deliver growth. Failure to do so will leave the Island where it is, in a state of 'managed decline'.
- **Global competition in new markets:** Market opportunities such as e-health will be aggressively pursued by high performing jurisdictions and large scale support will gravitate to areas of highest opportunity. Israel's fibre network will be rolled out by CISCO at a total cost of \$1.65B. Jersey must move quickly.
- **Other jurisdictions' earlier positions:** Many jurisdictions have been implementing digital strategies for many years (e.g. Isle of Man 2001, Malta 2008) and have experienced enough success and failure to have refined objectives and interventions.
- **Data/IP legislation too slow:** a lack of law-drafting resources could withhold advantages to be gained from the opportunity of independent legislation (see 'opportunities')
- **Other jurisdictions' compelling propositions:** competitors have bold propositions, which represent huge, strategic commitments by their governments in order to attract skilled people.
- **Not established as a community priority:** The digital revolution in Jersey will need the engagement of Digital Jersey, businesses, the public sector and students. But without winning the support of the population, the sector will struggle to gain (or operate without) political support.
- **Off-Island data cost & power resilience:** a persistent perception that off-Island data costs are damaging to business (existing and new) is compounded by high connectivity costs on-Island. This could lead to further loss of data-intensive businesses to competing jurisdictions and the failure to develop a strong inward investment incentive package for digital companies.

Appendix 10: JISC Report – 2001 Survey

A report commissioned by the Jersey Information Society Commission (JISC), identified some key issues, which the Island faced at the time, some of which are existent in our SWOT analysis. The aim of the JISC was to examine the environment in Jersey that could lead to the diversification of the economy through growth of an e-commerce sector.

The report led to very few issues being addressed regarding the Digital Economy in the Island. It is clear that Digital Jersey must now act to address some of these issues that still exist in order to develop and promote Jersey as a viable Digital Jurisdiction for the future. For a detailed look at the Key Issues, please see Appendix 4. Some of the persistent issues are as follows:

- **Legislation** – The report identified pressing legislative debates of the time, one of which was the need to well regulate e-commerce. Whilst e-commerce may not be of priority within Digital Jersey's business plan, moving forward to examine legislation for other business areas, such as social gaming, to gain a competitive advantage must be recognised as an important issue. Failure to gain legislative advantage can result in the loss of valuable business opportunities.
- **Immigration/Emigration (skills)** – immigration and emigration, the report suggests, are heavily influenced by job and skills demands. Youths leaving Jersey as a result of lack of opportunities is identified as an issue, supporting youth development and creating incentives to return to work in Jersey after further education is an issue that Jersey must address to be able to retain a skilled workforce. Creating incentives to attract businesses to the Island is also an area of concern that the 2001 report, and an issue that Jersey must still take into consideration.
- **Education** – Social attitudes held towards certain vocations can create skills vacuums, the report argues. With the current low levels in ICT related education, encouraging young people to pursue a career in the Digital Sector is a goal for Digital Jersey. The report also considers there to be a lack of access to higher education in ICT for students in the Island, this is also an issue that Digital Jersey is concerned with dealing with.
- **Competition** – The JISC report was focused on identifying Jersey's strategic position in regards to e-commerce. Bermuda, however, was quick to draw up e-commerce legislation, introducing the Electronic Transactions Act in 1999. This therefore gave Bermuda a competitive legislative advantage. Digital Jersey has moved to identify the strategic positioning of competing jurisdictions as part of this business plan, as well as the strengths and weaknesses of the Island. In order to make well calculated decisions for the future, it is important therefore to understand these principles.
- **Infrastructure** – The Island has a cohesive ICT strategy currently in place, however the structure of the Civil Service has allowed this structure to be bypassed by the departments within it that have the ability to remain autonomous. E-Government presents a large opportunity for the States of Jersey to make cost reductions; for local businesses to gain an income, and for skills to be generated within the Island. E-Government requires a strong and supportive infrastructure in order to function efficiently, further offering a platform for innovative services such as e-health.
- **Government** – The report identifies the States of Jersey as showing a lack of engagement with long-term issues, with no long term strategies. Whilst the reform programme has been tasked with solving many of these issues, it is critical that the States of Jersey engage with Digital Jersey, and that we have a role in the creation of a long-term strategy for the Islands future economy. An inability to be able to commit to supporting future long term strategies will have a negative effect on the Island'

Appendix 11: E-Health

E-health is an innovative and fast moving industry that is being driven globally by government policy, ambition and industry. Jersey has the potential to provide a test-bed for e-health services, offering the clear advantages of a large single community, one that is highly connected, the ability to reach all decision makers quickly and the opportunity to put in place enabling legislation.

Digital Jersey will connect global pioneers in this arena to the opportunity here with the aim of developing Jersey as a centre of excellence for e-health.

The provision of e-health is not simply limited to the services of doctors and nurses, but requires the maintenance and operation of IT systems. E-Health therefore represents both inward and outward opportunities for the development of the Jersey's economy, digital and otherwise. Similarly this offers great social advantages, reflecting Digital Jersey primary objectives of economic, social and reputational.

E Health will address issues as identified by Health and Social services

Health and social services published a White paper in 2012 under the title of 'Caring for each other, caring for ourselves'. This addresses the changes that Health and Social Services aim to bring about between 2012 and 2021. It identifies the following as issues:

- Ageing population – between 2010 and 2040 there will be a 95% increase in the number of people over 65.
- 60% of doctors will be eligible to retire in the next 10 years
- The limited range and availability of community services, along with the waiting lists for long term care can cause people to stay in hospital longer than necessary
- Little use of innovative services that can reduce costs, improve care and enable patients to be cared for outside of hospitals. 'We are not taking advantage of services which demonstrably reduce costs and improve care, and enable individuals to be cared for in non-hospital. One example of this would be technologies known as telehealth and telecare. They help patients, service users and teams to manage needs better, by measuring vital indicators such as blood pressure in a patient's own home, care is then designed to meet the individual's needs, as those needs change
- Disjointed services
- Insufficient respite places

In the white paper consultation, 90% of respondents agreed that 'The states should ensure that preventing ill health is as important as curing ill health'. E-health technologies can be used to monitor variables within the body, and as a result, any changes in the variables can be identified and illnesses can be prevented from developing to a stage where long-term medical intervention is necessary.

Most respondents agreed that 'people should be able to live in their own home for as long as possible, providing they have the right health and social care support from the SoJ, the third sector and parishes'. E health technologies, such as remote consultations, can allow for these kinds of services to be provided. Guiding principles for the 10 year health plan

- Services concentrate on the individual – a single point of access for patients/service users and for care professionals.
- Increased amount of health and social care services available in home
- Care that is efficient, effective, productive, integrated and received in the most appropriate place, provided by the most appropriate professional.
- The ability to use telehealth, telecare and telemedicine as part of an integrated set of services
- Improved identification of those who are at risk
- Care provided in less institutional settings
- Improved value for money
- Effective workforce development and deployment

These principles can be provided by e-health.

**INNOVATIVE AND MARKETABLE
E-HEALTH SERVICES**



**DRIVEN BY
INDUSTRIES
ATTRACTED BY
DIL**

BENEFITS

- **Economic:** Value added to economy, digital and otherwise.
- **Social:** Meets Health and Social services aims for future of health, better services for population.
- **Reputational:** Value added to economy, digital and otherwise.

**DESIGN
BUILD
OPERATE
INNOVATE**

OPPORTUNITY

- £ Reduction for SoJ through the use of innovative services.
- £ and training opportunity for local suppliers.
- Local business Development



TERTIARY CARE:
e.g. HOSPICE,
NURSING HOMES

**ENABLING
SUPPORT OF GPs
& OTHER
STAKEHOLDERS**

SECONDARY CARE:
e.g. HOSPITAL

DIGITAL JERSEY

Engagement with industry and investors making a business case to attract e-health service providers to the island. Establishment of E-health TAG & Cooperation with DL TAG, Funding external research.



STATES OF JERSEY

Legislative and policy issues, involvement from health and social services

Appendix 12: Research and Knowledge Think Tank Output

The list in the previous section represents known areas of interest. But Jersey should consider longer term potential areas of development in the Island.

The Research & Knowledge TAG ran a series of Think Tank sessions, followed up by proprietary research and write-ups. Each proposition has taken into account the advantages the Island would have in the particular area. Below are 3 write ups of the propositions from the Research and Knowledge think tank, with the other areas listed below.

Proposition 1- Undersea Digital Cartography

- Digitised Mapping information is now a major global business, with revenues in the billions. Many major global companies, such as Google, are now investing significantly in research to advance their techniques in this area. Only about 3-4% of the Earth's sea beds have been surveyed and mapped. This leaves an unmet need, with all the geological potential that this implies, for mining and salvage companies.
- New cartographic approaches have emerged in recent years, which use a combination of satellite surveying, new GPS digital techniques and novel apps, to cross reference each other, and using pioneering 3D displays. Underwater mapping is also used by wreck divers to map both the location of shipwrecks, and to detail the sites. Archaeologists employ it for similar reasons, whilst hydrologists and geologists are mapping hidden networks of underwater caves. Coral reefs are being mapped by biologists, and engineers/surveyors are mapping shoals, sandbars and other submerged areas.
- One example of the benefits of Undersea Digital Cartography has been in Japan where undersea research led to the discovery of rare earth elements, hidden in deep sea mud. These elements are used in the production of common technologies such as LCD screens and car batteries, until this discovery was made, Japan had to import from China at high prices.
- Essence of Concept
- Jersey could develop a niche capacity in this area to attract both internal and external interest from innovative businesses; digital developments could then be built from the back of this capability. The outline of the concept is that Jersey embrace this field as a long term development area, and invest in an applied research facility with sufficient advanced technological facilities to provide commercial capability, together with a backwards integrated educational/training unit to help develop our own experts.
- As well as a Headquarters, the project would need three well equipped vessels so that, at any one time one would be put on global operations, one would be used to training and surveying in local waters, and one would be engaged in the research of advanced capabilities, digital and otherwise.
- Approach
 1. Outline initial feasibility study.
 2. Detailed design recommendations.
 3. HQ base, new build and location to be discussed.
 4. Opening of new facility, with around 10 in house staff.
 5. Two local water, trawler type vessels with crews and equipment.
 6. Downstream – one deep sea research ship with crew and equipment.
- Related Local Strengths
 - Proximity of shallow seabed for training and development.
 - Growing cohort of locally based global mining companies.

- Significant maritime tradition in the Island
- Close proximity to the French coast, with potential for collaboration with technologically cultured French organisations.
- Development of sophisticated Apps capabilities, on Island.

Proposition 2 - Niche Big Data

- With the increase in data in our general lives, the creation of which has now been automated with digital tools and services, there is a growing trend in companies that utilise this data for improving services, marketing and/or products. As of 2012, the global data supply was estimated at 2.8 ZB (2.8 trillion GB), of which only 0.5% of this is used for data analysis. Roughly 3% of the data is available for analysis at the moment through the use of correct tagging, etc. With this number increasing over the next few years, the number of industries and governments that will be turning to this data for more efficient workflows will increase.
- Essence of Concept
 - a. It is unrealistic that Jersey could compete with the large global data institutes, but after examining the infrastructure needed to support these types of companies, Jersey has a good position.
 - b. The outline concept is that Jersey embraces and invests in creating software for analysis for data platforms that could be utilised and tailored to multiple industry needs, and that local companies could use this software at a massively reduced licence rate for their analysis needs. If this could offer better flexibility than existing platforms, which tend to have been developed as open-ended solutions, or for a specific use, then this would encourage data analysis companies to move to Jersey, or for industries to use Jersey companies. As data tends to not be massively tied to other languages, the potential market for this concept is global.
- Related local strengths
 - The finance industry is proven in dealing efficiently with data.
 - There are some local experts for data analysis statistics – mainly for market/funds.
 - The varying platform could be used to boost existing local brands. For example, targeting marketing for Jersey Royals, increasing data analysis for finance, increasing conservation efforts with Durrell.
 - History of large software infrastructures.
 - Island connectivity via the Gigabit project.
-

Proposition 3 e-learning services

- A constant issue with any fast moving industry is that the training programs put in place are often rendered useless when they've been completed, especially with longer training programmes (1 year or more). There is a large gap in the market for newer learning concepts that replicate the learning process needed for the correct thought processes for this type of work. This rise in e-learning over the last few years has grown due to the increase in broadband speeds and the widespread adoption of both video chat and cloud based storage. There are examples of e-learning providers such as Khan Academy (15 million users), Coursera (6 million users) and niche examples like Treehouse (web development areas – 44,000 users). These three

have also embraced mobile and tablet usage for learning, as well as applying gamification of this by offering levelling up/badges/awards at each step to incentivise use and progression.

- Essence of Concept
- The outline concept is that Jersey becomes a place of 'High learning' with the added expense of physical locations on the Island. The project could start by creating a structure of 'lessons' that reflect on the Islands current skill set: finance, legal, natural sciences, agriculture, zoology, etc. This could grow easily, and once the platform is in place experts could be contracted to contribute 'lessons' from anywhere in the world, which in turn would raise Jersey's global identity as a 'Centre of Knowledge'. This would hopefully encourage companies operating in areas of expertise to work closely with Jersey, with a view to move to the Island. By standardising the video format/asset delivery and storage, we could 'brand' any outgoing industry knowledge training with a mark of quality and a solid platform.
- Approach
 1. Outline initial feasibility study.
 2. Build scalable online platform and partner with cloud services for assets.
 3. Create 'lessons' per standardised formats with existing experts.
 4. Partner with all local education outfits to provide e-learning.
 5. Use existing globally recognised local companies to market platform idea.
 6. Hire experts from other areas to both create content and partner with.
 7. Market Jersey as a 'Centre of Knowledge' to encourage physical locations on-Island for practical training/research.
- Related local strengths
 - Certain local expertise in global fields.
 - A good standing in certain industries from a global point of view would allow for easy marketing of those areas. For example, a Durrell series would be picked up by most conservation centres.
 - A lack of overly progressive local e-learning for most levels of education and a high level of technical competency would make for a good testing ground.

Appendix 13: Jersey Information Society Commission, 2020.je - Scenarios and Strategy for a Digital age

In 1999 Peter Griffiths, the IS/IT Strategy Adviser to the States of Jersey, commissioned a report to identify possible features for the Island of Jersey in the context of its ability to become a viable offshore e-business jurisdiction. The report was carried out and completed in September 2001 by Jersey BusinessLab Ltd.

Key Issues – The following issues come directly from the report and reflect issues that were discussed in workshops during the creation of the report. The views expressed here do not necessarily represent the views of Digital Jersey but attention may be drawn to some issues which have persisted twelve years after the publication of this report.

1. Government

- Attitudes: There is political and economic uncertainty because of weak Government.
- There is a need to invent the future.
- Legislation: Pressing legislative debates include: immigration (i.e. skills shortage), and the regulation of e-commerce and money laundering.

2. Politicians

- Attitudes: It was recognised that the parish politics were very much a part of the fabric and identity of the Island and that there was an embedded resistance to change.
- Strategies: Jersey politics does not deal with the big issues. The States of Jersey must now “bite the bullet” and address housing and population. There are few strategic leaders in Jersey.
- Spending: Jersey is inflationary- the Government overspends and property prices are affecting salaries.
- Influences: There are too many vested interests. Landowners have too much political influence.
- Accountability: A more effective and accountable government is needed. People are aware but there is little interest in issues or elections.
- System: We have too many politicians and committees. The Parish system still has potential but with a Cabinet heading it up. There is confusion over voter eligibility.

3. Civil Service

- Attitudes: Civil Service needs to have more of a corporate identity. Industries feel that they have not been understood by Government.
- Structure: There are too many civil servants and too many are bureaucratic.
- Budgets: A recognition that huge overhead costs are needed to run a small public sector as economies of scale are not realised yet Jersey is also inefficient. Jersey needs to invest in Education. If the Finance industry leaves, Jersey couldn't fill the budget gap necessary to run its' existing civil service.
- Information Technology: Jersey, like many other states, does not have a cohesive IT strategy. There is a need for more continuity. The right electronic infrastructure could help to streamline the bureaucracy.
- External Relations: Is Jersey a pariah, an “in-between” state or an international citizen?
- OECD influence continues to be significant. Jersey needs a higher international role and profile. The cultural and business influence of the UK is getting greater.

4. Economics:

- Population: By 2020, there will be a significant economic impact of an ageing population.
- Capping the population drives inflation.
- Immigration/Emigration: Job/ skill demands will dictate emigration. Many youths are planning to leave Jersey. A positive future for immigrant workers centres around housing and social acceptance.
- Cost of living: Can anyone afford to live in Jersey? The quality of life is good.

- Competition: The international finance environment is a major issue for Jersey. The worst case scenario is that finance & e-commerce go to Bermuda. Let the competition worry about us.
- Influences: Pressures from the OECD and UK will change. Taxation rates provide an incentive to work here, but how do you tax mobile activities?
- Industries: Remove regulations - embrace a free market. Our economy is not diverse.
- Agriculture is going to change - rationalisation will mean bigger farms and land development. Tourism is not the golden egg it once was, but it is still important. Tourism is too reliant upon the State.
- Diversification: Our growth area is the marine service industry. Need to develop, non-labour intensive, high value industries. Golf and leisure in general is something we can invest in.
- Training: We need an incubator theme. Some industries fear that after training, their employees will be poached.

5. Infrastructure

- Housing: Housing is a nightmare. Quality of flats is generally high.
- Transportation: The bus service is terrible. There are too many cars. Flight prices are horrendous. Problems since the loss of the Heathrow link. Jersey has no transport strategy. There is a modernisation strategy for the airport.
- Information Technology: We need the right infrastructure for a modern economy (i.e. broadband). Could we afford the major investment in fibre optic technology? If I could, I would liberalise Telecoms. I am not convinced of privatising telecoms.
- Investment: The infrastructure is being improved.
- Competitiveness: Need to look at a Channel Island's strategic partnership.

6. Education:

- Attitudes: Parents have high expectations for their children- dictates courses and creates skills vacuums.
- Funding: Reluctance to give grants for vocational education. £33m to build one school is ludicrous. Secondary schools are overflowing. There is a duplication of facilities (when it would be easy to share).
- Community: English lessons for the Portuguese population are neglected. There is a lack of education of local people to e-commerce. There are lots of private trainers.
- Higher Education: Need more money for further education. Jersey needs its own further education system but is it viable? Highlands College dilemma is to provide courses for business or what people want. More focus on labour market needs required.
- Information Technology: IT education has accelerated in the schools. 50% of attendance to e-business course felt it was not hugely relevant to them.
- 2020.je Scenarios and Strategies for Jersey -30 - Jersey BusinessLab Ltd

8. Culture

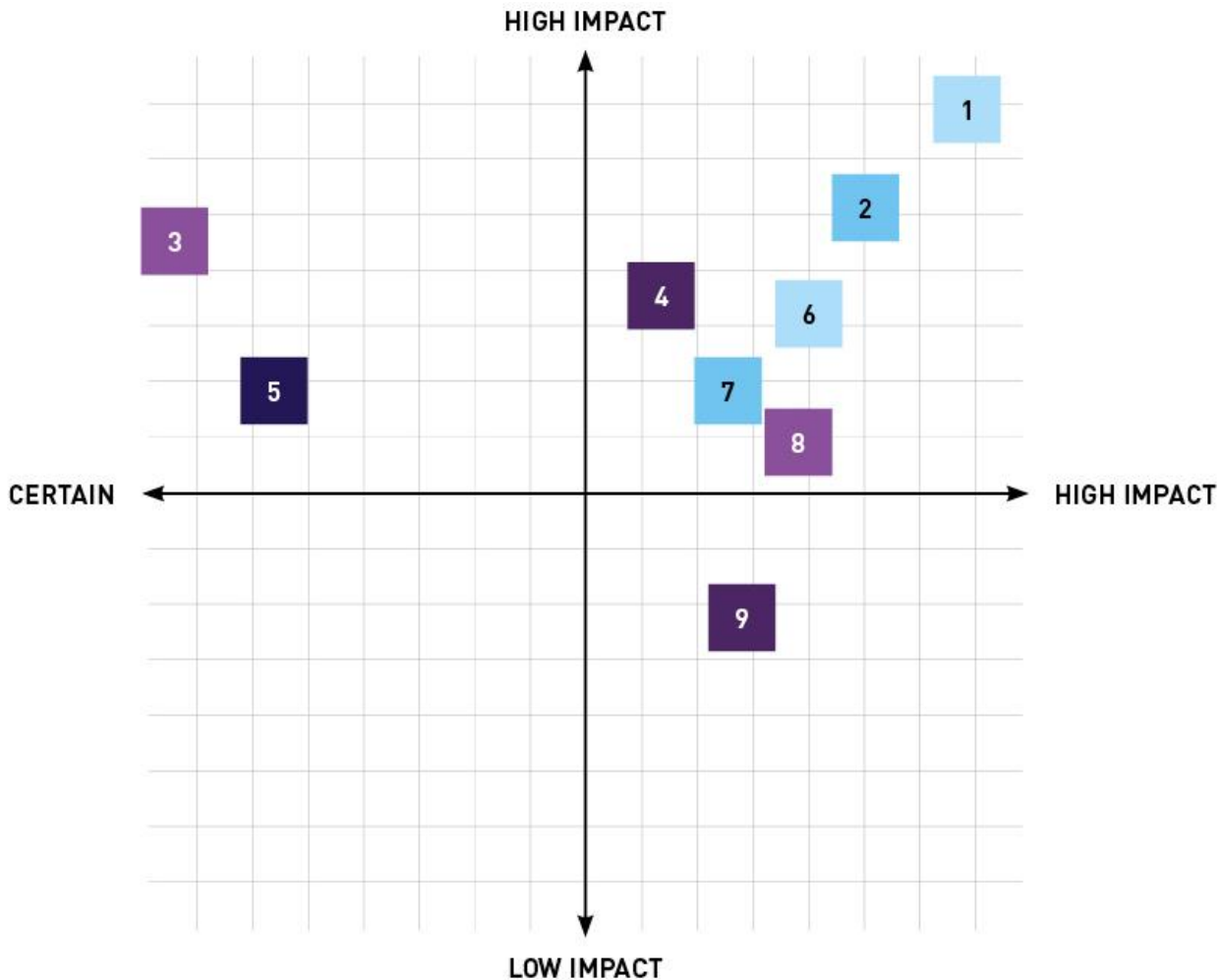
- Identity: We have an old generation that is insular and a young one that is outward looking. Cultural import and export brings important benefits to the Island. The culture is fading in generational terms.
- Attitudes: Jersey, particularly Government, needs a change in attitude so that people realise that change is a foot.

9. Social

- Health: The standard of healthcare is very good. In the future, we need to be more concerned with psychological health.
- Pensions: Concerns about future ability of Government to deliver services to pensioners.
- Poverty: There is no universal dole. There is hidden abject poverty in Jersey, people who rely heavily upon social services. Parishes, charities, voluntary organisations are all plentiful and strong.
- Drug/Alcohol Abuse: There is significant drug misuse in the Island. Crime & drugs? The users have money so less theft for money to buy drugs. 6214 crimes were recorded in

- 1996. Almost 80% involved property. There is a high incidence of alcohol abuse.
- Youth: The media discriminates - reporting more on Portuguese crimes.
- Family: There is a breakdown in the fabric of society. Childcare is very scarce and expensive - creating social problems. It is a relatively safe place to bring up kids- also lots of activities for them. Adults can only go bowling or to the pub. Spiritual values are high, a strong Methodist influence.
- Environment: There are very good sporting facilities. The arts are lacking in Jersey. We have a splendid arts and music scene. We need a more sustainable Island with regards to transport, green spaces and redevelopment of old land.

The following figure is an impact map for the key issues identified in the report.



Three 'future' scenarios for Jersey

As well as identifying key issues facing the Island the report developed three scenarios for the 20 years following the report, with one in particular bearing some similarity to the position that we currently find ourselves in.

1. Imagine

Imagine represents a positive future for Jersey, whereby the Island is in control of the changes that occur within it. This comes about through decision-makers making the right decisions and an environment of creativity, innovation, learning and enlightenment. The success in this scenario comes from the appointment of a Business leader through the agreement of government and industry. This perhaps bears the most similarity to the present situation with a business named 'Enterprise Jersey' taking a holistic approach to economic diversification, development and competitive strategy.

2. Yesterday

This scenario demonstrates a disappointing future for Jersey, containing a theme of insular thinking and internal control via hierarchical structures demonstrating political lethargy, social division and economic decline. The situation in the story is that the only sustainable future for the Island is a return to a simpler way of life after the collapse of the finance industry. Overall, the story warns against a lack of forward thinking and planning.

3. Help

The significant drivers for change in this scenario derive from external influence. Following a decline in the economy, due to inflexible regulatory frameworks, competition is made worse by brand damage to the financial services industry. Increased influence from the UK ensues and alliances with the other Channel Islands and the EU are developed and the Island results in becoming a host to high tech and high value companies. This scenario has been somewhat defeated by the excellent regulation of the local financial services industry, but certainly highlights the threat of a future where Jersey loses its tax advantages and finance industry.