

# A1 Research Analytics

Opportunity			Can Jersey accommodate it?	Preliminary success likelihood (1 to 10)	Preliminary qualitative score (1 to 10)	Barriers present (low to high)	The company is more innovative of more established?	Assessment					
Level 1	Level 2	Level 3						Combined success likelihood (50% Success factors and 50% Qualitative)	Barriers present (low to high)	Combined assessment	Technology description		
			yes / no	100%			Innovative / established						
0	Benchmark	a high street bank	yes	8.5	8.5	Low	established	8.5	Low	1 - Star opportunity			
		an international tech giant (such as: Apple, a high potential FinTech startup)	yes	8.65	5.5	Low	established	7.075	Low	2 - Potential candidate			
			yes	6.55	10	Low	innovative	8.275	Low	1 - Star opportunity			
1	FinTech	Adjacencies	bespoke business process	yes	6	10	Low	innovative	8	Low	1 - Star opportunity	cloud based administration of funds and trust business, aim of reducing administrating time for most the previous manual / paper based process	
			compliance automation	yes	5.75	10	Medium	innovative	7.875	Medium	1 - Star opportunity	automation of paper based / manual work in the compliance process (such as KYC, CDD or EDD procedures)	
			advanced risk management systems	yes	5.75	10	Medium	innovative	7.875	Medium	1 - Star opportunity	automation of paper based / manual work in the risk management process (client scoring, trust relationship evaluations, and so on)	
	RegTech	Cryptocurrency	wealth management platforms	yes	5.45	10	Medium	established	7.725	Medium	1 - Star opportunity	platform that provides wealth management services especially to HNWI	
			various opportunities (such as JFSC APIs)	yes	5.35	10	Medium	innovative	7.675	Medium	1 - Star opportunity	various opportunities (such as JFSC API databases being used to streamline processes)	
			virtual currencies payments and related services	yes	6.5	10	High	innovative	8.25	High	2 - Potential candidate	a virtual currency or virtual money has been defined in 2012 by the European Central Bank as "a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community."	
	Process improvement	Cyber security	other virtual currencies technology (custodian, reporting, other)	yes	6.5	10	High	innovative	8.25	High	2 - Potential candidate	a virtual currency or virtual money has been defined in 2012 by the European Central Bank as "a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community."	
			cryptocurrencyexchange	yes	6.5	10	High	innovative	8.25	High	2 - Potential candidate	exchanges where you can buy and sell cryptocurrency for other digital or fiat currencies	
			fraud detection / forensic services	yes	6	10	High	established	8	High	2 - Potential candidate	data analysis techniques for fraud detection (both supervised and unsupervised)	
	Transactional	Cyber security	big data analytics	yes	6.05	10	High	established	8.025	High	2 - Potential candidate	big data analytics is applied to data sets so large or complex that traditional data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualization, and information privacy.	
			predictive analytics	yes	5.8	10	High	established	7.9	High	2 - Potential candidate	predictive analytics encompasses a variety of statistical techniques from predictive modeling, machine learning, and data mining that analyze current and historical facts to make predictions about future, or otherwise unknown, events.	
			cyber security solution development	yes	6	8.5	Medium	established	7.25	Medium	2 - Potential candidate	developing cyber security applications and training	
	customer / operations	RegTech	Payment platforms	yes	4.95	7	Medium	established	5.975	Medium	3 - For the backburner	the architecture is represented by a layer – or overlay – that resides on top of multiple disparate systems and provides for two-way communications between the payment system and the PaaS.	
			digital and mobile payments	yes	4.4	7	Low	established	5.7	Low	3 - For the backburner	mobile payment, also referred to as mobile money or mobile money transfer, generally refers to payment services operated under financial regulation and performed from or via a device.	
			money remittance (banking and non banking)	yes	4.2	7	Low	established	5.6	Low	3 - For the backburner	a remittance is a transfer of money by a foreign individual to the individual's home country	
			dynamic currency conversion	yes	5.75	8.5	High	innovative	7.125	High	3 - For the backburner	dynamic currency conversion (DCC) or cardholder preferred currency (PC) is a financial service in which credit card holders, when making a payment in a foreign country, have the cost of a transaction converted to their home currency at the point of sale.	
			clearing and settling	yes	4.9	7	Low	established	5.95	Low	3 - For the backburner	clearing denotes all activities from the time a commitment is made for a transaction until it is settled. Clearing of payments is necessary to turn the promise of payment (for example, in the form of a cheque or electronic payment request) into actual movement of money from one bank to another	
			high frequency trading	yes	5.45	8.5	High	innovative	6.975	High	3 - For the backburner	high frequency trading is an automated trading platform used by large investment banks, hedge funds and institutional investors which utilizes powerful computers to transact a large number of orders at extremely high speeds	
			e-wallets	yes	5.1	8.5	High	innovative	6.8	High	3 - For the backburner	a digital wallet refers to an electronic device that allows an individual to make electronic commerce transactions. This can include purchasing items on-line with a computer or using a smartphone to purchase something at a store.	
			forex	yes	4.45	7	Low	established	5.725	Low	3 - For the backburner	this includes all aspects of buying, selling and exchanging currencies at current or determined prices. The foreign exchange market (forex, FX, or currency market) is a global decentralized market for the trading of currencies.	
			card issuing	yes	5.1	7	High	established	6.05	High	3 - For the backburner	technical hardware and accompany software for bank card issuing	
pos hardware and software			yes	5	7	High	established	6	High	3 - For the backburner	technical hardware and accompany software related to pos		
funding			yes	5.7	5.5	High	established	5.6	High	4 - Do not actively pursue	alternative funding platforms similar in scope and nature to crowd funding platforms		
investment platforms (crowdfunding)			yes	5.45	5.5	High	established	5.475	High	4 - Do not actively pursue	crowd funding is a form of alternative finance, which has emerged outside of the traditional financial system. The platform is the back end of the crowd funding concept		
2	Testbed	Fintech	A.I. for finance and legal industry	yes	5.2	5.5	High	innovative	5.35	High	4 - Do not actively pursue	development of artificial intelligence / cognitive learning / machine learning to develop solutions for the finance or legal industry (such as automatic document reading and interpretation)	
			FinTech ecosystem experimentation	yes	6.75	8.5	Medium	established	7.625	Medium	1 - Star opportunity	using Jersey as a test bed for FinTech (such as to experiment in a closed environment with virtual currencies payment)	
			AgriTech	yes	6.15	8.5	Medium	established	7.325	Medium	1 - Star opportunity	using Jersey as a testbed for the application/development of new technology to improve sustainable farming by collecting data/information, analysing and utilising for a beneficial end goal	
	MedTech	EduTech	vertical farming (intensive)	yes	6.15	8.5	Medium	established	7.325	Medium	1 - Star opportunity	using Jersey as a testbed for the application/development of new technology on vertical farming in Jersey	
			agri innovation	yes	6.15	8.5	Medium	established	7.325	Medium	1 - Star opportunity	using Jersey as a testbed for the application/development of new technology to test general agricultural processes	
			genetically modified crops	yes	4.35	7	High	established	5.675	High	4 - Do not actively pursue	using Jersey as a testbed for the application/development of new technology relating to genetically modified crops	
			general agri tech	yes	4.35	5.5	Medium	established	4.925	Medium	4 - Do not actively pursue	collating general agri data/information, analysing and utilising for a beneficial end goal	
			pollution control	yes	4.95	5.5	High	innovative	5.225	High	4 - Do not actively pursue	using Jersey as a testbed for the application/development of new technology to test / monitor / control pollution	
				yes	6.75	8.5	Medium	established	7.625	Medium	1 - Star opportunity	building a new innovation lab next to the hospital or using the new hospital grounds as a testbed for MedTech	
	CleanTech	EduTech	new hospital infrastructure / adjacent innovation lab	yes	5.8	7	Medium	innovative	6.4	Medium	2 - Potential candidate	using Jersey as a testbed for the application/development of new technology to provide innovative educational delivery systems	
			innovative educational delivery systems	yes	6.3	8.5	Medium	innovative	7.4	Medium	2 - Potential candidate	using Jersey as a testbed for the application/development of new technology to utilise in education experimenting with educational delivery systems	
			mixed remote / on site education experiments	yes	5.8	7	Medium	innovative	6.4	Medium	2 - Potential candidate	using Jersey as a testbed for the application/development of new technology to provide virtual / remote universities	
			virtual / remote universities	yes	6.15	8.5	Medium	established	7.325	Medium	2 - Potential candidate	technology developed to focuses on clean energy / water with an aim to reducing biological footprint in processes involving these utilities	
			general clean tech	yes	6.05	8.5	Medium	innovative	7.275	Medium	2 - Potential candidate	using Jersey as a testbed for the application/development of new technology to test tidal energy in Jersey	
			water and tidal energy generation	yes	6.2	8.5	Medium	innovative	7.35	Medium	1 - Star opportunity	iot is the network of physical objects embedded with sensors and technology enabling these objects to collect and exchange data	
3	IoT	IoT test bed and some permanent solutions	yes	6.15	8.5	Medium	innovative	7.325	Medium	1 - Star opportunity	the use of digital tech to enhance the quality of services and reduce costs / resources. Enables engagement with citizens to be more effective		
		smart city / future city (with a variety of applications)	yes	6.35	8.5	Medium	innovative	7.425	Medium	1 - Star opportunity	Using Jersey as a testbed for the application/development of new smart government technology		
		smart gov (such as egov, or more broadly smart jersey)	yes	6.75	8.5	Medium	established	7.625	Medium	1 - Star opportunity	testing the full digital integration of health and social care		
4	MedTech	health and social care integration	yes	6.25	8.5	Medium	established	7.375	Medium	1 - Star opportunity	using technology to identify patterns in big data and other useful information to be used to make better decisions in area of health		
		data analytics	yes	6.35	8.5	Medium	innovative	7.425	Medium	1 - Star opportunity	improvement to hospital tech		
		hospital technology	yes	6.3	8.5	Low	established	7.4	Low	1 - Star opportunity	technology that enables disabled people, their families, carers and friends access to technology opportunities		
		inclusive tech (digital access for the impaired)	yes	5.95	10	Medium	innovative	7.975	Medium	1 - Star opportunity	various applications/devices that can measure/monitor/analyse a number of personal health factors e.g. via wearable sensors		
		health and wellness apps	yes	6.35	8.5	Medium	innovative	7.425	Medium	1 - Star opportunity	technology that allows people to monitor their own health at home		
		home health monitoring	yes	6	10	Low	innovative	8	Low	1 - Star opportunity	specific digital monitoring systems		
		preventive monitoring and prompting	yes	7.45	8.5	Medium	innovative	7.975	Medium	1 - Star opportunity	development of block chain tech (insurance contracts on block chain, registry trading and settlement of financial assets on block chain, remittance of funds on block chain, currency as a content, digital id, block chain analytics). registries of: local and classic car ownership, real estate, companies, share ownership, other luxury goods, trading / settlement of financial assets and remittance of funds, all on the block chain; eVoting systems; contracts, ledgers, databases on the block chain		
			yes	4.45	7	Low	established	5.725	Low	3 - For the backburner	Data storage technology and locations in Jersey		
5	Other	Block chain	storage (targeted)	yes	4.85	7	Low	innovative	5.925	Low	3 - For the backburner	research and development of technology that explores methods for capturing data from unstructured documents	
			specialised data capture and standardisation	yes	6.15	5.5	Medium	innovative	5.825	Medium	3 - For the backburner	use of prescriptive analytics technology (synthesis of big data to make predictions in which to base decisions) in relation to businesses and government	
			prescriptive analytics	yes	6.45	5.5	Medium	innovative	5.975	Medium	3 - For the backburner	technology that using various analytical procedures to forecasting future events and behaviors	
		Data analytics	Educational technologies development	advanced analytics with self-service delivery	yes	5.85	5.5	Medium	innovative	5.675	Medium	3 - For the backburner	digital content analytics (allowing fast reading & error detection in various documents)
				content analytics	yes	4.8	7	Medium	established	5.9	Medium	3 - For the backburner	creation of eLearning content
				eLearning content creation	yes	4.8	7	Medium	established	5.9	Medium	3 - For the backburner	research and development of e learning services platforms
		Application / software development	MedTech Tech development	eLearning services platforms	yes	4.95	5.5	Low	innovative	5.225	Low	3 - For the backburner	research and development of natural history / ecology / farming applications in Jersey
				specific application development (natural history / ecology / farming)	yes	4.9	7	Low	innovative	5.95	Low	3 - For the backburner	various application for financial services customers
				various apps for fs customers	yes	5	7	Low	innovative	6	Low	3 - For the backburner	ability to control connected devices at home through a central device
		MarineTech	eGaming	connected home	yes	6.75	5.5	High	innovative	6.125	High	3 - For the backburner	technology that makes software more in command of multi-piece hardware systems, systems relying on biological characteristics of individuals for secure access
				software-defined anything, biometric authentication	yes	4.8	7	Low	innovative	5.9	Low	3 - For the backburner	research and development of technology allows mapping of underwater area
				digital underwater cartography	yes	5.7	5.5	Low	established	5.6	Low	3 - For the backburner	eGaming technology
MarineTech	yes			5.25	4	Medium	established	4.625	Medium	4 - Do not actively pursue	using technology to identify patterns in big data and other useful information to be used to make better decisions in the medical domain		
eGaming	yes			6.35	4	High	innovative	5.175	High	4 - Do not actively pursue	technology that provides advice to the customer (patient)		
MedTech Tech development	big data and analytics			yes	5.5	4	Medium	innovative	4.75	Medium	4 - Do not actively pursue	technology that allows staff to work at a workspace that is not in the office, allowing flexibility of workplace	
Other	MedTech Tech development	smart advisors (e.g., Ibm Watson and apple watch)	yes	5.6	4	Low	innovative	4.8	Low	4 - Do not actively pursue	science data research conducted, in whole or in part, by amateur or nonprofessional scientists		
		citizen data science	yes	5.2	4	Medium	innovative	4.6	Medium	4 - Do not actively pursue	Smaller datacentres designed to solve different problems from the traditional data centre facility		
		micro data centers	yes	3.85	7	High	innovative	5.425	High	4 - Do not actively pursue	Jersey as a data storage location that allows compliance with privacy laws worldwide		
	safe harbour jurisdiction	yes											

a) Star Opportunities: higher than 7.3 (with Medium or Low barriers)  
 b) Potential candidate: higher than 7.3 (with High barriers) or between 6.4 and 7.3 (with Medium or low barriers)  
 c) For the backburner: between 6 and 7.3 (with High barriers) or between 5 and 6.4 (with Medium or low barriers)  
 d) Do not actively pursue below 5 (with Medium or low barriers) or between 5 and 6.4 (with High barriers)

# A1 Research Analytics

Opportunity			Can Jersey accommodate it?	Preliminary success likelihood (1 to 10)	Preliminary qualitative score (1 to 10)	Barriers present (low to high)	The company is more innovative of more established ?	Assessment			Technology description
Level 1	Level 2	Level 3						Combined success likelihood (50% Success factors and 50% Qualitative)	Barriers present (low to high)	Combined assessment	
		Jersey as the data jurisdiction of choice (for specific data)	yes	4.15	5.5	Medium	established	4.825	Medium	4 - Do not actively pursue	
Cyber Security		on island testing capability	no								using the island to test various elements of cyber security
		all fs employees being trained	no								training financial services employees on various elements of cyber security
		on island standard for encrypted email	no								producing an on island standard for encrypted email to drive a common security standard for email
		meeting global skills demands (cyber)	no								
Automotive		digital skills development faculty	no								
		autonomous vehicles	no								vehicles which can drive themselves
Consumer goods		telematics	no								Technology which merges telecommunications and informatics i.e. GPS systems and navigation systems. Devices brought together by data and wireless communication
		robotics	no								use of robotics to automate processes to free up manpower and drive efficiencies and innovation
		quantified self	no								technology that allows data acquisition on aspects of daily lives of people via personal input
		wearable	no								Wearable technological devices that serve specific purposes for the consumer
		cloud computing	no								Using a network of remote servers hosted on the Internet to store, manage, and process data
		3d printing consumer	no								technology that allow the making of three dimensional solid objects from a digital file for consumers use
		big data and analytics	no								using technology to identify patterns in big data and other useful information to be used to make better decisions in relation to consumer goods
		robotics	no								use of robotics for consumer market to be used in every day lives
		augmented reality	no								use of computer generated input such as sound / video / GPS etc... to augment a real environment
		location based	no								technology for consumer market whereby computer program-level services use location data to control certain features
		digital dexterity	no								Technology that uses strategy to attract the optimum mix of employees based on ability and social practice
		people-literate technology	no								mixture of technologies that offer more humane behaviors and interfaces towards autonomous companies
		natural-language question answering	no								Systems that are designed to answer questions that are posed in natural language
		affective computing	no								Development of systems that can recognize, interpret, process, and simulate human affects
	Power and Utilities		gesture control	no							
		virtual reality	no								Simulation of physical presence in the real world using a computer-simulated environment
		smart grid	no								Electrical grid using smart measures such as smart meters, smart appliances, renewable energy resources and energy efficiency resources
Media and Entertainment		telematics / scada	no								A supervisory control and data acquisition system sends signals over communication channels to provide control of remote equipment.
		speech analytics	no								Analysing recorded calls and gathering information
Business and Government		big data and analytics	no								big data analytics is applied to data sets so large or complex that traditional data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualization, and information privacy.
		location based	no								Delivering content to users of mobile electronic devices dependent upon their location
		augmented reality	no								use of computer generated input such as sound / video / GPS etc... to augment a real environment
		saas (software as a service)	no								software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted
		software-defined security	no								Software that introduces simplicity to the world of network security
		biocoustics sensing	no								Technology that involves a combination of biology and acoustics, which includes ultrasound and vibration
		smart dust	no								A system of microelectromechanical systems (MEMS) such as sensors, robots, or other devices, that can detect, for example, light, temperature, vibration, magnetism, or chemicals
		virtual personal assistants	no								Technology that can allow assistants to work from a remote location
		quantum computing	no								A computer that uses qubits to store information
		brain-computer interface	no								A connection between a brain and a device that allows the brain to direct some external activity, such as control of a cursor or a prosthetic limb
		human augmentation	no								technologies that enhance human productivity or capability, or that somehow add to the human body
		volumetric displays	no								a graphic display device that forms a visual representation of an object in three physical dimensions
		3d industrial printing	no								technology that allow the making of three dimensional solid objects from a digital file for industrial purposes
		contactless technology roll out	no								contactless technology allows communication between devices without contact such as smart cards that use chips and induction technology
		near field communications	no								allows devices to communicate within close proximity of one another
	smart robots	no								robotic systems with artificial intelligence designed to carry out their operation without direct human intervention	
	iot platform	no								a platform where internet of things (network of physical objects) can communicate with one another for a specified purpose	
	biochips	no								miniaturised laboratories that can perform a large number of simultaneous biochemical reactions	
	smart advisors	no								technology that provides advice to the user	
	speech to speech translation	no								Technology that translates speech from one language to another in near real time	
	machine learning	no								Technology which explores the study and construction of algorithms that can learn from and make predictions on data	
	hybrid cloud computing	no								integrated cloud service utilising both private and public clouds to perform distinct functions within the same organisation	
	autonomous field vehicles	no								vehicles which can drive themselves	
	3d scanners	no								A device that can scan a real world object or environment and collects data on its shape and appearance to be used to make 3d models	
	complex-event processing	no								Event processing that combines data from multiple sources and then identify meaningful events such as opportunities or threats	
	consumer telematics	no								end-user-targeted vehicle-centric information and communication technologies and services	
	data science	no								processes and systems to extract knowledge or insights from data in various forms	
	gamification	no								application of elements of game playing such as a points scoring system and competitiveness to areas of business and government	
	in-memory analytics	no								Technology that queries data when it resides in a computer's random access memory rather than a physical disk	
	in-memory database management systems	no								database management system that primarily relies on main memory for computer data storage	
	machine-to-machine communication services	no								used for automated data transmission and measurement between mechanical or electronic devices	
	speech recognition	no								methodologies and technologies that enables the recognition and translation of spoken language	
	wearable user interfaces	no								miniature electronic devices that are worn by the user	
	preventive monitoring and prompting	no									
	robotics	no									
	nanotechnology	no									
	augmented reality	no									
	3d bioprinting	no									
	personal genomics	no									
	quantified self	no									
	health tech / connected health	no									
	gamification	no									

a) Star Opportunities: higher than 7.3 (with Medium or Low barriers)  
 b) Potential candidate: higher than 7.3 (with High barriers) or between 6.4 and 7.3 (with Medium or low barriers)  
 c) For the backburner: between 6 and 7.3 (with High barriers) or between 5 and 6.4 (with Medium or low barriers)  
 d) Do not actively pursue below 5 (with Medium or low barriers) or between 5 and 6.4 (with High barriers)