

2018 EDITION

THE INVESTOR'S GUIDE TO THE NEW ZEALAND TECHNOLOGY SECTOR

TIN



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

Report objective

This report has been prepared by Technology Investment Network (TIN) on behalf of the New Zealand Ministry of Business, Innovation and Employment (MBIE).

The New Zealand Government's Investment Attraction Strategy aims to promote:

- High-quality foreign direct investment in areas of competitiveness for New Zealand;
- Overseas investment in research and development, especially encouraging multinational corporations to locate their R&D activity in New Zealand; and
- The attraction of individual investors and entrepreneurs to expand New Zealand's pool of smart capital.

Report Content

i. Opportunities to Invest.....	1
Reasons to invest in New Zealand technology	
ii. Investor Environment	5
Investor activity in New Zealand continues to intensify	
iii. Growth Capabilities and Areas of Competitive Advantage	15
High growth exists across many industry sectors	
iv. New Zealand's Investment Credentials.....	21
A maturing business ecosystem and supportive government promote technology success	
v. Learn More.....	27

Methodology

This document draws largely on public and private company data from the annual TIN Report (www.tin100.com) of the top 200 New Zealand technology firms (as determined by revenue). This data has been collected and aggregated by TIN over the past thirteen years.

¹All data is derived or sourced from TIN Report analysis, so that double counting is eliminated.

Inclusion in the TIN top 200 requires technology firms to:

1. Originate in New Zealand;
2. Retain a meaningful presence in New Zealand;
3. Operate in the High-tech Manufacturing, ICT, or Biotech sectors;
4. Have developed their own technology-based intellectual property; and
5. Generate at least 10% of their revenues offshore.

Information is gathered by surveying companies that satisfy the above criteria. When a survey is not returned or is incomplete, publicly available figures are used. If none are available, revenue is estimated based on staff numbers, revenue per employee ratios from comparable companies and data supplied in previous years.

Further, interviews are conducted with leading sector analysts and firms to aid research and analysis.

All figures in this report are quoted in New Zealand dollars unless otherwise specified.

Sector Definitions

In this report the "High-tech Manufacturing" sector refers to companies that fall under the OECD definitions of High-Technology and Medium-High Technology Manufacturing.

The OECD definition for "ICT" makes it a cross-cutting sector that has some overlap with these manufacturing definitions; refer to the latest TIN Report (www.tin100.com) for individual company sector classifications. The OECD definition of Biotechnology has also been used by TIN to classify companies that fall within the "Biotech" primary sector.¹

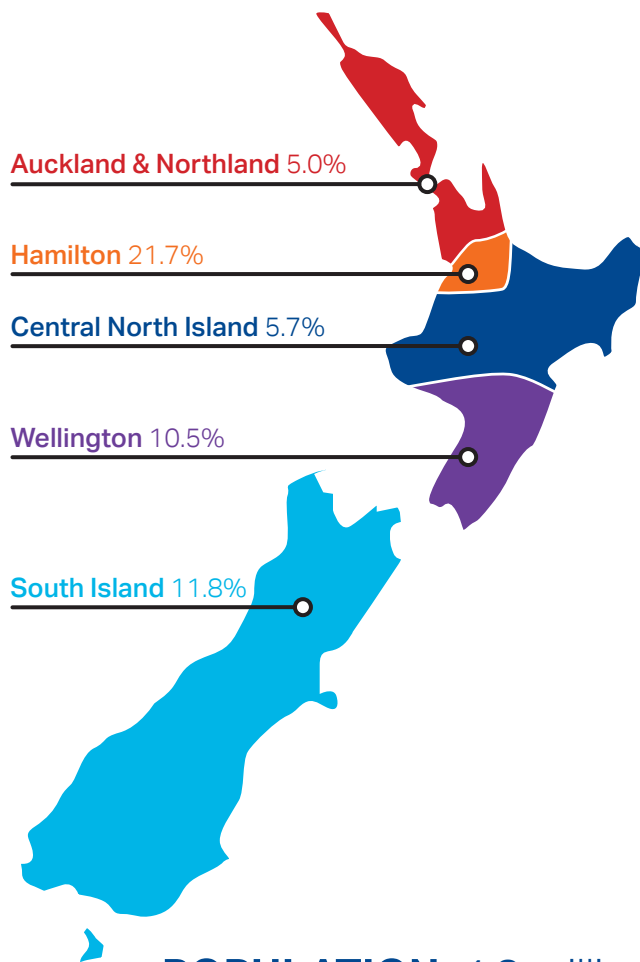
Key Contacts

The report was prepared by the Technology Investment Network (TIN). To contact please email tin100@tinetwork.com. See page 28 for the contact details of other key information sources.

New Zealand offers attractive investment opportunities

The technology sector offers multiple investment opportunities in ambitious and scalable firms that are targeting global problems with market-leading solutions.

% Revenue growth (2017)



POPULATION: 4.8 million

Surging investment in technology

Significant capital raise

\$876m

raised by companies for NZ private equity and venture capital investment in 2017¹.

\$\$\$

Growing foreign investor activity

62 offshore

investors in the past 5 years².



A technology sector on the rise. Growth for the top 200 revenue-earning technology firms (2017):

Speed of growth

7.9%

revenue growth in the past year.



Spread of growth

Growth is evident across every New Zealand region.



Highest growth sectors

FinTech **48.5%** Digital Media **32.5%**



Scale of growth

\$7.3B

generated in offshore revenues.



Technology is New Zealand's

3rd largest export sector.

Company sizes are growing rapidly

21.5% now have annual revenues exceeding \$50m.

In total, the New Zealand technology sector

Contributes:

16.2B of national GDP³.



Consists of:

21,411 firms⁴.



Employing:

120,350 workers⁴.



¹ NZ Private Equity and VC Monitor, NZVCA/ EY (May 2018).² There have been 62 TIN tracked investors over the five year period from April 2013 to March 2018.
³ Digital Nation New Zealand: From Tech Sector to Digital Nation, (NZ Technology Industry Association, June 2016).⁴ TechNZ 2017 Update (NZ Technology Industry Association, 2017).

Reasons to invest in New Zealand technology

New Zealand's well-connected and fast-growing technology sector thrives on meeting global challenges, doing more with less and thinking differently.

Centrally Positioned and Globally Connected

- ✓ **Great global export base** with strong connections to US and Asian markets, and a comprehensive free trade agreement network primarily in the Asia-Pacific region.
- ✓ **World-class fast internet speeds.**
- ✓ **Timezone advantage:** compatible with business hours in the US and Australia, and 12 hours ahead of Greenwich Mean Time.



"Vista Group is a cluster of eight businesses providing technology solutions to the global film industry; their flagship company Vista Entertainment Solutions has software installed in over 90 countries, holding 43% global share of the Large Circuit Market (cinemas with 20+ screens) and with Veezi, its cloud-based cinema management solution, it is rapidly building a global stable of customers in the Small Circuit Market (cinemas with -20 screens)."

High Growth Technology Companies with World-Leading Ambitions

- ✓ **Growing number of innovative companies** with scalable business models across the ICT, High-tech Manufacturing and Biotechnology fields.
- ✓ **Globally focused from the outset:** with a small domestic market, New Zealand's technology firms need to develop innovations with international appeal and pursue early offshore expansion.
- ✓ **Healthy startup environment** with low cost barriers and high levels of entrepreneurship.



Datacom became New Zealand's largest technology company with \$1.16B in revenue in 2017. It operates across New Zealand, Australia, Asia, Europe and the Americas.



New Zealand
Technology
Sector

Strong Technology Ecosystem

- ✓ **Developed democracy**, ranked first in the world for ease of doing business (World Bank Group).
- ✓ **Growing, highly educated workforce**, with globally competitive salary costs.
- ✓ **Safe, established financial markets**, with strong angel and venture capital investor networks.
- ✓ **Stable, business-friendly government**, with a low-compliance tax system and government funding to assist research and development, training, and international growth.



In the year to June 2017, the Government's innovation agency Callaghan Innovation committed over \$253m to R&D grants, co-funding up to 40% of companies' R&D expenditure.

Innovative "Can-Do" Culture

- ✓ **Rich history of world-acclaimed innovations**
- ✓ **Flexible and resilient workforce** with a tradition of extracting maximum value from minimal resources.
- ✓ **Generalist efficiencies:** the broad nature of work in New Zealand often requires employees to be generalists and typically work in smaller development teams, leading to faster response times.
- ✓ **Ideal test bed for new technologies:** As liberal adopters of new technology, New Zealand's small populace are ideal "beta testers" for a growing number of IT multinationals.



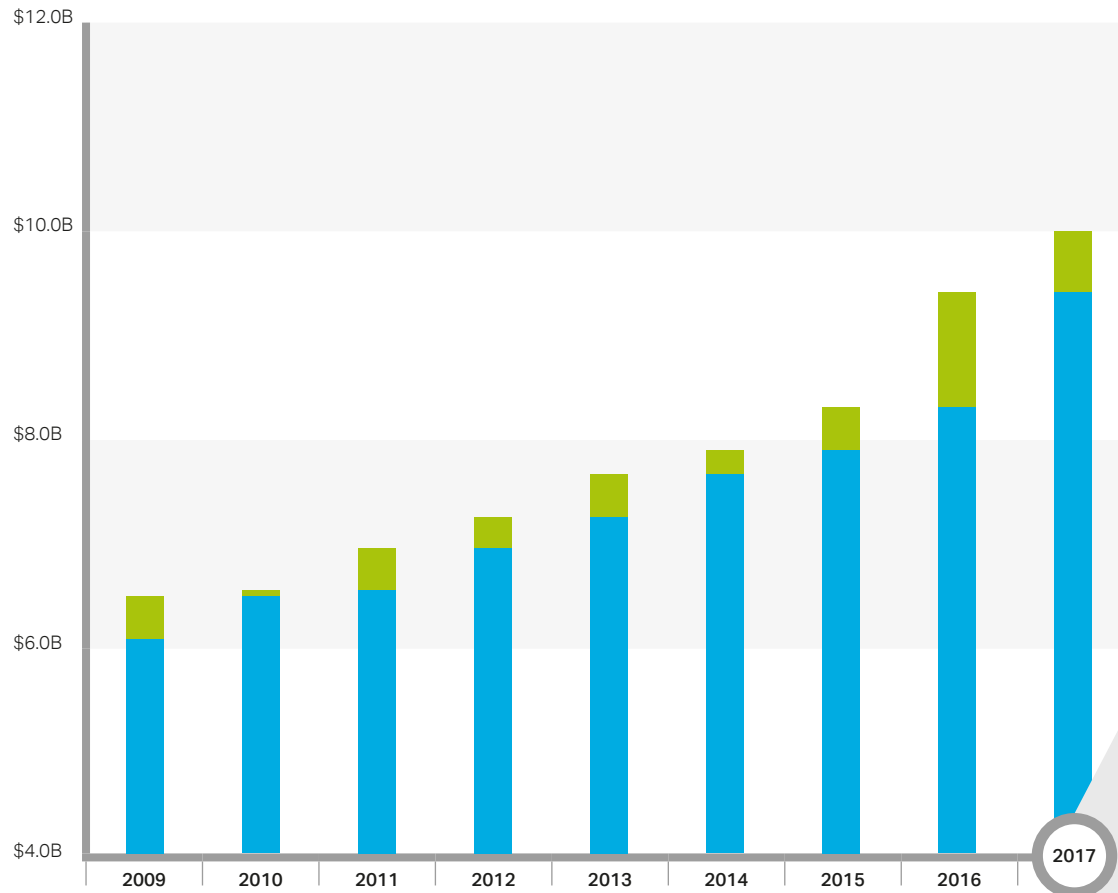
Buckley Systems builds components for the machinery that produces 90% of the world's silicon chips.

Strong and sustained revenue growth

New Zealand's technology sector continues to grow strongly each year, earning significant international revenue.

Revenue Over Time (Top 200 NZ technology firms)

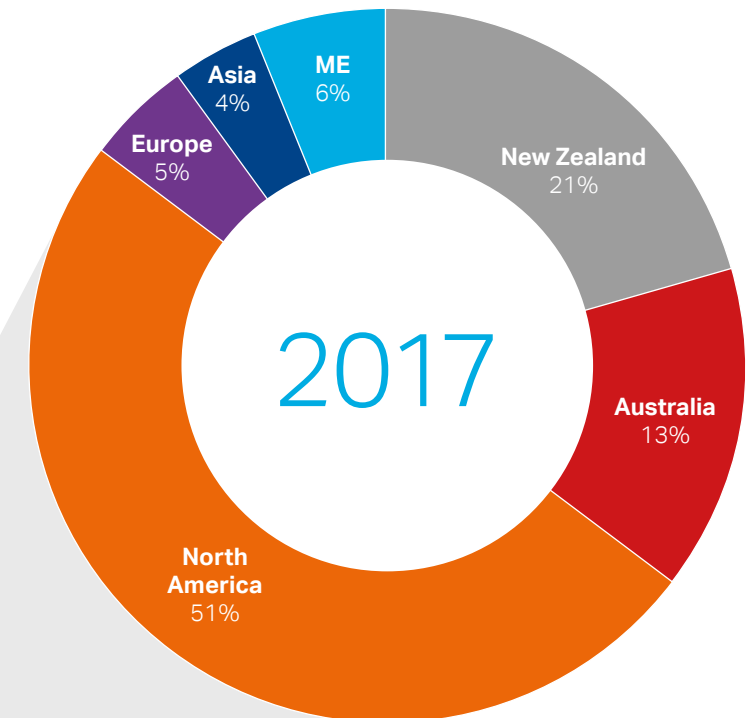
● Revenue ● Growth



Data source: Top 200 NZ technology firms (ranked by revenue), TIN Report 2017.

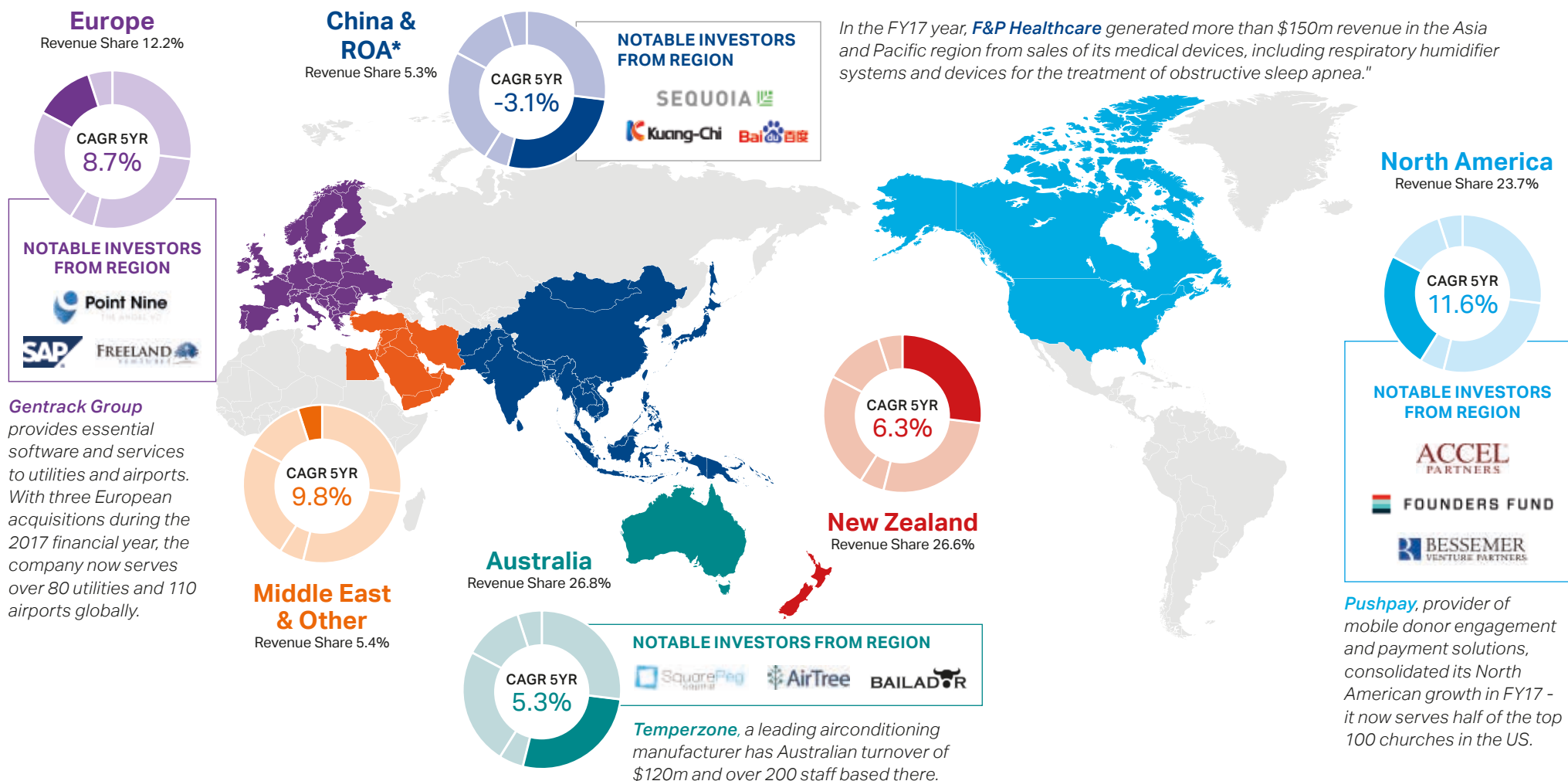
% of Growth by Region (Top 200 NZ technology firms)

● New Zealand ● Europe
● Australia ● Asia
● North America ● Middle East / Other



Many global markets

The top 200 New Zealand technology firms are driving substantial revenue growth in diverse global markets.



Data source: Top 200 NZ technology firms (ranked by revenue), TIN Report 2017.

CAGR: The Compound Annual Growth Rate is the mean annual growth rate of an investment over a specified period of time longer than one year. *ROA: Rest of Asia.

Investor Environment



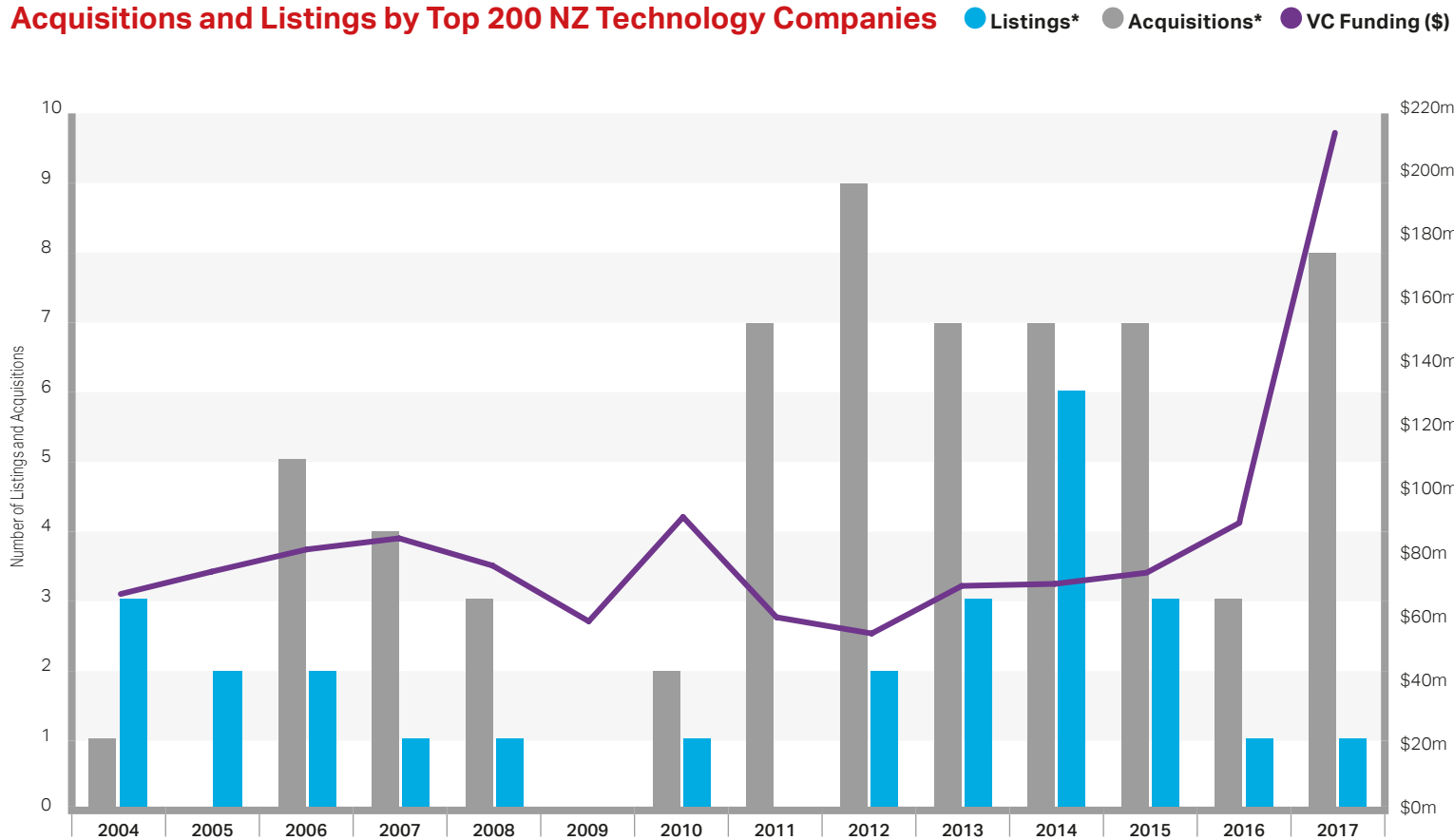
"This country has started to churn out some awfully polished, extraordinary products... They're world-class technological achievements – the work of a well-educated, creative people bent on competing on the world stage".

Ashlee Vance, American business columnist, author of
"Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future"

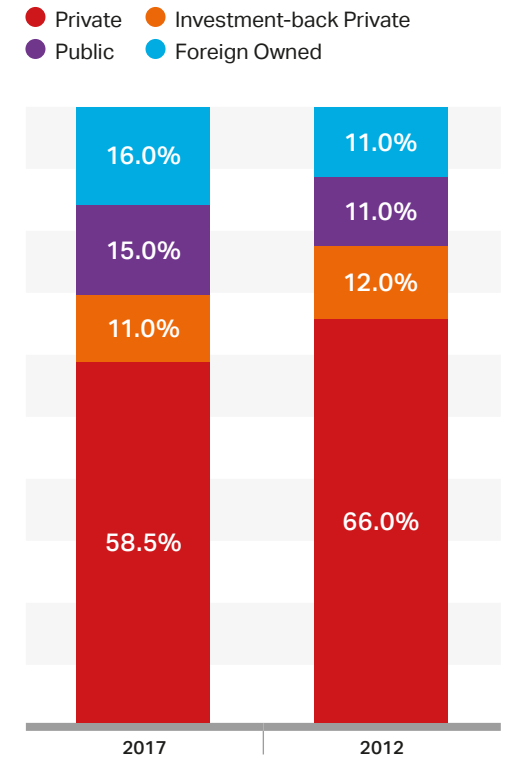
Investor activity continues to intensify

With many more emerging technology companies, investment in New Zealand is on the rise.

Acquisitions and Listings by Top 200 NZ Technology Companies



Percentage of Companies by Ownership (Top 200 NZ technology firms)

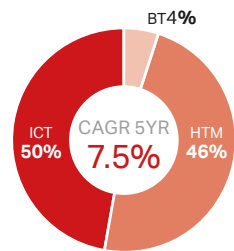


Private equity activity in New Zealand continues to rise steadily. While public listings have slowed recently, CropLogic and Syft Technologies both listed in 2017.

Data sources: NZ Private Equity and VC Monitor (NZVCA/ EY 2018), TIN Report 2017. *Listings and Acquisitions are for the financial year to August 2017.

Regional strengths attract investor interest

High-performing technology firms are not just an urban phenomenon: they exist throughout New Zealand.

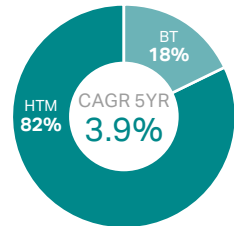


Auckland & Northland Auckland City Population: 1.535m

The world's 3rd best city for quality of living¹, Auckland is a diverse high-tech manufacturing centre, attracting a range of businesses including robotics, food processing, precision engineering, advanced materials and space technology firms. Its GRIDAKL innovation precinct forms the fast-growing hub for ICT companies including medical and fintech providers, and software, gaming and app developers.

Key areas of growth:

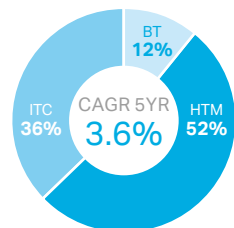
Digital Media* 29.7%, Financial Services Technology* 22.5%



Central North Island Population: 870.7k

A base for advanced biotech, engineering and electronics companies specialising in processing, health and productivity, and packing technologies to service agricultural businesses in the surrounding regions (Hawkes Bay, Bay of Plenty, Taranaki, Manawatu-Whanganui and Gisborne Tairāwhiti).

Key areas of growth: Agritech* 28.4%, Electronics 8.1%

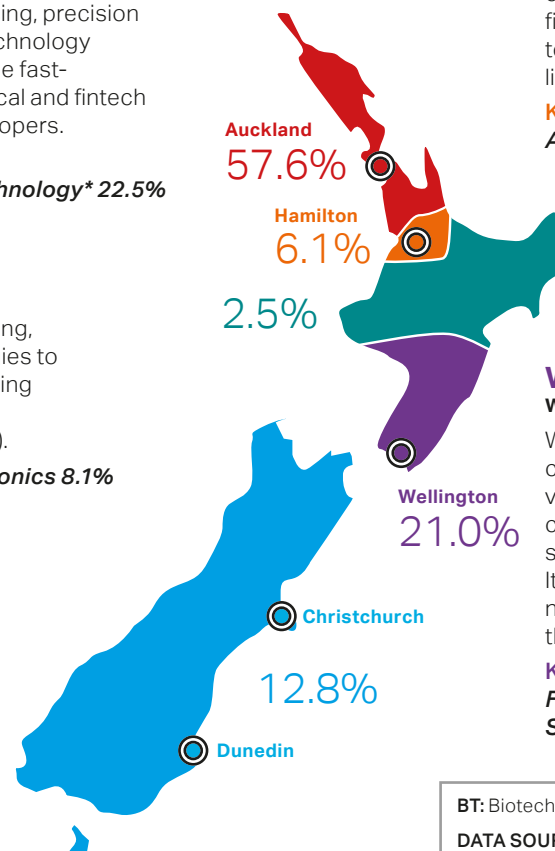


Christchurch & South Island Christchurch City Population: 396.7k

A high-tech manufacturing hub for the region's acclaimed primary industries. Christchurch and Dunedin cities also boast a number of biotech and healthcare technology firms. The region's many established software solutions providers address a variety of niche market needs including tourism souvenir imaging, 3D geological modeling and Board management systems. The South Island offers attractive lifestyle benefits and a highly supportive ecosystem for startups.

Key areas of growth: Digital Media* 39.8%, Operational Support 14.4%

% OF TOTAL FY17 REVENUE

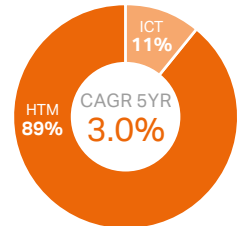


Hamilton Hamilton City Population: 235.9k

The fertile Waikato region is home to a number of well-established, privately held agritech firms specialising in high-tech manufacturing technologies for the many crop, dairy and livestock businesses in the area.

Key areas of growth:

Agritech* 3.3%, Heavy Manufacturing 3.0%

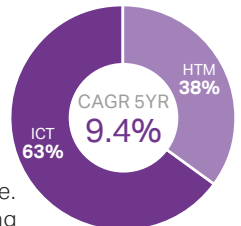


Wellington & Lower North Island Wellington City Population: 412.5k

Wellington city is world-renowned for producing creative screen-related technologies for movie visual effects and AR/VR.² New Zealand's largest cloud-based fintech provider and its largest IT services and support firm are also both based here. Its tech hub innovation precinct supports a growing number of tech startups including those serving the creative industries and social enterprises.

Key areas of growth:

Financial Services Technology* 68.2%, Software Solutions 27.0%



BT: Biotech, **HTM:** High-tech Manufacturing, **ICT:** Information and Communications Technology.

DATA SOURCE: Revenue, regional sector breakdowns, and CAGR figures are for the top 200 New Zealand technology firms.

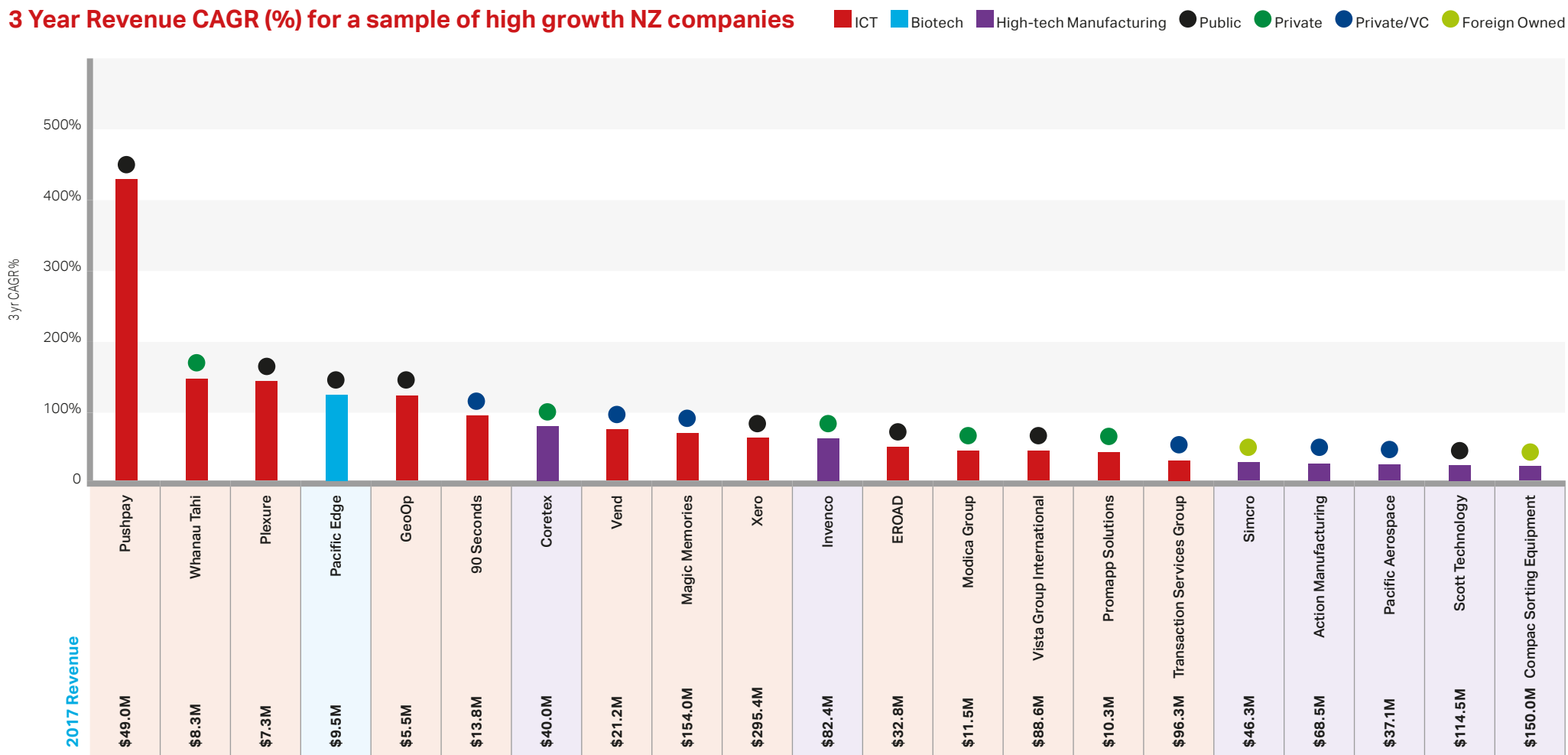
POPULATION ESTIMATES: Statistics New Zealand Infoshare 2017.

*Refer to pages 18-20 for regional company examples. ¹Quality of Living survey 2017 (Mercer). ²Augmented Reality/Virtual Reality. Pie charts show % of TIN200 companies by primary sector in their respective regions. Key areas of growth show 5-year CAGR for the fastest growing secondary sectors in their respective regions.

New Zealand's technology companies welcome investment

Investment drives growth: two-thirds of the fastest growing companies are already either VC backed or publicly funded.

3 Year Revenue CAGR (%) for a sample of high growth NZ companies

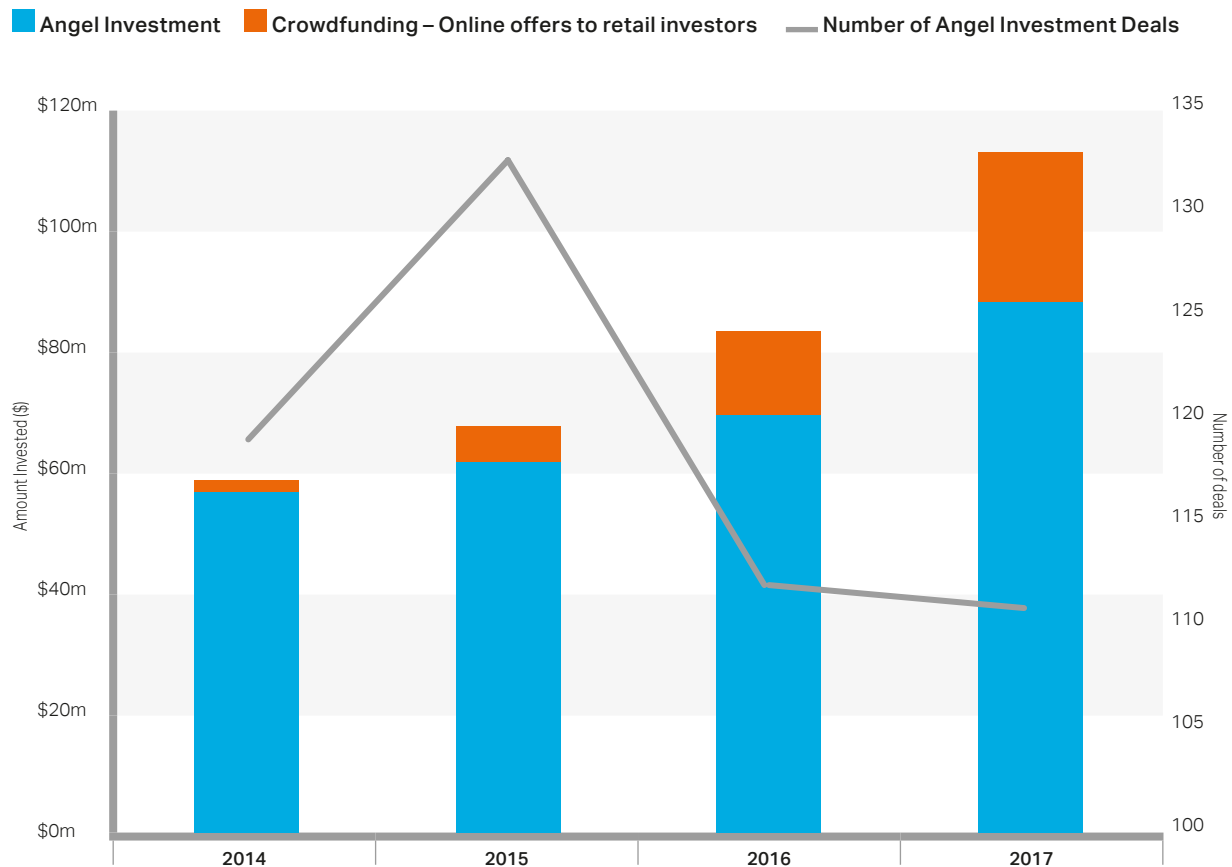


Bar colours signify Primary Market Sector

Many opportunities exist for international investors

The rising value of local investment is creating a strong pipeline of early stage New Zealand companies.

Angel and Crowdfunding investment into early stage New Zealand companies (2014-2017)



NOTE: Equity Crowdfunding was introduced to New Zealand in 2014, following government financial market reforms under the Financial Markets Conduct Act 2013. **Angel Investment data source:** NZVIF (2018). **Crowdfunding data source:** Snowball Effect (2018).



Colin McKinnon, Executive Director,
NZVCA (New Zealand Venture Capital Association)

"The growing presence of international investors in New Zealand early-stage companies is evidence of emerging confidence in New Zealand tech companies. Over half the early-stage transactions in 2017 involved international investors. A strong commitment to a New Zealand that is "open for business" supports New Zealand's technology industry's growth."

Angel and crowdfunding investment has grown at a compound average annual growth rate of 17.7% over the past four years.

New Zealand's investor base: global and growing

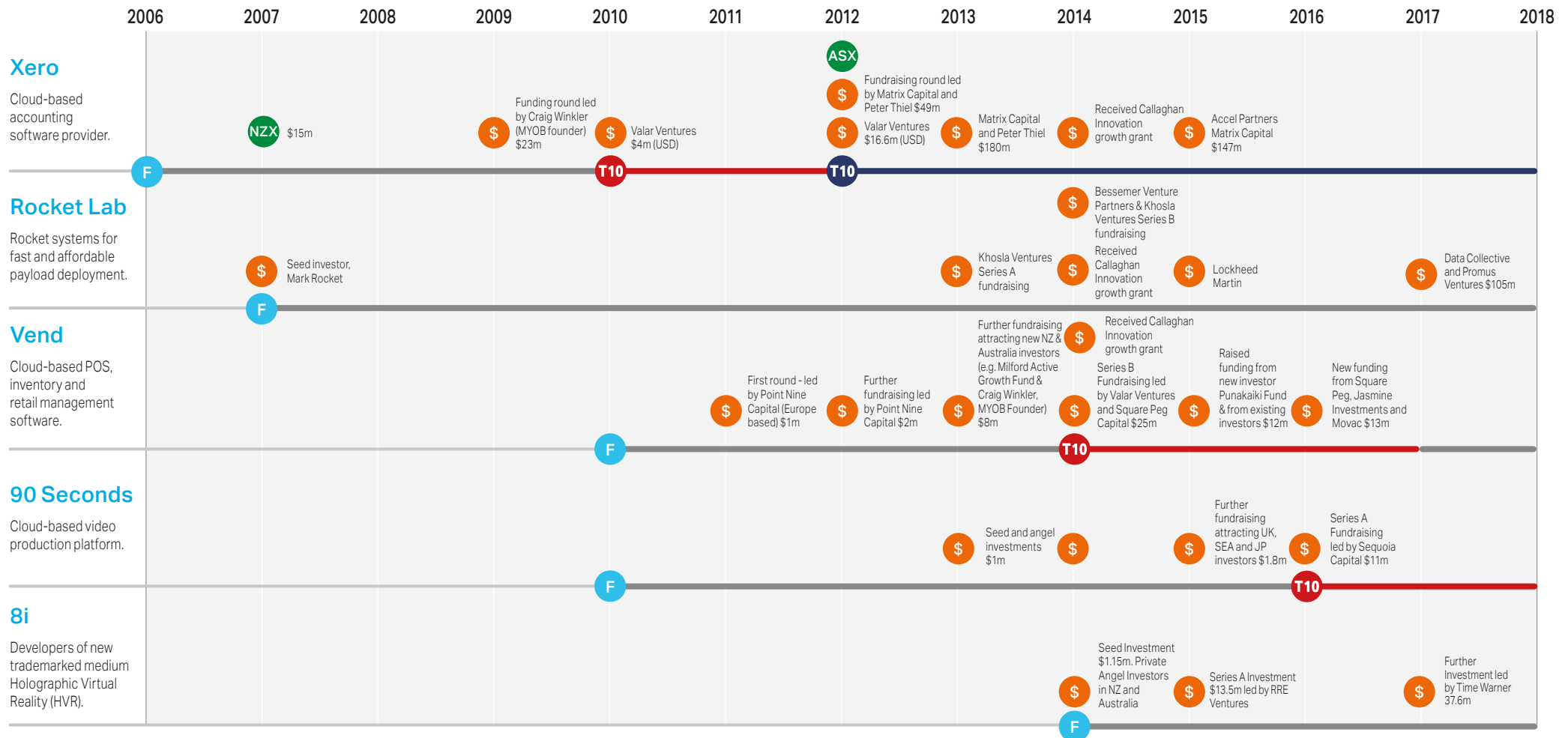
International investors, like those listed below, are impressed by the innovation on offer in New Zealand. Over half of the investors on record are based in North America.*

Nyriad    	AFT Pharmaceuticals 	Performance Labs 	Xero   	Latipay 
Vend   	Soul Machines  	Rocket Lab    	Simcro  	Fuel50   Postr Media 
90 Seconds  	Transaction Services Group 	8i                    		
Ubco 	Straker Translations 			

* Of the 62 TIN-tracked international investors recorded from March 2013 to April 2018, 56% were based in North America.

Escalating investor interest in New Zealand companies

The past five years have seen a marked increase in the number of offshore investments being made in New Zealand technology companies, as these examples show.



KEY: T10 TIN Hot Emerging Company AWARD RECIPIENT (for being a high growth company, ranked between 101-200 on TIN's revenue rankings for that year)

T10 TIN Ten to Watch Company AWARD RECIPIENT (for being a high growth company, ranked between 1-100 on TIN's revenue rankings for that year) ● IPO F Founded \$ Investment Round





Amounts stated in NZD unless otherwise specified. **ASX:** Australian Stock Exchange.

Acquisition activity

Global leaders have also acquired a number of New Zealand technology companies in the past five years, including the 2017 purchase of PowerbyProxi by Apple (for an undisclosed sum). Other examples are shown below.

TARGETS

DETAILS

Target	Purchase Price	Acquirer	Year	Target Description
Diligent Corporation 	\$941m	Insight Venture Partners 	2016	Board Meeting software to securely create, distribute and collaborate on Board reading material.
F&P Appliances 	\$927m	Haier 	2012	Appliance manufacturer with over 420 patents.
Endace 	\$157m	Emulex Corp. 	2013	Network visibility and recording solutions for security, network and application monitoring.
Banklink 	\$136m	MYOB 	2013	Software for accounting practices across New Zealand and Australia.
Compac Sorting Equipment 	\$70m	Tomra 	2016	World leading produce sorting equipment provider.
BBC Technologies 	\$64m	Tomra 	2018	Advanced vision sorting and packing equipment.
Phitek Systems 	\$60m	Amphenol 	2017	Noise cancellation and audio enhancement equipment.

All figures reported in New Zealand Dollars using the exchange rate at time of sale.

What foreign investors are saying...

A number of existing investors are now actively seeking more opportunities to invest in New Zealand founded technology firms.



Barry Brott,
Square Peg Capital.
Investor in Vend.

"We're proud to continue supporting the team at Vend. Vend is adding value for retailers around the world by providing an outstanding product at an attractive price, combined with world class support."



Simon Feiglin,
The Riverside Company.
Investor in Simcro.

"The thing we really like is that as a small and remote country, New Zealand companies almost from conception think globally, and are structured to achieve that objective."



Daisy Cai,
Baidu Ventures.
Investor in 8i.

"We are excited to back the extraordinary team at 8i and help bring its superior holographic experience to mass audiences in China. At Baidu we envision a future where VR and AR can be applied in numerous industries that serve more than one billion monthly active users."



Pieter Kemps,
Sequoia Capital, Singapore.
Investor in 90 Seconds.

"The 90 Seconds team has done a terrific job in building the leading global marketplace for video production. In the large and rapidly growing video market, they offer creative talent and agencies a unique workflow platform to work together on global projects. This has enabled them to build a fast growing and rapidly scaling model."



Scott Nolan,
Founders Fund.
Investor in 8i.

"With our team's history of investing both in NZ and in virtual reality, we were thrilled to back 8i in solving one of the holy grails of VR: volumetric capture. Our firm's approach is to invest in world-class teams solving hard problems, and I believe these companies will increasingly be located in hubs of local expertise. Given Wellington's history in CGI and the technical talent there, 8i's choice of a Wellington HQ made perfect sense and was a clear competitive advantage."



Mike Weinmann,
Capital Royalty Group (CRG).
Investor in AFT
Pharmaceuticals.

"CRG welcomed the opportunity to partner with AFT Pharmaceuticals due to its diverse product portfolio as well as its compelling research and development pipeline... We are actively seeking other opportunities to partner with similar companies."

What New Zealand investors are saying...



Lance Wiggs,
Punakaiki Fund.

"We've seen a jump in VC community activity, but with just 3 or 4 active local funds we have a long way to go. We need help to address the hundreds of millions of dollars of high quality investment opportunity each year."



Chintaka Ranatunga,
Sparkbox.

"We believe New Zealand is now producing a critical mass of high growth technology companies which are emerging global leaders in a niche, but lack the capital to really scale sales and market expansion. We are actively looking to help with that."



Matthew Slater,
Ngai Tahu Holdings Group.

"[Waikato Milking Systems operates in]... a sector where NZ should have a natural skill-set. It's a company where there had been considerable IP development and a differentiated product line, with an international market that we believed had potential to grow and replicate the strength that existed domestically."



Phil McCaw,
Movac.

"It's been a pleasure to invest in and support companies like Aroa Biosurgery and PowerbyProxi over many years. These companies are great examples of the quality and depth of the intellectual property being developed in New Zealand, and the outstanding calibre of the management teams that we work with. We continue to actively explore and invest in established New Zealand businesses with great intellectual property and outstanding international growth potential."



Randal Barrett,
Pioneer Capital.

"We have invested in a wide range of New Zealand technology businesses (nine TIN100 companies) and co-invested with a number of international investors. The common theme we see and hear is that they are 'born global' – developing their products, plans and people for large global markets practically out of the gate."



Brooke Bone,
Milford Asset Management.

"Vend is a young exciting cloud-based business with a strong management team and significant future growth potential. We are actively looking for investments in established businesses with the ability to deliver high growth rates."

Growth Capabilities and Areas of Competitive Advantage

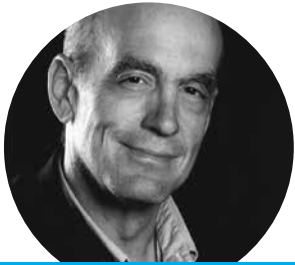


"We've proven it's possible to grow and run a global business from New Zealand. Here in New Zealand we have high quality fibre and internet, which means we are no longer geographically disadvantaged. This was proven in our most recent financial results in September 2017, showing we have over 1.2 million subscribers in more than 180 countries. We are also the largest cloud accounting software platform outside of the US. We no longer see ourselves as simple accounting software but rather a global small business platform, and with over 600 certified add-on partners in our ecosystem we touch 40 thousand active partners every 60 days. We are a true global platform."

Rod Drury, Xero Founder & Non-Executive Director

Rising numbers of early stage, innovative companies support highest growth sectors

New Zealand's top 200 technology companies include many highly scalable and globally focused firms.



Gary Bolles, Entrepreneur, Co-founder of eParachute & Silicon Valley technology thought leader.

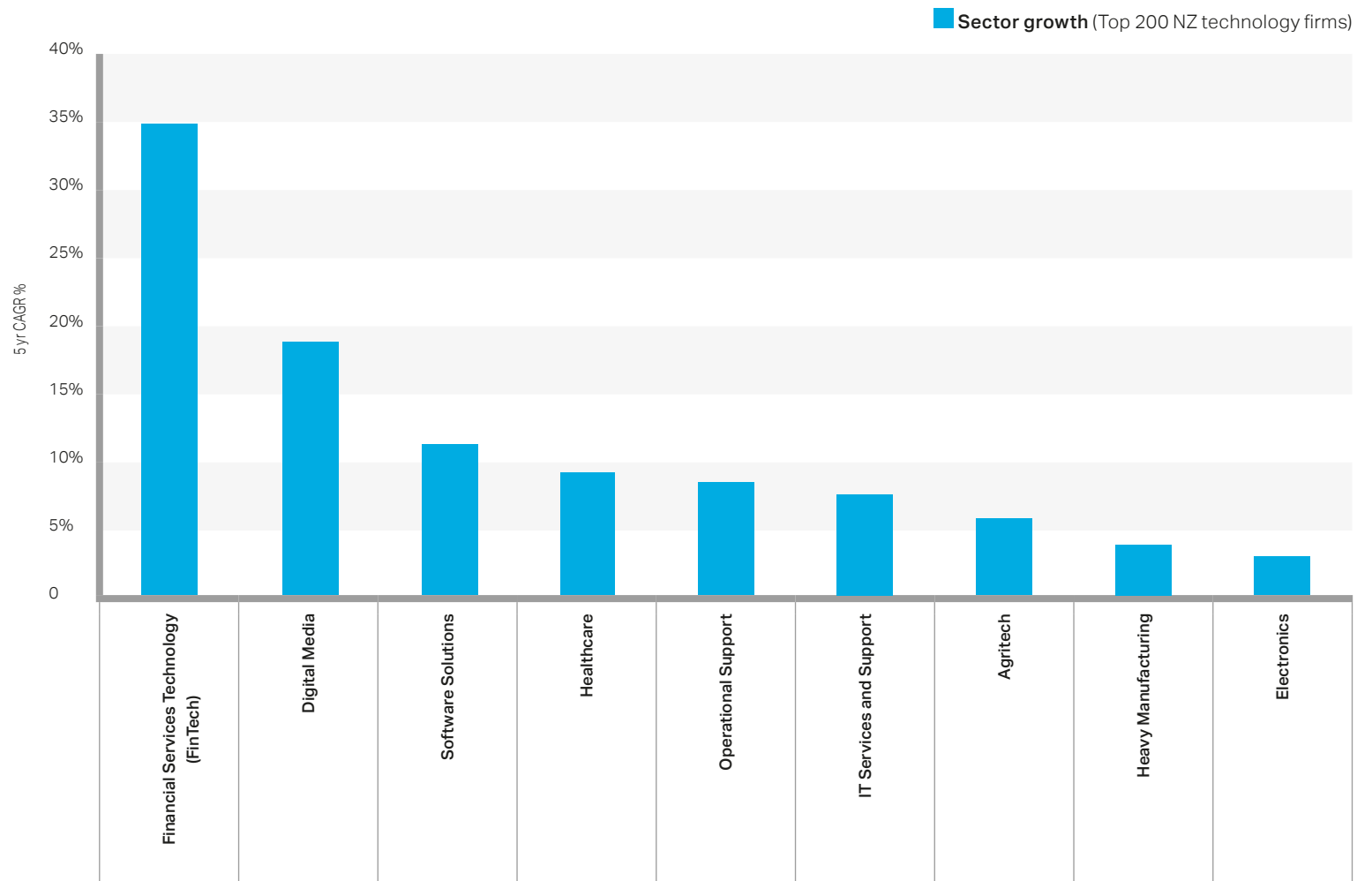
"New Zealand is becoming one of the world's best-kept secrets for entrepreneurial activity."



Anne Fulton & Jo Mills, Co-founders, Fuel50.

"We find we can attract great tech talent from across the globe to work with us in NZ, and our home-grown tech talent is world-leading, but we can keep our development costs very competitive."

5 Year Revenue CAGR for New Zealand's Highest Growth Technology Sectors

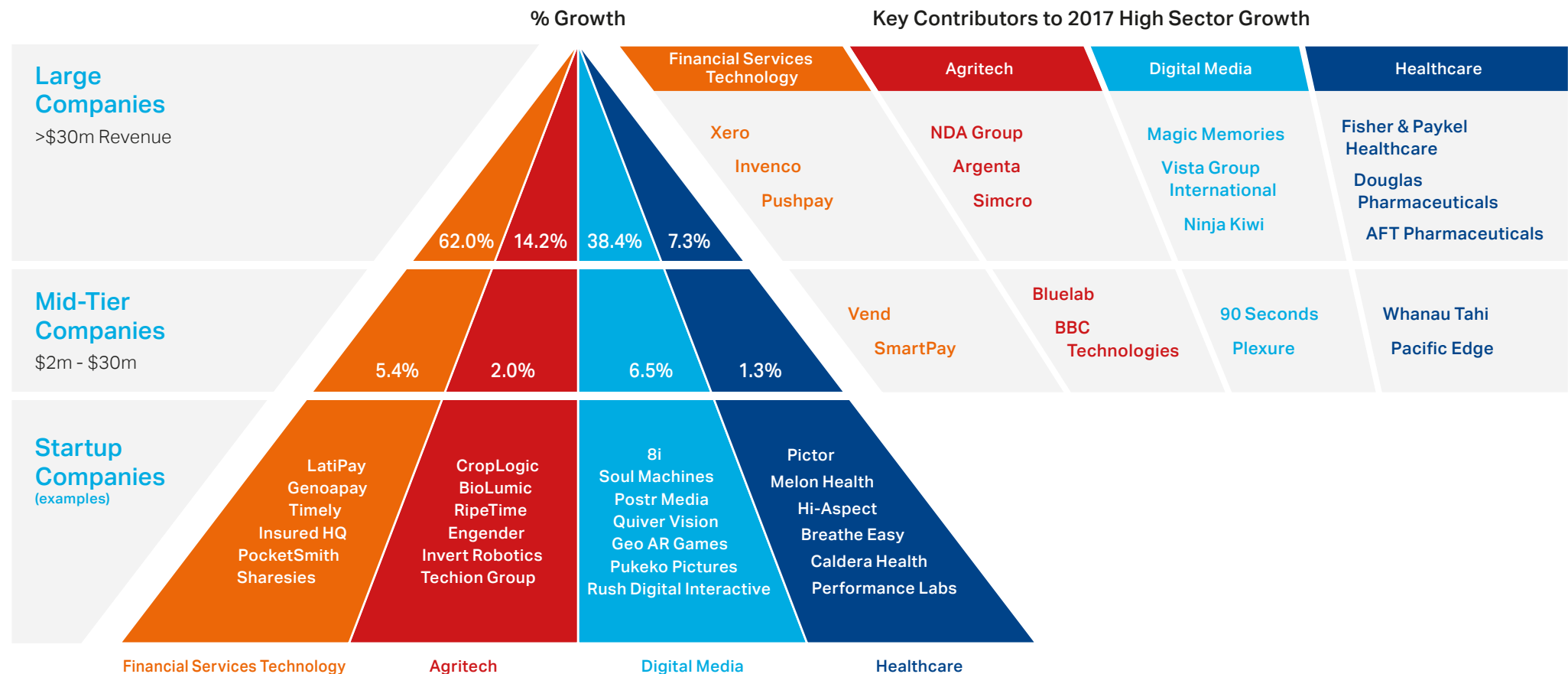


A strong pipeline of promising startups will drive continued growth

Here are examples of companies contributing to four of New Zealand's highest growth sectors. A burgeoning number of startups are following their lead.

Revenue % Growth by Secondary Market Sector (2016)

(for Top 200 NZ technology companies)



Investor Focus: High growth sectors that are making waves

Innovation, diversity and growth are demonstrated in New Zealand's Healthcare and Agritech sectors.

Healthcare

Top 200 New Zealand Technology Companies:

5 YEAR REVENUE GROWTH \$650m ▲

5 YEAR CAGR 9.4% ▲

SECTOR GROWTH IN NEW ZEALAND PROMOTED BY:

- + Innovation friendly compliance environment supporting greater product speed to market.
- + Highly educated workforce.

Agritech

Top 200 New Zealand Technology Companies:

5 YEAR REVENUE GROWTH \$259m ▲

5 YEAR CAGR 5.8% ▲

SECTOR GROWTH IN NEW ZEALAND PROMOTED BY:

- + Strong primary industry.
- + Large regional centres of innovation.
- + Access to foreign markets.

Healthcare

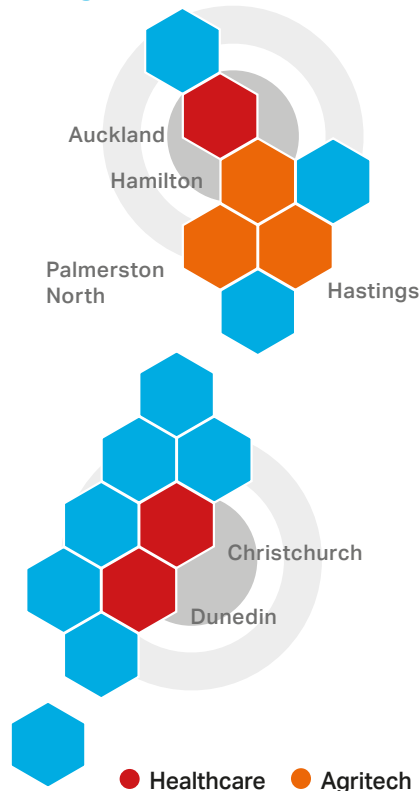
Auckland | Home to established global companies like F&P Healthcare and Orion Health, this region also hosts a range of technical institutions producing top engineering and software talent. Auckland healthcare innovators include:

- **Aroa Biosurgery:** Developers of regenerative tissue substitute technology. This company is scaling rapidly and reinvesting 75% of its revenue into R&D.
- **Douglas Pharmaceuticals:** One of Oceania's fastest growing generic pharmaceutical companies, employing over 515 staff and supplying to over 35 countries.

South Island | This region boasts Otago University medical school and a resourceful talent pool. Innovations range from 3D scanning and informatics systems for amputees (ARANZ Medical), to power wheelchair controls (Dynamic Controls). Other examples include:

- **Pacific Edge (Dunedin):** Ground-breaking bladder cancer detection technology. With a three year CAGR of 124.6%, this company is gaining excellent market traction, especially in the US.
- **MARS Bioimaging (Christchurch):** Pioneering new spectral molecular imaging technology to improve upon traditional x-ray techniques.

Regional Hotspots



Agritech

Prevalent throughout New Zealand, agritech firms are creating innovative solutions to improve the productivity and efficiencies of the country's important farming, fishing, food, animal welfare, biosecurity, and forestry industries.

Hamilton | The fertile Waikato region is home to the annual National Agricultural Fieldays show, claimed to be the biggest show of its kind in the southern hemisphere. The region has produced globally successful firms such as:

- **Gallagher Group:** Disruptive solutions for animal control, security and fuel systems.
- **Simcro:** Animal health pharmaceutical delivery systems.
- **NDA Group:** High-tech engineering, manufacturing and servicing of industrial storage and process vessels for the dairy, food processing, chemical, gas and wine industries.

Central Region | Packing, picking and processing technologies for the dairy and horticultural industries are a key regional strength. Company examples include:

- **Haden and Custance (Hastings):** Automated handling systems to handle and prepare bulk cheese and butter.
- **BioLumic (Palmerston North):** Ultraviolet (UV) light technology to improve crop yields for large crop and horticultural growers.

Investor Focus: Digital Media

New Zealand has established an international reputation for excellence in creative screen-related technologies.

Digital Media

Top 200 New Zealand Technology Companies:

5 YEAR REVENUE GROWTH	\$287m ▲
5 YEAR CAGR	18.9% ▲

SECTOR GROWTH IN NEW ZEALAND PROMOTED BY:

- + Creative, highly educated workforce.
- + Large regional centres of innovation.
- + Globally recognised for innovation in digital media and entertainment technologies.



Many world-leading innovators in this sector choose New Zealand as their creative home base, with companies ranging from *Magic Memories* (digital imaging for the tourism sector) in the South Island to award-winning game developers such as *Ninja Kiwi* in the North.

NZ Digital Media Hotspots:

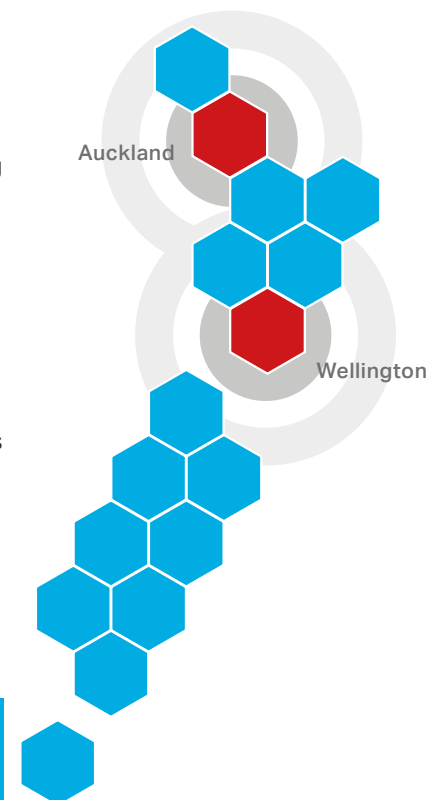
Auckland | Offers a diverse mix of creative technology companies including cloud-based video producer 90 Seconds, and 'Internet of Things' advertising innovator Plexure. Others include:

- **Soul Machines:** Oscar winner Mark Sagar's early stage company is at the forefront of humanizing AI technology. To date it has raised \$7.5m in seed funding from foreign investors.
- **Vista Group:** Provides software and additional technology solutions across the global film industry. Cinema

management software is provided by Vista Entertainment Solutions, the core business of the Group. Movio, Veezi, movieXchange, Maccs, Numero, Cinema Intelligence, Powster and Flicks provide an innovative range of complementary products across additional film industry sectors, from production and distribution, to cinema exhibition through to the moviegoer experience.

Wellington | An expansive support network of creative incubators, associations and investors supports this vibrant cultural hub. Some of its world-leading innovators include:

- **Weta Digital:** Responsible for developing Oscar winning special effects for CGI-forward movies like *Lord of the Rings*, *Avatar* and *Ghost in the Shell*.
- **8i:** This startup has developed software to 3D render digital video to create quick and efficient photorealistic human holograms for AR/VR and mixed reality headsets. It has raised over \$40m across 28 investors, exemplifying the growing international interest in New Zealand's Digital Media scene.



New Zealand's Game Development industry grew **12%** (YE March 2017), earning **\$99.9m** in revenue, with **97%** of that revenue coming from exports.*

* NZ Game Developers Association, www.nzgda.com

Investor Focus: FinTech disruptors build on international successes

Based predominantly in New Zealand's two largest cities, FinTech companies are redefining the way we borrow, lend, save, spend, store and transfer money.

Financial Services Technology

Top 200 New Zealand Technology Companies:

5 YEAR REVENUE GROWTH	\$490m	▲
5 YEAR CAGR	35.1%	▲

SECTOR GROWTH IN NEW ZEALAND PROMOTED BY:

- A business friendly, agile regulatory system that is favourable to innovators and investors (such as the recent reforms allowing crowdfunding and peer-to-peer lending).
- A long history in FinTech (Boards and management teams with experience bringing companies to maturity).
- Highly competitive domestic environment – driving innovation and process automation.



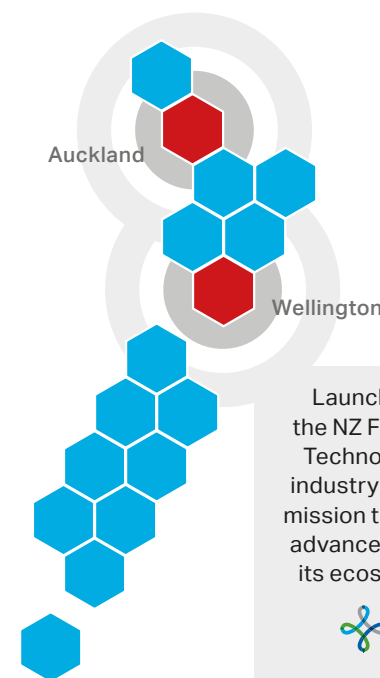
New Zealand's FinTech Hotspots:

Auckland | Home to a number of ICT companies specialising in global payment technologies, including: Transaction Services Group, Invenco, Payment Express, Wirecard, Talkingtech and Pushpay. Notable high growth companies include:

- **Latipay:** With two years of phenomenal growth, Latipay recently attracted a \$4.27m investment from Jubilee Capital (Singapore). The company provides global businesses with payments across four main Chinese e-wallets and nineteen main Chinese banks.
- **Vend:** A cloud-based point of sale solution for retail businesses, in over 20,000 stores globally. The company has attracted investments of \$63m since 2010.

Wellington | Base for a diverse range of FinTech startups focused on portfolio and account analytics, insurance and government technology. Other more established examples include:

- **Xero:** Cloud-based accounting software provider Xero delivered another strong half-year result, achieving positive EBITDA for the first time, and is emerging as one of the largest and fastest growing listed technology companies in Australasia.
- **DataTorque:** With solutions that allow emerging nations to reduce costs and implement tax law transparently, DataTorque is now trusted by governments internationally to collect billions of dollars in tax revenue.



Launched in February 2017, the NZ Financial Innovation and Technology Association is an industry working group with the mission to connect, promote and advance the FinTech sector and its ecosystem in New Zealand.



In 2017, the Asia Pacific region attracted the largest amount of investment in FinTech with a total of **US\$14.8 billion, 56%** of the world's total fintech funding¹.

¹ PwC and Startupbootcamp Fintech, 2017. **Note:** A list of FinTech startup companies is available in the 2017 TIN Report).

New Zealand's Investment Credentials

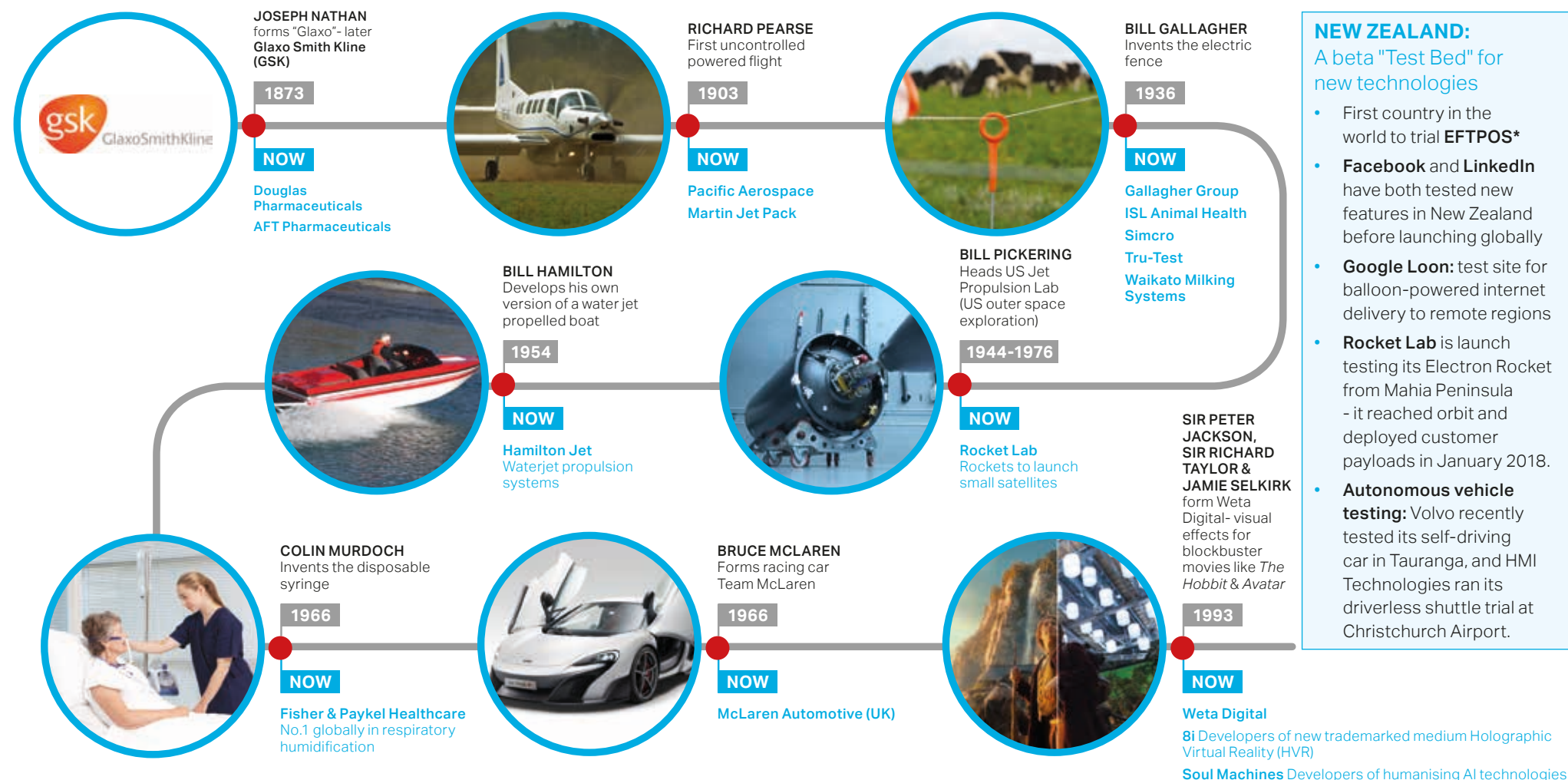


"New Zealand's regulatory environment, IP protection regime and quality research universities are a big plus for tech investors."

Deepak Natarajan, Former Director - Intel Capital, Singapore.

An innovative heritage

New Zealand's technology sector has a long tradition of combining intellectual smarts with deep practical skills. Most of the world's population has benefited from technology pioneered in New Zealand. There are many examples, here are just a few:



NEW ZEALAND:

A beta "Test Bed" for new technologies

- First country in the world to trial **EFTPOS***
- **Facebook** and **LinkedIn** have both tested new features in New Zealand before launching globally
- **Google Loon:** test site for balloon-powered internet delivery to remote regions
- **Rocket Lab** is launch testing its Electron Rocket from Mahia Peninsula - it reached orbit and deployed customer payloads in January 2018.
- **Autonomous vehicle testing:** Volvo recently tested its self-driving car in Tauranga, and HMI Technologies ran its driverless shuttle trial at Christchurch Airport.

* EFTPOS refers to "Electronic Funds Transfer at Point Of Sale".

New Zealand: Open for business

A well-established ecosystem supports New Zealand's technology industry growth.

Regional Development Agencies

14 regional Economic Development Agencies provide local support to technology companies.

Mature & Emerging Financial Markets

- A long-established stock market, the NZX.
- Five active equity crowdfunding platforms to fund early stage companies.

World-leading Tertiary Institutions

- New Zealand universities are ranked in the world's top 50 in 22 subjects and top 100 across 39 subjects.*
- Numerous entrepreneurial development programmes support student ventures.

Government Policy

Initiatives within the Government's Digital Economy Programme include:

- Establishment of ICT graduate schools.
- Funding to increase the number of engineering graduates.
- A Global Impact Visa system encouraging entrepreneurs and investors to create and support innovation-based ventures from New Zealand.
- Supporting the establishment of a nation-wide Techweek event.

*Source: Universities New Zealand, March 2018

Simple, Predictable and Fair Tax Environment

- No general capital gains tax.
- US-based Tax Foundation (2017) ranks New Zealand's overall tax system as second in the developed world for its competitiveness.

Strong Angel Investor Network

- A well-developed network exists of early-stage investment vehicles for seed capital.

Collaborative Working Spaces

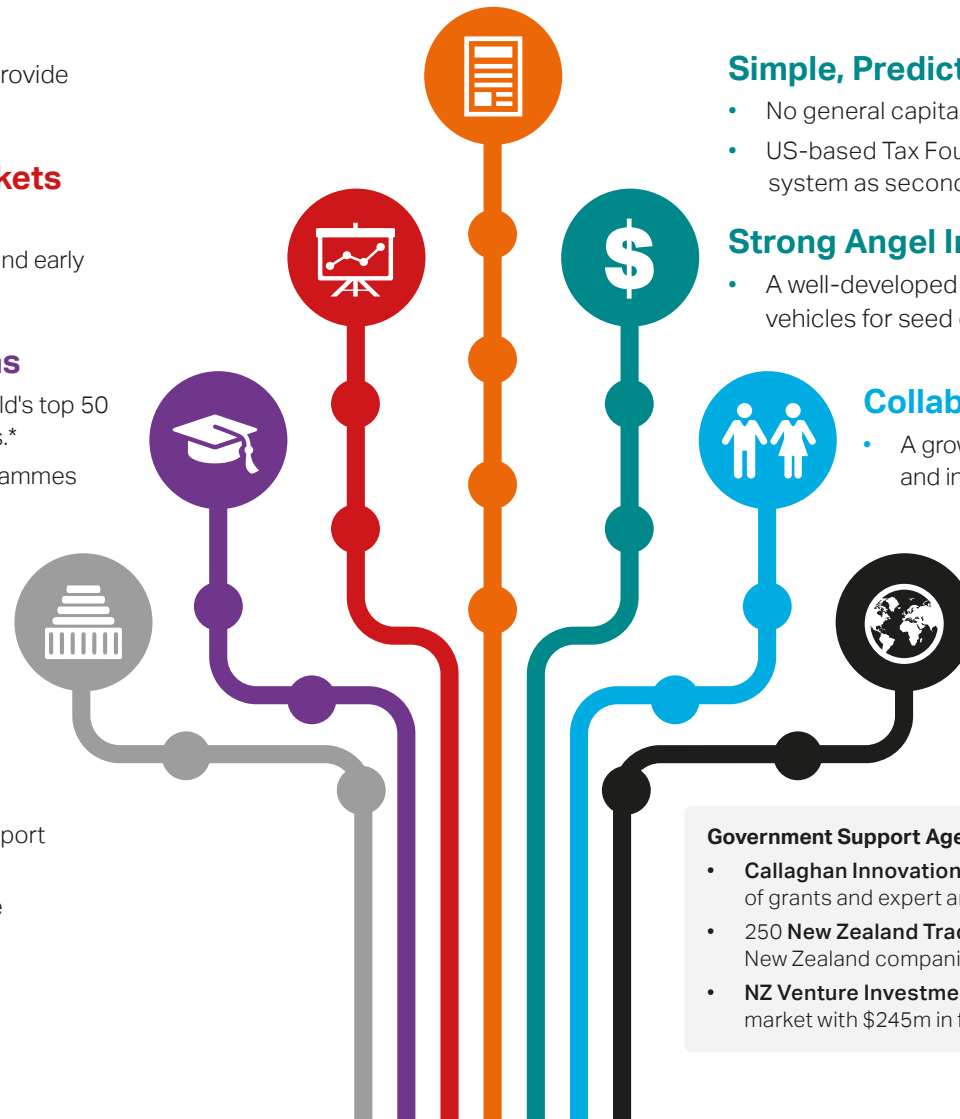
- A growing number of collaborative workspaces and innovation hubs in all regions.

World-leading Internet Speeds

- Government has committed to spend over \$2B to provide Ultra-Fast Broadband to 80% of New Zealanders by 2022.
- 4 existing international fibre cables with another under construction.

Government Support Agencies








- **Callaghan Innovation** provides companies with R&D support in the form of grants and expert and technical advice.
- **250 New Zealand Trade & Enterprise (NZTE)** overseas advisors help New Zealand companies expand their offshore operations.
- **NZ Venture Investment Fund (NZVIF)** supports the early stage investment market with \$245m in funds under management.



Supportive regulatory framework

The New Zealand government is firmly committed to facilitating business growth and fostering a safe financial market.

Our Business Record

-  **Most transparent country in the world¹**
-  **Ease of starting a business²**
-  **Ease of doing business²**
-  **Getting credit²**
-  **Forbes Best Countries for Business³**
-  **Protecting minority investors²**
-  **Heritage Foundation Index of Economic Freedom⁴**



Sir Paul Callaghan, GNZM FRS FRSNZ

"New Zealand has the fundamentals in place... We are ranked among the highest countries in the world for property rights, market freedom, free trade, lack of corruption and legal and political rights. And our taxation rate – personal and business – is one of the lowest in the OECD."



Vic Crone, CEO, Callaghan Innovation

"The fourth Industrial Revolution, where the internet and software meets hardware, is underway. A thriving tech sector at the forefront of new technologies such as AI will be critical to the success of all our businesses. The sustained growth rate of our TIN200 companies shows New Zealand is heading in the right direction – and Callaghan Innovation is focused on accelerating that pace."

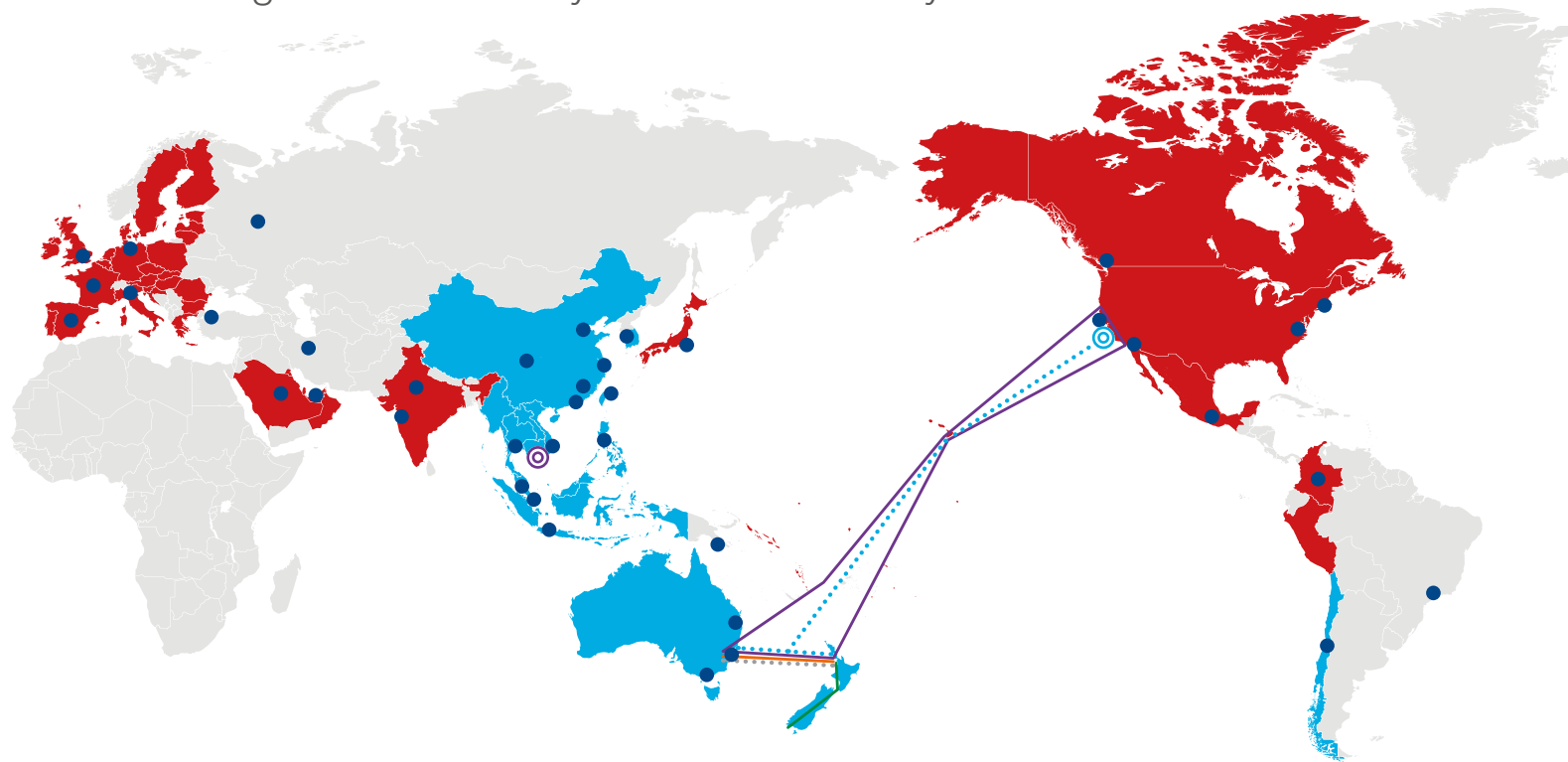
CallaghanInnovation

CALLAGHAN INNOVATION is New Zealand's innovation agency. It connects businesses to the networks, capability and funding they need to make their ideas happen.

¹Transparency International 2017, ²World Bank Group Doing Business 2018, ³Forbes 2017, ⁴Heritage Foundation 2018.

Centrally positioned and globally connected

New Zealand has Free Trade Agreements – in place or proposed – with most major global economies, a global network of government support offices, and Ultra-Fast Broadband fibre connections which extend throughout the country and internationally.



9

Current Free Trade Agreements in force, largely with countries in the Asia-Pacific region (and a further 8 proposed, under negotiation, or awaiting ratification).

60.7 milliseconds

Time taken to send data between New Zealand and the United States.

41

International New Zealand Trade & Enterprise (NZTE) offices – with over 250 offshore advisors helping New Zealand businesses expand overseas, attract investment and grow exports.

FREE TRADE AGREEMENTS (FTAs)

● Countries with current FTAs ● Countries where FTAs are proposed, under negotiation or awaiting ratification

FIBRE CABLES

EXISTING — Southern Cross Cable — TASMAN 2 Cable — Aqualink Cable
... TASMAN Global Access (TGA) Cable
























































































































UNDER CONSTRUCTION ... HAWAIIKI Cable (scheduled for service June 2018)

KEY:

- NZTE Office Locations
- Kiwi Connection, a new technology centre located in Ho Chi Minh City, is making it easier for New Zealand technology companies to invest and conduct business in Vietnam.
- Kiwi Landing Pad, located in San Francisco, helps high growth NZ technology companies establish and grow their business in the US.

Key support organisations

Some of New Zealand's many technology sector supporters:

	Tertiary / Research and Development Institutions	Government and Industry Networks	NZ Angel and Seed Investors / Venture Capital	Collaborative Spaces, Tech Transfer Offices and Incubators
NZ Wide	  	         	<p>Angel & Seed Investors:</p>    <p>Venture Capital:</p>         	
Auckland & Northland	      	     	     	           
Hamilton & Waikato	  	  		 
Central North Is.	   	     	   	   
Wellington & Lower North Is.	    			        
Christchurch/ Other South Is.	       	    	  	  

Learn More



"What I like about the ideas I've seen coming out of New Zealand is that they are fundamentally based on science and technology innovations. The innovation comes first and, oh by the way... you can use it to build a good business. I think that is the right priority... and that's exciting!"

Vinod Khosla, Founder of Khosla Ventures, Co-founder of Sun Microsystems, former general partner at Kleiner Perkins Caufield & Byers. Investor in Rocket Lab, BioDiscovery, Lanzatech

Contact Information

More information about New Zealand's top 200 and startup technology firms can be found in the annual TIN100 Report (www.tin100.com).

CENTRAL GOVERNMENT

NZ Ministry of Business, Innovation and Employment: www.mbie.govt.nz

New Zealand Immigration: www.newzealandnow.govt.nz

New Zealand Trade and Enterprise (NZTE): www.nzte.govt.nz

Callaghan Innovation: www.callaghaninnovation.com

NZ Venture Investment Fund (NZVIF): www.nzvif.co.nz

Kiwi Landing Pad: www.kiwilandingpad.com

INDUSTRY ORGANISATIONS / NETWORKS

Technology Investment Network (TIN): www.tin100.com

New Zealand Technology Industry Association (NZTech): www.nztech.org.nz

NZ Institute of IT Professionals: www.iitp.nz

The New Zealand Game Developers Association: www.nzgda.com

FinTechNZ (NZ Financial Innovation and Technology Association): www.fintechnz.org.nz

The MacDiarmid Institute: www.macdiarmid.ac.nz

TiDA: www.tida.co.nz

NZRIse: www.nzrise.org.nz

REGIONAL BUSINESS PARTNERS

Northland Inc: www.northlandinc.co.nz

Grow North Innovation District: www.grownorth.co.nz

ATEED (Auckland Tourism, Events & Economic Development): www.businessaucklandnz.com

Waikato Innovation Park: www.wipltd.co.nz

Waikato Means Business: www.waikatomeansbusiness.nz

Tauranga Chamber of Commerce: www.tauranga.co.nz

Venture Taranaki: www.taranaki.info

Activate Tairāwhiti: www.activateairawhiti.co.nz

Hawkes Bay Business Hub: www.hbbusinesshub.co.nz

CEDA (Central Economic Development Agency): www.ceda.nz

WREDA (Wellington Regional Economic Development Agency): www.wellington.govt.nz/your-council/wreda

NRDA (Nelson Regional Development Agency): www.nrda.co.nz

Development West Coast: www.dwc.org.nz

Canterbury Regional Business Partners Ltd: www.cdc.org.nz

Otago Chamber of Commerce and Dunedin City Council -

Economic Development Unit: www.otagochamber.co.nz

Venture Southland: www.venturesouthland.co.nz

NEW ZEALAND CHAMBERS OF COMMERCE

www.newzealandchambers.co.nz

REGIONAL ECONOMIC DEVELOPMENT AGENCIES

EDANZ: www.edanz.org.nz

NZ ANGEL & SEED INVESTORS/ VENTURE CAPITAL

New Zealand Private Equity and Venture Capital Association (NZVCA): www.nzvca.co.nz

Angel Association New Zealand: www.angelassociation.co.nz

Cure Kids Ventures: www.curekidsventures.co.nz

Global From Day One: www.globaldayone.com

GRC: www.grcpartner.com

K1W1: www.crunchbase.com/organization/k1w1

Milford Asset Management: www.milfordasset.com

Movac: www.movac.co.nz

Pacific Channel: www.pacificchannel.com

Pioneer Capital: www.pioneercapital.co.nz

Powerhouse: www.powerhouse-ventures.co.nz

Punakaiki Fund: www.punakaikifund.nz

Sparkbox: www.sparkbox.vc

Tuhua Fund: www.crunchbase.com/organization/tuhua-fund

Auckland & Northland

Arc Angels: www.arcangels.co.nz

Astrolab: www.astrolab.co.nz

First Cut Ventures: www.firstcut.vc

Flying Kiwi Angels: www.fka.nz

Foundry Innovations: www.foundryhq.com

Ice Angels: www.iceangels.co.nz

Waterman Capital: www.waterman.co.nz

Hamilton and Central North Island

Enterprise Angels: www.enterpriseangels.co.nz

Launch Taranaki: www.launchtaranaki.co.nz

Manawatu Angel Investment Group (MIG): www.thebcc.co.nz/investment/mig-angels

WNT Ventures: www.wntventures.co.nz

Wellington & Lower North Island

Angel HQ: www.angelhq.co.nz

Christchurch/Other South Island

Canterbury Angels: www.canterburyangels.nz

Ice Angels: www.iceangels.co.nz

Otago Angels: www.otagoangels.co.nz

COLLABORATIVE SPACES, TECH TRANSFER OFFICES AND INCUBATORS

Shared Space: www.sharedspace.co.nz

Auckland & Northland

AUT Business Innovation Centre: www.aut.ac.nz/research/about-the-research-and-innovation-office

AR/VR Garage: www.arvrgarage.co.nz

Astrolab: www.astrolab.co.nz

Biz Dojo: www.auckland.bizdojo.com

Generator NZ: www.generatornz.com

Grid Auckland: www.gridakl.com

eCentre Massey: www.ecentre.org.nz

Flux Accelerator: www.fluxaccelerator.co.nz

Icehouse: www.theicehouse.co.nz

Industry Connect: www.industryconnect.co.nz

The Distiller: www.thedistiller.org

UniServices: www.uniservices.co.nz

Velocity: www.velocity.auckland.ac.nz

Hamilton

Soda Inc: www.sodainc.com

Waikato Link: www.waikatolink.co.nz

Central North Island

Basestation: www.basestation.nz

Building Clever Companies: www.thebcc.co.nz

Icehouse: www.theicehouse.co.nz

WNT Ventures: www.wntventures.co.nz

Wellington & Lower North Island

Biz Dojo: www.wellington.bizdojo.com

Creative HQ: www.creativehq.co.nz

Enspiral Space: www.enspiralspace.co.nz

Lightning Lab: www.lightninglab.co.nz

Mahuki: www.mahuki.org

ProjectR: www.twitter.com/projectrnz

R9 Accelerator: www.r9accelerator.co.nz

Venture Up: www.ventureup.co.nz

Vic Link: www.viclink.co.nz

Christchurch & Other South Island

Bridge Street: www.bridgestreet.co.nz

EPIC Innovation: www.epicinnovation.co.nz

Green House: www.green-house.co.nz

Innovation Precinct Christchurch: www.innovationprecinct.nz

The Distiller: www.thedistiller.org

Vodafone xone: www.vodafonezone.co.nz

TERTIARY/RESEARCH AND DEVELOPMENT INSTITUTIONS

Open Polytechnic: www.openpolytechnic.ac.nz

KiwiNet: www.kiwinet.org.nz

Plant & Food Research: www.plantandfood.co.nz

Tech Futures Lab: www.techfutureslab.com

North Tec: www.northtec.ac.nz

The University of Auckland: www.auckland.ac.nz

Auckland University of Technology: www.aut.ac.nz

Auckland ICT Graduate School: www.ictgraduateschool.ac.nz

Unitec Institute of Technology: www.unitec.ac.nz

Whitireia: www.whitireia.ac.nz

Manukau Institute of Technology: www.manukau.ac.nz

Massey University: www.massey.ac.nz

AgResearch: www.agresearch.co.nz

University of Waikato: www.waikato.ac.nz

Wintec Institute of Technology: www.wintec.ac.nz

Eastern Institute of Technology: www.eit.ac.nz

Toi Ohomai Institute of Technology: www.toiohomai.ac.nz

Victoria University of Wellington: www.victoria.ac.nz

Wellington Institute of Technology: www.weltec.ac.nz

Wellington ICT Graduate School: www.wellingtonict.ac.nz

Lincoln University: www.lincoln.ac.nz

University of Canterbury: www.canterbury.ac.nz

University of Otago: www.otago.ac.nz

Southern Institute of Technology: www.sit.ac.nz

Otago Polytechnic: www.op.ac.nz

Nelson Marlborough Institute of Technology: www.nmit.ac.nz

Ara Institute of Canterbury: www.ara.ac.nz

Scion: www.scionresearch.com

Signal ICT Grad School: www.signal.ac.nz

About us

The Technology Investment Network (TIN) is a private company with a simple mission: to help facilitate the growth of the technology sector in New Zealand. It delivers on this objective through the following key endeavours.

TIN



Research and Analysis

TIN is the leading independent source of information on the technology sector; the organisation has been collecting and analysing company data for over a decade. The annual **TIN Report** (released in October each year) is a comprehensive listing of the year's top 200 high technology companies (ranked by revenue), along with information about innovative technology startup firms. It also includes detailed analysis of sector performance for the year.

In addition, the company undertakes research and analysis on request for industry participants, professional services firms, investors and Government clients.

Networking and Information-Sharing

TIN organises a number of industry events each year, based around

business-critical topics that are of high interest to sector participants.

The organisation also produces free bi-weekly electronic updates on New Zealand technology sector news. For more information about TIN or to purchase our latest report, visit our website: www.tin100.com

This 2018 edition of **The Investor's Guide to the New Zealand Technology Sector** will be relaunched as part of New Zealand's Techweek in May 2018. Techweek brings together the technology sector, the wider business community, and New Zealanders from across the country to promote New Zealand as a high-tech nation. It brings investors and ICT talent to New Zealand, inspires youth to get into tech, and encourages business uptake of ICT through events in various regions.



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

The Ministry of Business, Innovation and Employment is the Government's business facing agency, with a wide range of policy and operational responsibilities including innovation, enterprise, sector, ICT and digital economy policy.

newzealandnow.govt.nz

This New Zealand Government immigration website provides an overview of the main investor migration policies, as well as useful information about New Zealand's business environment and investment opportunities.

Technology Investment Network Ltd (TIN) has taken every care to ensure that all data is accurate at the time of writing. It accepts no liability for inaccuracies or factual errors. Copyright is reserved by Technology Investment Network Ltd. **TIN contributors:** TIN Managing Director - Greg Shanahan, Research & Operations Manager - Deanne Bloom, Data Research Analysts - Mihnea Enache and Hugh Blackburne. **Design and print production:** MOSHA.

ISSN 2463-7025 (Print). ISSN 2463-7033 (Online).

TIN



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI