Compass Startup Genome Startup Ecosystem Ranking
NZ Assessment Explanation
June 2017

In 2016 over 100 kiwi start-ups took part in the Compass Start-up Genome's Ecosystem Ranking Survey (Genome Survey) for the first time. The Compass Start-up Genome project benchmarks 56 start-up ecosystems from around the world. New Zealand was surveyed as a single ecosystem. The project also surveys large cities as single ecosystems. Silicon Valley has held the number one spot for several years and is a group of cities surveyed as a single ecosystem.

2 New Zealand's inclusion in the 2016 global ecosystem survey was led by the Angel Association NZ and delivered with support from NZX, New Zealand Trade and Enterprise, New Zealand Venture Investment Fund, Ministry of Business Innovation and Employment and Callaghan Innovation.

3 This paper sets out key insights from the New Zealand Startup Genome Assessment (NZ Assessment). AANZ's Chair, Marcel van den Assum and Executive Director, Suse Reynolds, were separately briefed by Startup Genome CEO, JF Gauthier and insights from this meeting are included.

Purpose of Global Genome Report

4 A primary goal of the Genome Survey is that it be inspirational and encouraging. It aims to address and identify the key drivers behind successful startup and innovation ecosystems. In doing so the survey's authors shed light on what is required at a local level to ensure the returns from successful eco-systems are more widely and globally shared and are not just the preserve of the top performers: Silicon Valley, Tel Aviv and Singapore.

5 The Genome identifies nine startup ecosystem factors: performance, funding, market reach, global connectedness, resource attraction, startup experience, talent, corporate involvement and founder. There are thirty metrics in the Genome Survey and eighty selected metrics addressed in the ecosystem, or in New Zealand's case, country specific assessments. The specific assessments are not intended for general distribution but prepared for those who commission the survey. The terminology and level of detail in the detailed assessments are more meaningful to those working with startups.

6 The Genome identifies four stages of growth:

- Activation
- Globalisation
- Expansion
- Integration

New Zealand Assessment

7 New Zealand is in the activation phase of the growth of its startup ecosystem. The **activation** phase is all about the generation of organic or input resources – talent, investors, deals and startup companies. New Zealand is doing well in this initial phase but there is some way to go yet. The Genome researchers estimate New Zealand only has about 400-600 startups. A successful ecosystem needs two to three times this number. Even at 1000 startups New Zealand would still be in the activation phase. We discussed whether the figure of 400-600 startups is entirely accurate. The AANZ believes there are more than 600 startups in New Zealand.

8 Once an ecosystem gets beyond activation and is generating energy internally, then it starts to have the density of community and startups required to attract talent, investment and attention and as such the odds and prospect of venture success begins to improve.

9 Resource attraction is defined as the movement of startups and entrepreneurs to an ecosystem and New Zealand's overall resource attraction is low. Gratifyingly, our startups have better access to funding than many of our peers in the activation phase.

10 New Zealand entrepreneurs show a level of global connectedness that is slightly above average for activation phase ecosystems, which is pleasing as global connectedness is one of the key determinants for startup success. Global connectedness correlates closely with exits according to the Genome study. New Zealand's early stage community needs more exits. We score very low when it comes to founders who have experienced an exit and were assessed as only having 3 exits of greater than $50m in the last 10 years.

11 JF noted that an average startup is not going to have any better chance of an exit in Silicon Valley than it would in any other ecosystem. But startups in these ecosystems do have better access to knowledge and are more globally connected. As Michael Porter pointed out a number of years ago, bigger ecosystems create more performing players. Big ecosystems attract the best, keep attracting the best and generate the best. Successful ecosystems become self-perpetuating. We discussed the analogy with New Zealand's high per-capita gold medal results at the Olympics. This is all about focus. At the beginning of the creation of a successful ecosystem it is so important to keep talent and successful founders in New Zealand.

12 Once an ecosystem reaches the **globalization** phase it is starting to generate energy and attention from beyond its borders. It is gaining global 'know how'. This is done through relationship building. And this is how unicorns are fundamentally created – through relationships that grow a global business of scale. Unicorns are generally recognized by a billion dollar-plus market capitalisation or valuation. At the **expansion** stage – eg Berlin and Stockholm – the ecosystem has experienced several $100m+ exits and is growing past 2000 startups. And in the last phase - **integration** - the ecosystem is supporting and generating 3000+ startups, resources are self-sustaining and balanced and the ecosystem is on a par with Silicon Valley and other top performers.

Which ecosystems are New Zealand's competitors?

13 Identifying which ecosystems New Zealand benchmarks itself against is not necessarily about geography or size but more specifically about which eco-systems are currently attracting New Zealand's ambitious startups and talent. For New Zealand this is still Silicon Valley and to a certain extent Singapore. While Melbourne and Sydney are nearby and of a similar size (and there is an element of the age-old trans-Tasman rivalry) the lessons and insights to draw from being part of the Genome Survey are from those we seek to bench mark ourselves against. These are eco-systems of a similar size to which talent and capital are being attracted AND which are generating unicorns and exits. JF suggested that for New Zealand this is Singapore.

14 Most startups fail. A critical mass of two to three thousand startups is needed to produce successful fast growing startups that create jobs. An ecosystem with thousands of startups begins to reduce its aversion to risk. These sorts of ecosystems are also assiduously accessing global know-how. Without global know-how and connections, entrepreneurs and startups languish and fail. As mentioned earlier, the generation of exits correlates highly global connectedness. Genome research suggests 66% of a startup's success potential is related to global connectedness.

15 We must grow New Zealand founders' global knowledge and connections. Genome Survey results clearly illustrate the importance of continuing to get people onto planes and into offshore markets and successful ecosystems. In a similar vein, but without quite the same impact, it is important to continue to invite people from these ecosystems to visit New Zealand.

16 The Genome Survey's research suggests founders are generally better at sharing knowledge and helping each other than investors. Investors are not as good at providing introductions according to JF. The creation of founder networks, such as the accelerator programmes are providing, is therefore very important.

New Zealand's strengths

17 New Zealand clearly has competitive strengths in agritech. Our fintech and film sectors are also areas of strength. We are creating scale ups in these sectors but New Zealand is still only slowly generating startups in these sectors.

18 Generating startup ecosystem success requires unicorns. New Zealand has unicorns in fintech, agritech and entertainment. Where there are unicorns, clusters of startups spring up. The recent KiwiBank Fintech Accelerator illustrates the impact of Xero, one of New Zealand's most high profile unicorns, inspiring and supporting a range of fintech startups.

19 New Zealand is doing well with respect to market reach but this is always high when an ecosystem is small and geographically isolated. We rank 2nd when it comes to the percentage of customers our startups have outside our region.

20 With respect to attracting resource and talent, we benefit from "being a place where people want to live". New Zealand is 9th of 56 ecosystems with respect to the number of entrepreneurs who have moved here from another ecosystem. The Genome Survey uses engineers as a proxy for talent, particularly software engineers. We perform well when it comes to the supply of engineers from universities and for the speed with which an offshore engineer can secure a visa to work in New Zealand. With respect to both the supply of engineering graduates and the speed of visa processing, we rank 5th of the 56 participants. Berlin provides a compelling case study. When this city focused on training more engineers, JF said the number of startups doubled.

21 New Zealand performs credibly for the level of corporate interest in startups. We ranked 7th with 65% of respondents rating corporate interest in startups as high.

New Zealand's Weaknesses

22 Deal flow is critical. JF pointed to Tel Aviv, a city of 7m people and generating thousands of startups. The Israeli mindset and policy focus has morphed into a cultural paradigm where school children now talk about growing up to run a startup. There is no reason why New Zealanders might not become similarly motivated. We have the underlying cultural traits of a "no.8 wire" mentality, being outward looking, tenacious and practical.

23 We rate well on some talent metrics. As mentioned, we generate plenty of engineering graduates but New Zealand's founders are typically inexperienced. We rank poorly when it comes to the supply of experienced engineers, the time it takes to hire

engineers, the number of experienced employees with more than two years startup growth experience and the average performance of New Zealanders in online coding competitions. More attention needs to be given to attracting and generating talent. The Edmund Hillary Fellowships global entrepreneurship visa is timely. Promoting New Zealand as a wonderful place to live is a key part of creating a successful ecosystem. Berlin leveraged its popularity in the early days of its ecosystem's creation.

24 We also rank poorly when it comes to the number of significant relationships our founders have with startup leaders outside New Zealand. It is telling that in the Genome Survey only 3% of all those responding said they had a significant relationship with two or more founders from New Zealand.

25 An eco-system either leaks or attracts resources and New Zealand is in fact doing both. We are attracting entrepreneurs but also losing startups. We are in the top 10% of ecosystems when it comes to the numbers of our startups being attracted offshore and rank 49th of 56 ecosystems when it comes to net startup attraction.

26 With respect to seed capital, New Zealand's founders are reasonably well served. Two thirds of our startups meet their seed round needs from local investors. But there is a paucity of local lead-investors; New Zealand ranks 53rd of 56 ecosystems.

AANZ's motivation and response to the Genome Survey

27 There are a number of relevant touch points in the Genome Survey for the AANZ. The primary motivation for its initiation was to set New Zealand's high growth startups in a data based, global context. This enables us to:

- tell a compelling story both domestically and internationally about our startups,
- provide credible data about the potential value of the ecosystem, and
- be able to talk from an evidence-based perspective about where the most impactful policy interventions might be made.

28 We were delighted to secure so much "NZ Inc" support for the Genome Survey with NZX, NZTE, MBIE, Callaghan Innovation and NZVIF all contributing to the $US20,000 cost of its delivery. We also received timely and helpful support from New Zealand's startup community; the incubators, accelerators and tech transfer organisations that helped to circulate the survey. There is a clear need for data.

29 Following a revision of AANZ strategy earlier in the year, one of the initiatives the AANZ is now implementing is the provision of support for our investor directors as they work with startups towards exits. Our "Doing Deals" project stream has a tight focus on global connectedness. We are supporting and incentivising investor directors to get in-market to develop key relationships and to do deals. Doing deals goes beyond raising growth capital and includes other 'success-marker' transactions such as closing strategic partnerships, closing sales channel agreements, securing an in-market director for the company or hiring in-market senior executives and sales people.

30 We are seeking financial support from relevant government agencies and private sector partners to implement a number of projects that will address New Zealand's poor results, particularly with respect to the global connectedness of our startups. This includes work to inspire 200 'success-marker' deals in the next three years, generated by at least 40 qualified investor directors and catalysing 25 liquidity events by the end of 2020. We are pleased to have secured support from NZTE for $150,000 of the $350,000 work programme.

Conclusion

31 We must apply the learnings and insights generated from the Global Genome Survey to create our own unique and differentiated eco-system. New Zealand is not Israel or Singapore or Silicon Valley.

32 Good work is being done to generate increasing numbers of startups through a range of government-supported programmes. Some of our big corporates are becoming more engaged too, generating and working with startups. Thanks to the Genome Survey, we know our output of startups is on a par with our peers but our startup density (startups per million people) is low. The Genome Survey provides evidenced based insights on the optimal number of startups and how best to support them to successful outcomes.

33 There are key areas where we are performing well:

- We rank 2nd when it comes to the percentage of customers our startups have outside our region
- New Zealand is in the top 10 ecosystems when it comes to attracting entrepreneurs here to start a company,
- Our access to locally based talent ranks in the top 10%. It is easy for foreign engineers to get a visa and our universities are generating plenty of suitably qualified people. We rank 5th on both measures.
- New Zealand startups have better access to funding than most of their peers in the activation phase.

34 To have the biggest impact on improving our Startup Genome ranking we need to:

- grow the number of startups we are generating
- work on global connectedness and particularly getting more entrepreneurs and investor directors 'in-market'
- grow the number of experienced entrepreneurs available to our startups
- generate more lead investors
- provide more seed, series A and follow on funding.

35 The Angel Association looks forward to working with our partners to grow a startup ecosystem generating compelling socio-economic and financial returns and producing jobs, export and tax revenue and recycling capital back into more startups.