SEAANZ White Paper

Growing and sustaining entrepreneurial ecosystems: What they are and the role of government policy

SEAANZ WP01-2014

Small Enterprise Association of Australia and New Zealand Ltd

SEAANZ White Paper

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SEAANZ White Paper Series

ISSN

White Paper WP01-2014

Mazzarol, T. (2014) *Growing and sustaining entrepreneurial ecosystems: What they are and the role of government policy,* White Paper WP01-2014, Small Enterprise Association of Australia and New Zealand (SEAANZ), www.seaanz.org

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Abstract

Entrepreneurial ecosystems represent a conceptual framework designed to foster economic development via entrepreneurship, innovation and small business growth. They can play a key role in the achievement of economic growth targets as set in recent years by the G20 Leaders' Summits. However, the creation of sustainable entrepreneurial ecosystems requires attention to a range of factors and they should be allowed to form organically. The development of such systems should avoid trying to 'pick winners' or 'replicate Silicon Valley'. However, they can be facilitated by government policy through reform of legal, bureaucratic and regulatory frameworks. There is a crucial role for leadership by government Ministers who can shape small business and enterprise policies within the wider political debate. Closely linked to industry clusters, entrepreneurial ecosystems should be built from existing industries via a 'top down' and 'bottom up' approach. All industry sectors should be included not just high-tech, high-growth ones. In the setting of policy it should be recognised that dealing with small businesses requires a largely 'transactional' response, while dealing with entrepreneurship is more 'relational' in nature.

Introduction

This is the first of a series of White Papers issued by SEAANZ as part of its contribution to advancing research, education, policy and practice in relation to small enterprises. As the G20 Leaders' Summit moves from Australia to Turkey in 2015 it is appropriate to reflect on the broader economic goals that emerged from the G20 summit communique issued form the meeting in Brisbane on 15-16 November 2014. This communique called for enhanced economic growth that could be achieved by:

> "...promoting competition, entrepreneurship and innovation, including by lowering barriers to new business entrants and investment" (G20 Leaders' Summit Communique, 2014 p. 2).

It also called for a reduction in unemployment, particularly amongst youth by "encouraging entrepreneurship". SEAANZ supports this ambition and the fostering of more supportive environments for small to medium enterprises (SMEs) that comprise the majority of all firms around the OECD, and which form the foundation and incubator for entrepreneurial activity.

This White Paper series has been developed by the SEAANZ board and aims to build on the G20 SME Conference of 20 June 2014. That meeting was convened by the Australian Minister for Small Business, the Honourable Bruce Billson MP and organised by the Australian Treasury, Australian Chamber of Commerce and Industry (ACCI), ANZ Bank, Australian Bankers' Association, Organisation for Economic Co-operation and Development (OECD) and public policy think-tank Global Access Partners (GAP 2014). These White Papers address the challenge of how to meet the G20's target of 2% growth by 2018 and how this might be achieved through the enhancement of SMEs within entrepreneurial ecosystems.

What is SEAANZ?

The Small Enterprise Association of Australia and New Zealand Ltd (SEAANZ) is a not-for-profit public corporation limited by guarantee, registered under the Australian Corporation's Act 2001. Founded in 1987, SEAANZ is dedicated to the advancement, development and understanding of small enterprise and entrepreneurship within Australia, New Zealand and the world. SEAANZ is focused on providing thought leadership across the "four pillars" of research, education, policy and practice in the area of SMEs.

SEAANZ is affiliated with the International Council for Small Business (ICSB), which was established in 1955 and was the first international organisation dedicated to the promotion, growth and development of small businesses at the global level. The ICSB draws together a wide cross-section of academic researcher, educators, policy makers and practitioners, who specialise in the field of SMEs. SEAANZ is also a member of the Asia Council of Small Business (ACSB), a regional affiliate of the ICSB that includes Australia, Japan, China, New Zealand, South Korea, Taiwan, Singapore and Malaysia.

It should be noted that the opinions contained in this document are those of the SEAANZ Board of Directors and do not reflect the views of all its members. They are disseminated in this document with the aim of better informing those with an interest in this area, and to stimulate further discussion.

The G20 challenge for small enterprise and entrepreneurship

The G20 SME Conference held at the Parliament of Victoria on 20 June 2014 issued an outcome statement that made 12 recommendations for change in how G20 nations should support SMEs:

1. **Government procurement policies** – government agencies should streamline and reduce their tendering and insurance requirements for SMEs with a voluntary procurement target of 20% of goods and services to be sourced from local SMEs.

2. **Regulation and 'red tape' reduction** – smarter regulation and inter-departmental cooperation is required over the long term to reduce 'red tape', and SMEs and their industry organisations should identify specific instances of 'red tape' for immediate review by government.

3. **Labour market flexibility, tax reform and productivity** – governments should take steps to enhance labour market flexibility, reform taxation systems, harmonise regulation across local, state and national jurisdictions, free international trade and improve national productivity.

4. **Entrepreneurship education** – entrepreneurship should become a subject taught within the Australian school curriculum and encouraged as a post-education employment option.

5. **E-Government** – single online entry points for the input of personal and business information and credentials should be developed as part of the Australian Government's Digital Economy agenda.

6. **Prompt payment of SME invoices** –the 30-day limit for the settlement of government accounts should date from the issue of the initial invoice, with the burden of further requests falling on public officials, rather than the SME.

7. **SME take up of digital technologies** – SMEs must adopt new technology and embrace the digital economy in order to remain globally competitive. A stronger focus on design and brand quality can also underpin long-term domestic and export success.

8. **Alternative sources of SME financing** – alternative sources of SME finance should be encouraged, with appropriate protection for stakeholders involved. Most SME growth is funded by retained earnings, so firm profitability is a key to enhanced SME growth.

9. **Growing the existing stock of SMEs** – 'Economic gardening' of local SMEs by encouraging existing small firms to employ additional workers can incrementally increase employment. Medium-sized firms that have export potential have the greatest opportunity for growth and job creation, and policy should encourage their expansion.

10. **Elevate the OECD Working Party on SMEs** – consideration should be given to the elevation of the OECD Working Party on SMEs and Entrepreneurship to an OECD Level 1 Committee.

11. **G20 SME Conference 2015** – a follow-up international SME conference should be hosted in Istanbul, Turkey in March 2015 as part of the Turkish G20 Presidency program of activities.

12. **B20 to focus on SME issues** – the B20 should continue to focus on issues relevant to SMEs and international growth.

In the following document we examine the nature and structure of entrepreneurial ecosystems and how each of these recommendations might operate within the context of building and strengthening economic growth through a strong and healthy SME sector. The emphasis of any government policy seeking enhanced economic and employment growth via small firms and enterprise should be upon fostering a vibrant entrepreneurial ecosystem. What follows is a discussion of the nature of entrepreneurial ecosystems and how government policy can be applied to help grow and maintain such systems.

What is an Entrepreneurial Ecosystem?

The concept of an 'entrepreneurial ecosystem' refers to the interaction that takes place between a range of institutional and individual stakeholders so as to foster entrepreneurship, innovation and SME growth. It was brought into prominence in 2010 by Professor Daniel Isenberg from Babson College through an article in the *Harvard Business Review* (Isenberg 2010). However, the concept has its antecedents in earlier work relating to business and industry clustering (Porter 1990; Krugman 1991; Baptista 1998), as well as the creation of National Innovation Systems (NIS) (Nelson 1992; Lundvall 2007).

According to Suresh and Ramraj (2012) the term 'entrepreneurial ecosystem' was used by other researchers such as Prahalad (2005), Cohen (2005) and Bernardez (2009) to describe conditions in which the individual, enterprise and society come together to foster the generation of economic wealth and prosperity. However, Venkataraman (2004) outlined the conditions for the fostering of 'technological entrepreneurship' within regions prior to this.

Table 1: Prescriptions for creating an entrepreneurial ecosystem

1. **Stop emulating Silicon Valley** – while Silicon Valley is a successful entrepreneurial ecosystem it is unique for its region and unlikely to be replicated in other areas.
2. **Shape the ecosystem around local conditions** – look for locally based industries with growth potential and existing capacity and build upon these foundations.
3. **Engage the private sector from the start** – entrepreneurial ecosystems must be led by the private sector and the role of government is to facilitate not try to lead or control.
4. **Favour the 'high potentials'** – while there must be room for all types of business attention should be given to fostering the growth of firms with the capacity for innovation and global market engagement.
5. **Get a big win on board** – success stimulates and motivates others to have a go and where there are successful firms they should be showcased and used as case examples for others.
6. **Tackle challenges head-on** – entrepreneurial activity in some areas may be stifled by an entrenched culture that is risk averse or conservative, this should be challenged by active communication and education programs.
7. **Stress the roots** – entrepreneurial growth oriented firms should not be flooded with 'easy money' through grants or venture capital flows. Firms must be profitable and sustainable with good financial management.
8. **Don't over engineer clusters; help them grow organically** – government enthusiasm for building industry clusters needs to be tempered by a realisation that they emerge organically from existing industries and not from attempts to 'pick winners' or building green fields science parks.
9. **Reform legal, bureaucratic, and regulatory frameworks** – a key role for government is to address legal, bureaucratic and regulatory issues such as taxation, licensing and compliance so that there are no unnecessary impediments to entrepreneurship and small business growth.

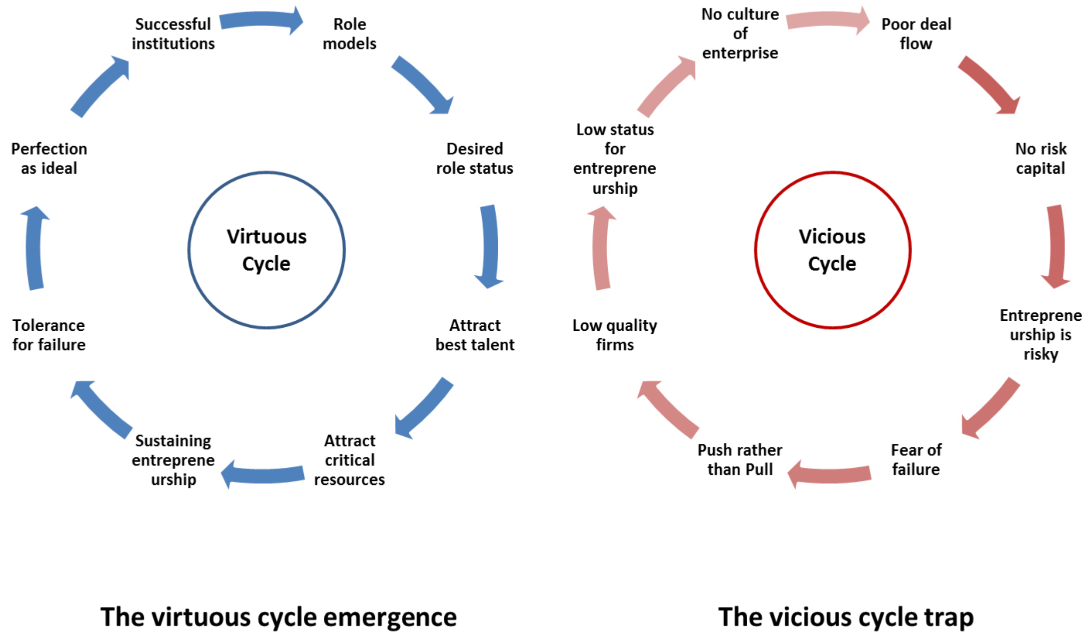
Source: Isenberg (2010)

Table 1 lists the nine 'prescriptions' outlined by Isenberg (2010) for creating an entrepreneurial ecosystem. It is worth noting that the role of government is essentially that of a facilitator and their role in leadership is indirect. The other important point to note from this list is the need to build upon local industry foundations fostering organic growth of existing industries that may not be high-tech in nature. Although it is important to encourage high-growth firms with potential, such companies also carry an above average level of risk and it is not possible to pick winners. Trying to replicate Silicon Valley, or focusing on the 'Silicon Valley Business Model' as a primary solution, will potentially risk failure and direct limited resources away from low to mid-tech industry sectors that may have more sustainability (Hirsch-Kreinsen, Hahn and Jacobsen 2008; Reboud, Mazzarol and Soutar 2014).

Virtuous versus vicious cycles

In his earlier examination of the factors necessary to foster technological entrepreneurship within a region, Venkataraman (2004) highlighted the need for a 'virtuous' rather than a 'vicious' cycle to emerge within a region if technologically based enterprises were to emerge. These two types of cycle are illustrated in Figure 1 where it can be seen that a virtuous cycle involves the building on successful enterprises that serve as role models, and then serves to attract into the region the kind of people who will seek to emulate these role models. There is also a tolerance of failure and an inflow of critical resources such as human capital, money and infrastructure.

Figure 1: Virtuous and Vicious cycles in fostering regional entrepreneurship



Source: Venkataraman (2004)

By contrast the vicious cycle sees a culture that is not supportive of enterprise and has a flow of only a few entrepreneurial businesses that are insufficient to attract risk capital, thereby creating a more risky environment. This can increase a fear of failure with a need to push or assist firms to grow rather than having them pulled into growth by market forces. The end result is low quality firms and the overall status of entrepreneurship is low leading to a poor culture in the region in relation to enterprise.

Venkataraman (2004) suggested the need for 'seven intangibles' (see Table 2), which reflect the conditions that should exist before a vicious cycle can be converted into a virtuous cycle. As he states in the paper:

> "Often governments attempt to break their economy's vicious cycle through a single solution, the most common of which is to inject risk capital. These funds are often distributed through small business development centers, and several regions and countries have even attempted ''public'' venture capital funds. However, if only risk capital is injected, it flows straight to low-quality entrepreneurship. My hypothesis is that most such cycles require multiple and simultaneous solutions." (Venkataraman 2004 p. 162)

While the investment of risk capital for entrepreneurial financing is valuable, it is not sufficient to generate a virtuous cycle. Also required are these seven intangibles to help kick-start and then sustain the appropriate cycle.

Table 2: Seven intangibles for regional entrepreneurship

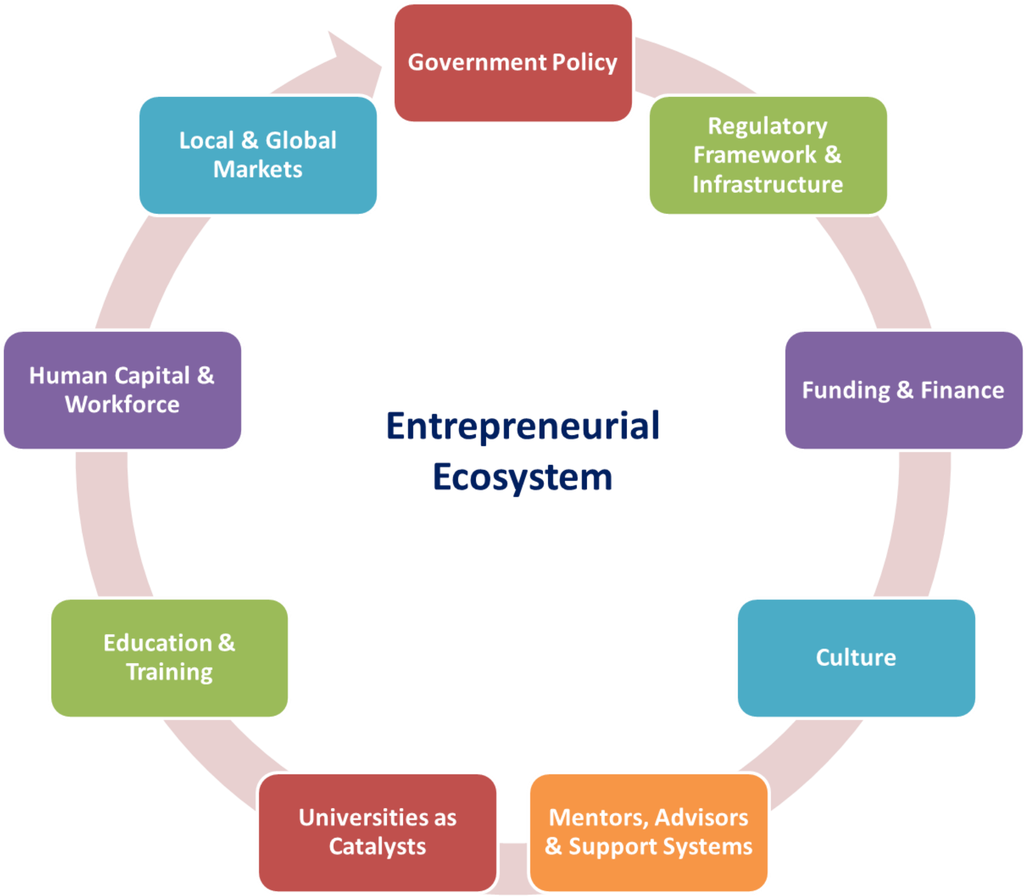
1. **Focal points capable of producing novel ideas** – there should be centres (e.g. universities, incubators, R&D hubs) that can serve to stimulate and foster new innovations.
2. **The need for right role models** – successful, local entrepreneurs or companies should serve as role models to attract risk capital, draw in new entrepreneurial talent and encourage others.
3. **The need for informal forums of entrepreneurship** – entrepreneurial activity and the fostering of innovation is more a social process than an economic one. There must be forums that can help to facilitate the process of social capital building that does not require formal, legally sanctioned exchanges.
4. **The need for region-specific ideas to be created** – technologies and business models should emerge that are relevant to the region and can grow organically within the industrial landscape.
5. **The need for safety nets** – entrepreneurship involves taking risks and many ventures will fail. There should be safety nets such as a tolerance of risk and failure, tax and bankruptcy laws, and a social welfare support system that are not punitive towards entrepreneurs who don't succeed.
6. **The need for gateways to large markets** – any new venture that is to achieve above average growth will need to able to secure access to large national or international markets.
7. **The need for executive leadership** – an important element in the success of any business venture is the quality of its leadership. Executive management teams with the skills, drive and determination to make their business grow and succeed in challenging environments are vital.

Source: Venkataraman (2004)

Components of the entrepreneurial ecosystem

The components of an entrepreneurial ecosystem vary depending on the source and the purpose for which the analysis has been undertaken. For the purposes of this analysis the model selected is adapted from that of Isenberg (2010) and the World Economic Forum (WEF 2013). It is illustrated in Figure 2 where it can be seen that there are nine components. These relate to the government policy settings for macro and micro-level aspects of the economy, and also the legal and regulatory frameworks that operate, along with infrastructure (e.g. power, water, gas, road, rail, air transport, telecommunications and broadband).

Figure 2: Components of the Entrepreneurial Ecosystem



Adapted from: Isenberg (2010); World Economic Forum (2013)

Also important is the financial sector including sources of formal and informal debt and equity for new and growing businesses. Culture plays a part, with respect to the society's tolerance of risk and failure, whether there are successful entrepreneurial role models and a desire to adopt new ideas and innovation. Of equal importance is the availability of business mentoring, advisory and support services, the engagement in the system by universities and the provision of education and training for entrepreneurs and employees. This education and training also needs to generate the human capital and skilled technical workforce that entrepreneurial firms require, including the ability to access immigrant workers. Finally, there must be access to large domestic and international markets through large corporate and government supply chains.

Government Policy

The first and perhaps most important component of an entrepreneurial ecosystem is government policy. This is not just in relation to areas directly relevant to small business or entrepreneurship, but over a wide cross-section of policies relating to taxation, financial services, telecommunications, transportation, labour markets, immigration, industry support, education and training, infrastructure and health. Much of the interest by governments in small business and entrepreneurship policy dates back to the report by Birch (1979; 1987) into employment generation in the United States, which suggested that start-up ventures, plus small and entrepreneurial firms play a significant role in job creation.

Another factor influencing government policy interest in small business and entrepreneurship is the recognition that across most of the world the majority of businesses are SMEs. For example, in the OECD group of 34 advanced economies SMEs (defined as firms with fewer than 250 employees and less than €50 million in annual turnover) comprise on average around 99% of all firms, provide around 67% of employment and more than half of all the value added (OECD 2010a).

Mason and Brown (2014) suggest that government policy relating to the development of entrepreneurial ecosystems should address seven general principles. These are listed in Table 3 and propose that any sustainable entrepreneurial ecosystem should be grown organically from existing industries that have demonstrated their ability to survive within the local conditions. Too often government policy seeks to stimulate the growth of high-tech Silicon Valley replicas through the construction of science parks and technology hubs. This is seldom a success.

Table 3: General Principles of Government Policy in Entrepreneurial Ecosystems

1. **You cannot create something from nothing** – entrepreneurial ecosystems need to evolve from industries that are already extant within the region or country.
2. **Policy approaches need to evolve over time** – entrepreneurial ecosystems are complex and dynamic in nature and need to grow and develop organically and their evolution cannot be rushed by direct intervention.
3. **No one size fits all** – every entrepreneurial ecosystem is unique and its size and shape will be determined by the local conditions at play within each of the components that comprise it.
4. **Government initiatives are likely to be ineffective in isolation** – there are no 'magic bullets' that can be used to stimulate growth in an entrepreneurial ecosystem. Each component is of equal importance and if any component is missing the system will fail or fail to grow.
5. **Entrepreneurial ecosystems require a 'top down' and 'bottom up' approach** – both macro and micro-level policy settings need to be configured to help stimulate and sustain the growth of an entrepreneurial ecosystem.
6. **Distinguish between small business and entrepreneurship policies** – most small businesses are not owned and operated by entrepreneurs. Although the majority of businesses are SMEs, only a relatively small proportion is growth focused.
7. **Policies for high growth enterprises should reflect the diversity of such firms** – high growth firms are not only found in high-tech sectors. Further, their growth paths are seldom linear in nature, few high growth firms are supported by venture capital and many grow through acquisition.

Source: Mason and Brown (2014)

The nature, size and shape of an entrepreneurial ecosystem will vary depending on the local conditions. There is also no 'magic bullet' that can be fired into a region or economy to stimulate the growth of an entrepreneurial ecosystem. Government policy must address all components of the system and ensure that they are operating in a healthy and effective manner. This requires government policy to be as holistic as possible, with attention given to both macro and micro-level policy settings so as to facilitate the entrepreneurial ecosystem via a simultaneous 'top-down' and 'bottom-up' approach.

Finally, it should be recognised that policy for the majority of small firms is likely to address a different set of issues to policy required to foster entrepreneurial firms. The first tends to focus on what Mason and Brown (2014) refer to as 'transactional' assistance. This includes regulation and compliance issues, often within specific industry sectors. By comparison, entrepreneurial firms require more 'relational' support. This is often time-sensitive, dynamic, strategically focused and peer-based (Mason and Brown 2014). Where the 'ordinary SME' is likely to require transactional assistance (e.g. in compliance), the 'entrepreneurial SME' is more in need of relational support. The latter is more generic in nature and deals with firms that are seeking above average growth and therefore assuming above average levels of risk.

Flaws in entrepreneurship policy

In their analysis of the entrepreneurial ecosystem Mason and Brown (2014) highlight the distinction between traditional approaches to entrepreneurship and small business policy and those that are more likely to stimulate growth.

Traditional policy approaches to enterprise development

Traditional policy approaches focus on specific individuals and firms, or on specific geographically located clusters of firms. Policy is focused on growing the total number of firms and this typically undertaken by investing in start-up programs. Financing policies are focused on increasing the availability of business angel and venture capital funding. Attention is also directed toward specific technologies or inventions, with a strong focus on R&D, the protection of intellectual property (IP) rights and high-technology sectors.

Government policy also seeks to 'pick winners' by targeting funding and programs at specific parts of the entrepreneurial ecosystem (e.g. business incubators, venture capital funds, university research or R&D) rather than taking a more holistic approach. Support to firms is mostly transactional in nature via grants, tax incentives and industry subsidies or assistance programs. This model is largely 'top down' in nature and driven from a national level with a few initiatives devolved to local level actors (Mason and Brown 2014).

Growth-Oriented policy approaches to enterprise development

By contrast, Mason and Brown (2014) suggest that a growth-oriented approach to enterprise development would focus primarily on types of entrepreneurs, their networks and how they might form into temporary clusters. It is the strategic intent of the management team who are leading their companies towards entrepreneurial growth that is most important.

Policy should focus on assisting firms that are seeking growth. This type of business can be from almost any industry sector, not just high-tech industries. The type of support required is more relational in nature. This involves facilitating network building, and connecting smaller firms and entrepreneurs with others who can assist their growth. A more systemic or holistic approach is required that addresses the ecosystem in totality rather than seeking to invest in only a few components.

Government policy should aim at fostering linkages between entrepreneurial firms and other actors within the ecosystem in order to stimulate innovation. This includes customers, end users, suppliers and universities. Innovation is diffused primarily through social networks and collaboration based on trust and mutual self-interest can be a major opportunity for fostering innovation and commercialisation (Mazzarol 2013). Innovation can also be found across all sectors of the economy, both new and traditional, and via low, mid and high-tech in nature (Reboud et al. 2014). Rather than a 'top-down' approach, policy should focus on a devolved model that works at local and regional level (Mason and Brown 2014).

Formulation is the "Achilles Heel" of entrepreneurship policy

According to Arshed, Carter and Mason (2014) entrepreneurship policy has generally been ineffective throughout most countries due to how it has been formulated. Their study of how such policy was formulated in the United Kingdom conducted interviews with public servants and government policy advisors. It highlighted the critical role played by "institutional entrepreneurs" who helped to shape and empower specific policies and programs.

Also identified in this study was the critical role played by Government Ministers. This took the form of ministerial interest in enterprise policy and their willingness to engage actively in the policy development process. Government agencies and departments answer to Ministers rather than the public and it is therefore important for Ministers to have a good understanding of the forces that drive and shape the formation and sustainability of entrepreneurial ecosystems.

Entrepreneurial actors

In setting policy for entrepreneurial ecosystems attention needs to be given to four key groups. Figure 3 illustrates these groups. The first are the *"entrepreneurial actors"*, including the 'nascent entrepreneurs' who are at pre-start level, or who are engaged in new venture creation start-up activities. Also there are 'novice entrepreneurs', who are learning to operate newly founded business ventures, or rebuilding established firms that they have recently acquired. Then there are the more experienced 'serial' and 'portfolio' entrepreneurs. The first of these start-up or acquire businesses only to sell or close them, and move onto new opportunities, the second build up groups of companies through ether start-up or acquisition. These 'entrepreneurial actors' need to be facilitated where possible via soft and hard infrastructure such as mentoring and support services, education courses, incubators, co-working spaces, networking forums and accelerator programs.

Figure 3: Policy points of focus for entrepreneurial ecosystems

Adapted from: Mason and Brown (2014)

Entrepreneurial resource providers

The "*entrepreneurial resource providers*" include sources of finance, both debt and equity, and of either a formal or informal nature. Policy should target ways to increase the total supply of and ease of access to funding for SMEs, in particular growth orientated companies. This is typically through risk-capital such as business angels' networks, venture capital funds and merchant banks. However, it can also now include crowd-funding and peer-to-peer lending. However, there needs to be a mix of debt financing supplied by banks under normal lending conditions. This is a reflection of the difficulty of acquiring venture capital funding, and the fact that many firms do not want or need such funding.

It is important to ensure that the business models and management competencies of the firms within the ecosystem are robust. Helping SMEs to gain access to large corporate or government contracts will significantly enhance their growth potential. Promoting links to management education via colleges and universities can also assist, as can securing access to technical and other non-financial resources that might be difficult for the business to retain in-house. This is particularly important in the commercialisation of new products or technologies. Attention should also be given to helping small firms gain access to the stock market and to make information on small listed companies more readily available to investors (Frino, 2014).

Entrepreneurial connectors

Another important point of focus for policy is the *"entrepreneurial connectors"* such as local professional associations, industry groups, chambers of commerce and industry (CCI), entrepreneurship clubs and start-up communities. There are also community-based business support centres such as the Business Enterprise Centres (BEC) network, as well as matching services designed to help investors find companies seeking equity. For in-bound business migrants or individuals seeking to purchase established businesses, there are business brokers.

Entrepreneurial orientation

Finally, there is the overall *"entrepreneurial orientation"* inherent in the culture of the country or region. As noted by Venkataraman (2004) there needs to be a culture that is tolerant of risk and failure and willing to champion entrepreneurial success, with role models of individuals and firms who can serve to encourage and motivate others. There should also be education programs that can help foster entrepreneurial behaviour, but also teach business owners the skills they need to successfully run sustainable and growth oriented companies. Immigration policy that is welcoming of inbound investment and business migration also plays a role. Finally there should be a willingness to adopt new ideas, innovate and embrace change.

Conclusions and recommendations for government policy

It is encouraging to see the outcomes from the G20 SME Conference adopt a holistic approach that is broadly in keeping with the principles of fostering and sustaining an entrepreneurial ecosystem. However, many of the 12 recommendations outlined in the conference communique (GAP 2014) address largely 'transactional' issues rather than the 'relational' ones that are better suited to the enhancement and support of growth focused entrepreneurial firms. Nevertheless it is encouraging to see the call to have the B20 focus on SME issues, to raise the status of the OECD Working party on SMEs and to hold a further G20 SME Conference in Turkey in 2015.

Key Recommendations for Government Policy

- The formulation of effective policy for entrepreneurial ecosystems requires the active involvement of Government Ministers working with senior public servants who act as 'institutional entrepreneurs' to shape and empower policies and programs.
- Policy should be developed that is holistic and encompasses all components of the ecosystem rather than seeking to 'cherry pick' areas of special interest.
- Build from existing industries that have formed naturally within the region or country rather than seeking to generate new industries from green field sites.
- Encourage growth across all industry sectors including low, mid and high-tech firms.
- Adopt a 'top-down' and 'bottom-up' approach devolving responsibility to local and regional authorities.
- Recognise that small business policy is 'transactional' while entrepreneurship policy is 'relational' in nature.

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