ENTREPRENEURIAL ECOSYSTEM DEVELOPMENT:
LEARNING FROM SUCCESSES

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Abstract

The strengthening of the entrepreneurial landscape has been viewed as a means to national economic growth, wealth creation as well as job creation. Good examples exist where government deliberate actions have contributed to these kinds of positive growth, yet this research exposes the rigour and hard work needed to bring about this success. The rigour stems from the pursuit of a holistic approach which involves the strengthening of the six domains of entrepreneurship ecosystem growth as posited in literature, while the hard work is related to the discipline and expertise required to pilot such initiative.

Research has shown that many countries may be looking for entrepreneurship in the wrong places. Funding availability is only a part of a thriving entrepreneurship ecosystem, the strengthening of other domains can help an ecosystem grow more sustainably. The role of government in driving the entrepreneurship ecosystem can be restricted and channeled towards government performing its traditional role of providing the enabling environment and allowing the private sector drive the ecosystem. Where the growth of the entrepreneurship ecosystem is led by public initiative, it may be better to jettison the idea of the individual firm’s development and pursue the strengthening of the ecosystem in all its domains.

Key-words: Entrepreneurship Ecosystem, Ecosystem, Regulatory capture, Information asymmetry, Domains of growth.
Dedications

To my wife, Aderonke Adedeji-Abbas and my kids: Samina & Samira; Sabaque & Sodiq thank you for understanding the long hours away from home.

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1. Introduction

1.1 Background
Pursuing economic growth through strengthening of the entrepreneurial space and driving innovation has become a lucrative venture for countries aiming to attain economic development and these can be achieved through a combination of strategies. Where public policies drive such opportunities, concerted efforts must be made to ensure that such developmental programs are well defined, appraised from time to time with well-defined measuring tools and the objectives should be well guided. This is of concern based on the high unpredictability of these programs owing to the peculiarities of different entrepreneurship landscape that what works in one country can be difficult to replicate in another country. An entrepreneurship ecosystem contains different types and levels of activities and complexity of interacting parts which combine to drive the system (Voelker, 2012 in Sheriff and Muffatto, 2015). Bygrave and Hofer (1991) defined entrepreneurship ecosystem (entrepreneurial process) as “all functions, activities, and actions associated with perceiving opportunities and the creation of organizations to pursue them” (Bygrave, 1993, Pg257).

The academic task here is to attempt an understanding of the strategies employed by forerunners of successful policies geared towards the achievement of economic development through the fostering of an entrepreneurship ecosystem. Quite a number of thriving entrepreneurial ecosystems which bears the hallmark of governmental policy inputs are discussed and analyzed across related literatures on entrepreneurial ecosystem development, however three of these examples namely:
1. The Israeli Yozma program;
2. The New Zealand Venture Investment Fund (NZVIF);
3. The Singaporean Entrepreneurship initiatives;
resonates well with the aim of this paper. The reasons for the above is found in the underpinning geography, level of economic development before the initiation of the program, the size of the country, and the overall impact of the programs.

There have been lots of discussions both in academia and the larger society about entrepreneurship, technological innovation, high-tech research and development and so on. Discussions has varied from the net contribution of entrepreneurial and small business start-ups to economic activities and job creation (Mason and Brown, 2013[1]); the importance of promoting entrepreneurship through pursuit of an all-encompassing ecosystem development approach that strengthen both monetary and non-monetary incentives (Isenberg, 2010); and issues such as differentiating amongst different categories of entrepreneurial pursuit and understanding where efforts should be directed to attain the desired growth (Steve Blank, 2011).

The notion that these can be brought about through carefully orchestrated process leading to the evolution of an entrepreneurial ecosystem has proven to be an encouragement to both
public and private institutions to foster entrepreneurship as part of a national agenda, driving countries around the world to develop an entrepreneurial culture where it is lacking, strengthen it where is weak and reinforce it where it already exists, this may explain the reasons why the likes of Silicon Valley, Boston region, Tel Aviv, Stockholm are not resting on their laurels.

As Isenberg (2010) succinctly puts it in his opener that recent research have shown that “the face of entrepreneurship is changing all around the world and best practices are emerging from surprising places, valuable lessons can be learned from what is working” (Isenberg, 2010, Pg1)

1.2 Research Questions and Aim
This paper has as its main purpose an understanding of some examples in governments’ policy programs (Israel, New Zealand, Singapore and Nigeria) directed towards boosting their national economy and how these have influenced the development of an entrepreneurial ecosystem. The task shall be achieved through a synthesis of existing scholarly literatures on the evolution of an entrepreneurial ecosystem in the selected examples in line with Daniel Isenberg’s framework/model for entrepreneurial ecosystem growth based on six domains.

The key questions which the study attempts to answer are:-
I. What lessons can be learnt from examples of successful government initiated programs and how they can bring about evolution and growth of a thriving entrepreneurial ecosystem?

II. What is the role of financial interventions which is sometimes perceived as the overarching ingredient in entrepreneurship development as pursued in the examples under review?

This research shows linkage within the field of industrial management as the larger discussion on entrepreneurial landscape though grounded in economic development is well rooted in technological advancement. The entrepreneurship ecosystem represents the entire interactions between socio-technical and human factors, it encompasses hundreds of parts and components that must interact together to bring about innovation and growth. There are inventors who need manufactures who in turn need suppliers and customers who add value through adoption, and all relies on financing (Moore, 1993 in Mason and Brown, 2013[1]).

1.3 Delimitations
The study has set out to understand the role of government policy interventions in selected countries towards the evolution and growth of an entrepreneurial ecosystem so as to identify a common trend in successful attempt at driving national economic growth through entrepreneurship development. The three examples: Israel, New Zealand and Singapore are not claimed to be representative of perfect cases of deliberate ecosystem development, yet they represent examples of government direct involvement in driving such initiative. Also,
the Nigerian case does not claim to be holistically explored or understood, attempts have only be made understand a tiny fraction of an array of possible research.

Interviews have only targeted entrepreneurs who have benefitted from government initiative which itself represent small proportions of entrepreneurs and start-ups in the country, also sample frame of 19 interviews spread across three cities of Lagos, Ibadan and Abuja is aimed at providing only an insight into the research problem. This study down plays lots of other debates on the most effective forms of policy intervention to promote economic growth and job creation and assume instead the advantage or otherwise of entrepreneurship to achieve such goals of economic development.

1.4 Outline
The work is divided into six chapters. Chapter one is focused on introduction to the general issues and stating of the research questions. Research delimitations as well as this outline are also contained in the first chapter. Chapter two centers on the research method and paradigm, ethics and sustainability issues are also stated. Chapter three comprises the review of some related literatures/conceptual framework on entrepreneurial ecosystems and clarifications of the main concept of entrepreneurship ecosystem.

Chapter four describes the three cases of successful entrepreneurial ecosystem by reviewing existing literatures and operationalizing these examples under the chosen model/framework setting the scene for the research findings. Chapter five describes the Nigerian entrepreneurial landscape and presents results of interviews re-echoing research findings from chapter four, while chapter Six presents a summary of the discussions and conclusions, highlights limitations and put forward suggestions for further studies.
2. Methodology

2.1 Research Method
A descriptive analysis of selected examples where some form of government intervention has led to the evolution of an entrepreneurial ecosystem is the preferred method for this paper, this descriptive study has as a major objective the description of current practices in the chosen examples (Collis and Hussey, 2013). The description will take the form of “fact checking” each of the examples against Daniel Isenberg’s framework/model for entrepreneurial ecosystem growth and searching for similarities amongst the successful examples under review, he made use of six domains to describe the perquisite of any entrepreneurial ecosystem, namely: a conducive culture; enabling policies and leadership; availability of appropriate finance; quality human capital; venture friendly markets for products and services; and a range of institutional support (Isenberg, 2011). The thinking in the adoption of this method can be deemed predictive, that if developing countries pursuing the development of an entrepreneurial ecosystem show certain margin in some or all of these domains highlighted above and can emulate and adopt some of the strategies employed in the discussed examples, meaningful progressed may be achieved in the development of an entrepreneurial ecosystem.

To answer the research questions, literature will be reviewed to understand how the entrepreneurial ecosystems of Israel, New Zealand and Singapore have evolved. Semi-structured interviews will be carried out in Nigeria to get more insight into how small and medium entrepreneurs are shaping the entrepreneurial landscape especially in the face of recent efforts by public and private sector geared towards fostering entrepreneurship. The focus group is primarily entrepreneurs/start-ups that has received one form or another of government incentive; this is aimed at understanding what other benefits that are gained in the process of accessing these mainly financial interventions. The study covered 19 interviews over a three week period, 16 of them are entrepreneurs while two others were entrepreneurship association leaders (themselves business owners) and one was the Zonal director of a government agency in charge of small and medium enterprises, each interviews lasted 45-55 minutes.

Interview results will be presented in a tabular form and juxtaposed with findings in literature. The six domains of entrepreneurship ecosystem growth put forward by Daniel Isenberg will be defined and then used as concepts that guide the analysis of literature and interview findings in similar structure used by Arvidsson (2013). This will lead up to a general discussion of the issues peculiar to and challenges of pursuing entrepreneurial endeavor in Nigeria.

2.2 Research Paradigm
The interpretivists’ paradigm is deemed appropriate for this research owing largely to it qualitative nature and the social science background. The researcher acknowledges the
subjectivity that is common to this kind of research, borne out of the interaction with the phenomena during the research and also because the stage is set in social reality and theories as well as frameworks are socially constructed leading to possible bias by the researcher (Collis & Hussey, 2013). Interviewees and the researcher also used “personal voices” during the interviews leading to strong bias and value-laden interview sessions although findings remained accurate and a pattern quickly formed after a number of interviews suggesting that entrepreneurs and small business start-ups face similar challenges and they have common knowledge of challenges in their entrepreneurial ecosystems.

2.3 Ethics and Sustainability

The research has been carried out strictly as an academic endeavor with adherence to the research ethical standards. Guidelines enumerated in literature for example Collis and Hussey (2013) has been followed. Interviewees were fully briefed about the purely academic intentions of the research, and results were presented without direct link to any individual interviewee and only those who consented where interviewed. Confidentiality of interviewees was ensured and the interviewees have been duly informed that the result is to be preserved as a public document, and permission has been given. The researcher has also ensured that findings are not exaggerated or miss represented to favor a particular outcome. Although the research uses the interpretivists paradigm and the researcher has bear the cost of interview (which requires a field trip to Nigeria), these has not influenced the motive to carry out a purely academic research.

A fundamental sustainability issue was that the research interviews were conducted in a manner that would endear interviewees to agree in future to grant interviews for research purposes. The research itself is well positioned in the realm of sustainability as it tends to understand how resources are been used within the entrepreneurial ecosystem today and how they can be better handled in the future.
3. Theoretical Framework and Literature Review

3.1 Theory of Regulatory Capture
The theory of Regulatory Capture (Laffont & Tirole, 1991) will be employed to understand some of the politico-economic processes which shape governmental interventions and how this can influence the objectives of an entire policy initiative towards development of an entrepreneurial ecosystem. There exist two interpretations of Regulatory Capture, taking the broader definition explained by Ernesto Dal Bo is the “process through which special interests affect states interventions in any of its forms, which can include areas as diverse as the setting of taxes, the choice of foreign or monetary policy, or the legislation affecting R&D” (Dal Bö 2006, pg203).

This theory explains a major challenge that a program targeted at developing an entrepreneurial ecosystem may face in the hands of political gladiators as they jostle to capture as more values for their constituency or even in some cases for their own benefits. Dal Bö (2006), also pointed out that well established firms can also position themselves or through proxies to capture excessive benefits to the detriment of the entire program. This is sometimes possible because these firms may have private or expert information that is beyond the reach of smaller firms and start-ups or their political representatives to obtain thereby conferring undue advantage for them to influence the policy direction, this can lead to failure of the program or policy.

3.2 Theory of Information Asymmetry
Theory of Information asymmetry as posited by George Akerlof relates to the behavior of firm during the process of valuation of a firm’s worth, he raised the issue of dishonest dealings and its effects on the market (Akerlof, 1970). Dierkens, (1991) defined Information asymmetry as the difference in information between the managers of the firm and the market. The numerous negotiations that follows accessing any form of financial intervention during the start-up and venture creation process means that ventures are required to provide disclosures about the viability of their model, products etc. It is usually done in formal financial reports especially for already existing business (Healy & Palepu, 2001).

Amit R. et al noted that information asymmetry can manifest in two forms, “hidden information” (leading to adverse selection) and “hidden action” (leading to moral hazard). Hidden information occurs when one party to the transaction have relevant information that is unknown to the other party, for instance the entrepreneur overstating the potential of a product or service under development leading to poor selection by financing agencies be it private or public funding. While Hidden action relates to the inability of one party to adequately observe the actions taken by the other party. Venture capital firms or monitors of government funded ventures may not be able to adequately observe whether the entrepreneur is working hard and making rational decisions (Amit et al, 1998).
Balakrishnan et al (1993) pointed out that “the target firm obviously has better information about the true value of its assets and capabilities because of prior ownership and use” (Balakrishnan et al, 1993. Pg102). Although it may be the case that the firm does not foresee the full potential of its product or services which the potential investor might know and choose not to bring to the negotiating table.

3.3 Literature Review

This paper draws heavily on Daniel Isenberg’s numerous works on the influence of government interventions on the evolution of an entrepreneurial ecosystem and the importance of an intertwining of a vast array of stakeholders which are necessary for entrepreneurship to take root. It also highlights the importance of building a wide and deep knowledge base. Isenberg also contributed immensely with his ecosystem for growth entrepreneurship domain which characterized the framework for analyzing the examples of entrepreneurial ecosystem in this paper (Isenberg, 2010).

Josh Lerner (2010) contributed on synergies between developing an entrepreneurial ecosystem and the venture capital industry as well as how this can lead to economic development. He carried out comparative studies to demonstrate how the thriving entrepreneurial ecosystems have aided economic recovery for countries facing challenges while developed and prosperous countries have been able to increase their economic lead with one form of government interventions or the other to strengthen R&D spending both in public and private sectors.

Mason and Brown (2013[1][2]) showed the need for the entrepreneurial landscape, need to understand and separate the peculiar needs of High Growth Firms (HGFs) from those of SMEs in any entrepreneurial ecosystem. They explained the different roles of both categories and as well as the differential contributions to employment generations. They also drove the arguments that government involvement in developing the ecosystem goes beyond the provision of capital. Other writers also lend their voice to the premise that numerous small firms make substantial gross contributions to the development of the entrepreneurial ecosystem as catalysts and feeders to high growth firms (Schumpeter 1934; Mason and Brown 2013[1]; Isenberg 2010).

The literatures suggests that the specific attention devoted to high growth firms can be key to how the entrepreneurial ecosystem develops, their numbers may be small but their impact can be huge due to factors including their abilities to go global, attract more capital, serve as success stories, create a pool of wealthy serial entrepreneurs, support small ventures and so on. Scott Shane (2009) also lends some voice to this argument, that although HGFs account for a small subset of firms (going by numbers) in most entrepreneurial landscape, yet they account for a disproportionately large amount of wealth and job creation. He therefore posited that rather than subsidizing “typical start-up”, policy makers focus should be on that tiny subset “that will take people out of poverty, encourage innovation, create jobs, reduce
unemployment, make markets more competitive, and enhance economic growth” (Shane, 2009. Pg146).

Cheng et al (2009) stressed the quality of entrepreneurial activities rather than its quantity as a better measurement. They noted that recently entrepreneurship has evolved as a crucial mechanism of economic development joining other factors as capital formation, labor inputs, scale economies and knowledge creation and spillover. They went as far as attempting the development of a standard measurement protocols for entrepreneurship quality. Entrepreneurship quality stresses the portion of successful new ventures that have expanded rapidly over the years, in sharp contrast to entrepreneurship quantity that is based entirely on gross firm formation and the total number of new businesses.

3.4 Conceptual Clarifications
Entrepreneurial ecosystem development draws up rich intellectual inquiry from Economic geography, Economics, and other disciplines mainly because it seeks to understand and explain why firms cluster together in geographical space and benefits that arise from such clusters (Mason and Brown, 2013[1]). They went on to synthesize a definition of entrepreneurial ecosystem as “a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations, institutions and entrepreneurial processes which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment” (Mason and Brown 2013[1], pg5). James Moore was amongst the first to coin the term ecosystem in relation to entrepreneurship, in his influential article in Harvard Business Review in the 1990’s he pointed out that businesses do not evolve in vacuum but rather in a relational nature of interactions between suppliers, customers and financiers (Moore, 1993 in Mason and Brown, 2013[1]).

There is a need to also define the term “ecosystem”, a term originating from ecology. Defined succinctly by Sir Authur Tansley in 1935 as “a biotic community or assemblage and its associated physical environment in a specific place” (Pickett and Cadenasso 2002, pg2). An ecosystem can be of any size as long as interactions are possible within its boundaries, another characteristic is that it is far from being in a state of equilibrium hence it is constantly changing in composition, content or the processes (Pickett and Cadenasso 2002). These can be related to Schumpeter’s third general principle of economic development which states that “economic development is not an organic entity that forms a whole, it rather consists of relatively separate partial developments that follow one upon the other” (Ursula Backhaus, 2002). There also exist the in addition to the meaning above, two other dimensions of an ecosystem, namely Model and Metaphor which will not be discussed in any details.

As natural ecosystems, this contains different types of biological components with varying degrees of arrangements. So also do entrepreneurship ecosystems contain different types and levels of activities and complexity of interacting parts which combine to drive the system which confer on it the status of an ecosystem (Voelker, 2012 in Sheriff and Muffatto, 2015).

Clarifications is also needed to understand the distinctions between High growth firms (HGFs) and small enterprises, while the former are engines of productivity growth, create
new employment, increase innovation and promote internationalization (OECD, 2013). The latter can play the role of encouraging sole proprietorships which in many instances are not scalable but nevertheless contribute significantly to economic development and engage quite a large number of most nations’ workforce (this is peculiar to developing countries where a large adult population either formally or informally engage in entrepreneurial activities, mainly small enterprises at the subsistence level), for example GEM data sets show that 82% of Nigeria’s youth population have propensity to engage in entrepreneurship even though only 22% are in the process of setting up a venture (GEM 1, 2015), a large percentage of them been small non-scalable informal enterprise. However, the social economics of employment opportunities of both classes of ventures are different in favor of the former (Isenberg, 2010).
4. Case Description

4.1 Israeli Yozma Program

In 1993, the Israeli government created Yozma, a $100 million fund of funds that in three years spawned ten venture capital funds. Each fund comprises the Yozma, an Israeli private partner and a foreign private partner (mostly from the USA, Western Europe and a few from Japan) with proven fund management expertise. After ten years, these ten original Yozma groups had a combined total fund of $2.9 billion and the entire Israeli venture market was approximately $10 billion with total of 60 groups active in the venture capital industry (Isenberg, 2010; Lerner, 2010; Erlich, 2002). The Yozma program was also to make direct investments in start-up companies through the Yozma Venture Fund which was established with USD20 million obviously to serve what start-up venture that is deemed unattractive to the venture capital funds (Lerner, et al 2005).

Figure 1: Israel TEA (Total new Entrepreneurial Activity) and EB (Established Business) rates 2002-2012

![Graph showing TEA and EB rates from 2002 to 2012.](source)

Avnimelech et al pointed out that the Israeli entrepreneurship landscape was shaped by two distinct periods, firstly the process of introduction and diffusion of R&D throughout the business sector followed by the transformation of high-tech sectors into an entrepreneurial high-tech cluster model which ultimately led to the successful emergence of the Venture capital industry between 1993 and the year 2000. This was a synergy of the Yozma program and the technological incubators program (Avnimelech, et al, 2007).

It is noteworthy that High-tech remains the major driver of the Israeli economy and has continued to grow faster than any other industry in that country. figure 1 shows the rate of new businesses from 2002-2012. Contributing factors include a wave of well-educated scientists and engineers who migrated from Russia, reductions in defense spending and changing lifestyle of the young generation who are picking up the buzz in the IT and electronics fields (Chorev & Anderson, 2006).
4.2 New Zealand Venture Investment Fund (NZVIF)
The second example, the New Zealand Venture Investment Fund (NZVIF) was borne out of the need to diversify the New Zealand economy which depended heavily on production and exporting of commodities, and to strengthen the nation’s Knowledge-based industries which was perceived to be very weak (Lerner et al., 2005; Lerner, 2010). According to Lerner et al (2005) the New Zealand initiative rested on four pillars, first, growing New Zealand’s Research and Development (R&D) capability and encouraging the commercialization of R&D; second, Encouraging the formation of networks between businesses that encourage the recognition and realization of market opportunities, collaborative research efforts, increased technology and skill transfer between organizations; To get more New Zealand businesses on paths to global success by increasing their access to international experts, networks and market knowledge; and lastly, to encourage the formation of a venture capital market to finance the commercialization of innovation thereby strengthening the local venture capital industry (Lerner, et al. 2005).

The establishment of the NZVIF in 2002 therefore targeted the growth of the New Zealand venture capital market through co-investment with private investors and related market development activities, adopting the a so-called fund-of-funds approach with the government making investments in private venture capital funds (Lerner, 2010). In essence the scheme was driving the evolution of an entrepreneurial ecosystem through pursuit of the four goals mentioned above without expressly using the term as it is used in this paper.

4.3 Singapore
The evolution of the Singaporean entrepreneurial landscape may be hard to pin down to one particular policy or strategy. Though, a chain of events immediately after independence in 1965 can be attributed to the economic growth of the tiny island state (Lerner, et al. 2005). Lerner (2010) noted that immediately after independence there was an aggressive pursuit on investments on infrastructures such as ports, subsidy on education, an open and corruption-free economy and the establishments of sovereign wealth funds driving a wide variety of investments (Lerner, 2010).

These enabled the government to experiment with varieties of efforts to develop an entrepreneurial ecosystem which steadily led to economic development for the country, for instance the gross domestic product (GDP) grew from $2,650 after independence to $31,400 in 2006 (Lerner, 2010).

The searchlight will now turn on the three examples in an attempt to operationalize them under Isenberg’s six domains of the entrepreneurship ecosystems namely; Policy, Finance, Culture, Supports, Human capital and Markets.
4.4 Domains of Entrepreneurship Ecosystem Growth

Going by James Moore’s elucidation of an entrepreneurial ecosystem, this supposedly comprises of a relational embedded nature of interactions with suppliers, customers and financiers operating in specific location (Moore, 1993 in Mason and Brown, 2013[1]). It becomes easy to understand the reasoning behind the articulation of Daniel Isenberg’s approach which he maintains constitute a novel and cost-effective strategy for stimulating economic prosperity becoming a “pre-condition for the successful deployment of cluster strategies, innovation systems, knowledge economy or national competitiveness policy” (Isenberg, 2011; Mason and Brown, 2013[1][2]). He identified six generic domains which in turn comprise hundreds of elements interacting in highly complex and idiosyncratic ways, meaning that taken individually these domains are very limited in value and should not be pursued in isolation. The six domains are, depicted in figure 2 below: Enabling policies and leadership; Conducive culture; Availability of appropriate finance; Quality human capital; Venture friendly markets for products; and a Range of institutional support (Isenberg, 2011). The ecosystem presumably emerges under these boisterous domains but under a unique set of conditions and circumstances leading to the conclusions that each and every entrepreneurial ecosystem should be shaped around local conditions (Isenberg, 2010).

Figure 2: Daniel Isenberg’s Domains of the Entrepreneurship Ecosystem.
4.4.1 Enabling Policies and Leadership
This is where the institutional role of government to provide a policy direction to national economic development is important. The focus should not be mainly the provision of capital but creating the conducive environment for businesses by providing key policy which will resonate well with the diverse group of stakeholders who symbiotically drive the growth of the entrepreneurial ecosystem. Institutions well-grounded and solid enough to be able to take financial risk has to be developed through conscious government strategies, regulatory frameworks and venture friendly legislation will go a long way in influencing the rate of new business growth and expansion of existing businesses such as Bankruptcy law, contract enforcement, property rights and labor laws are germane to a budding entrepreneurial ecosystem.
This is also where the buzz for economic development can first be created with how governments provide leadership through policy direction and create some kind of legitimacy for the general population to want to try their entrepreneurial skills (Isenberg, 2011). Isenberg affirmed that government cannot do it alone and that they must engage the private sector early as it is the private sector best advantage to develop a self-sustaining and profit driven market which are outcomes of a successful entrepreneurial ecosystem (Isenberg, 2010).

The Israeli Yozma program saw the government providing matching funds to investors and given the right to buy back the government stake within the first 5 years for the initial value plus an interest of 5-7%. The government also relaxed the cumbersome application procedures and burdensome reporting requirements that plagued earlier programs. Foreign investors were also very comfortable with the legal structure for the venture funds, it was a limited partnership modeled after the Delaware partnerships that was a standard practice in the USA and elsewhere with a 10-year fund life coupled with “flow-through” tax status (Lerner, 2010).

Also in the New Zealand NZVIF program, government investment was on the same term as those of private investors even though the program was structured as a stand-alone company distancing government from the risk and liability for the investments made. This ensured the independence from decisions about appointment of venture capital fund managers from the political class and greatly reducing the amount of regulatory captured by political representatives. The fund’s managers were allowed to make investment decision that reflects current market practices without undue interference from government. Government investments were structured as equity and could be bought over by the investors just as the Israeli Yozma up till the fifth year of the fund (Lerner, 2010). Lerner pointed out that the program was a reaction to the country’s precarious dependence on production and exporting of commodities, with a weak knowledge-based industry and steadily falling standard of living in comparison to other major developed countries, signaling the urgency to react to an impending economic crisis that needed to be addressed.

The Singapore example shows that abinitio the government experimented in their approach to arriving at a working formula for developing their entrepreneurial ecosystem which in itself was innovative. Lerner noted that they experimented with the provision of public funds for
venture investors seeking to locate in the city-state and provided subsidies for targeted firms such as leaders in biotechnology research to move their laboratories to Singapore (Lerner, 2010). But the aggressive investment in large infrastructures and running a corruption-free economy enhanced the evolution of the entrepreneurial ecosystem. The leadership roles of governments of Israel and Singapore towards strengthening entrepreneurship are visible from both countries ranking as depicted in Table 2 above.

Table 1: Rate of nascent and new firm entrepreneurs in 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Nascent Entrepreneurship Rates (%)</th>
<th>New Firm Entrepreneurship Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>9.2</td>
<td>3.7</td>
</tr>
<tr>
<td>2</td>
<td>Canada</td>
<td>7.8</td>
<td>4.7</td>
</tr>
<tr>
<td>3</td>
<td>Singapore</td>
<td>6.4</td>
<td>4.4</td>
</tr>
<tr>
<td>4</td>
<td>Israel</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td>5</td>
<td>Netherlands</td>
<td>4.7</td>
<td>4.8</td>
</tr>
<tr>
<td>6</td>
<td>Ireland</td>
<td>5.6</td>
<td>3.8</td>
</tr>
<tr>
<td>7</td>
<td>Luxembourg</td>
<td>6.0</td>
<td>2.8</td>
</tr>
<tr>
<td>8</td>
<td>Puerto Rico</td>
<td>6.6</td>
<td>1.8</td>
</tr>
<tr>
<td>9</td>
<td>Sweden</td>
<td>5.9</td>
<td>2.5</td>
</tr>
<tr>
<td>10</td>
<td>Portugal</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>11</td>
<td>Switzerland</td>
<td>4.6</td>
<td>3.7</td>
</tr>
<tr>
<td>12</td>
<td>Taiwan</td>
<td>3.3</td>
<td>5.0</td>
</tr>
<tr>
<td>13</td>
<td>Czech Republic</td>
<td>4.9</td>
<td>2.7</td>
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Source: GEM 2013 Singapore Report
4.4.2 Appropriate Financing

This is directly related to the policy issues as it can influence the outcome of how venture financing is done, the regulation and strengthening of the financial institutions, the presence of early stage funding in forms of micro-loans, angel investors, rich family and friends and zero-stage venture capital are key to raising the number of start-ups. Finance is important, but alone it cannot lead to a vibrant ecosystem, however the visibilities of success stories can lead to more people willing to become entrepreneurs once the success stories of founders are circulated locally and internationally. Appropriate financing can be greatly influenced after the initial government contributions to early stages start-ups who go on to scaled up through venture capital funding and end up going public or the owners sell the venture (“cash-out”), these entrepreneurial actors usually remain in the ecosystem in the process referred to as ‘entrepreneurial recycling’ (Mason and Harrison, 2006 in Mason and Brown, 2013[1]).

Mason and Brown argued that the need for seed funding is only important in the beginning of an ecosystem formation because this can be imported from outside the ecosystem once there start to emanate success stories of entrepreneurial achievement that have scaled up and gone global. They continued that of particular importance is a critical mass of seed and start-up investors who will provide finance and hands on support such as business angels, seed capitals and business accelerators (Mason and Brown, 2013[1]). These actors continue to be active due to their financial success as serial entrepreneurs and business angels, providing that crucial part of risky investments in innovative ideas. They can even go on to become venture capitals, advisers and mentors, board members or even engage in teaching entrepreneurship as so called ‘paracademics’ (Mason and Brown, 2013[1]).

One of the main driving points for Israeli Yozma program was the provision of the much needed capital for young and risky ventures, which were many due to the abundance of well-trained engineers working on promising technologies. Most of these young entrepreneurs did not have confidence in the pioneering local venture firms who did not have good reputation dealing with entrepreneurs. This led government in its Yozma program to discourage Israeli financiers to participate at the onset of the program instead they seek foreign investors and provided matching funds of up to $8 million of a $20 million fund (Lerner, 2010). This led to an increase in the amounts of funding available for start-ups in Israel, studies after the program became well-grounded showed high availability of funding for new entrepreneurship in Israel and venture capital was a major source (Chorev, & Anderson, 2006)

In the NZVIF, Lerner noted that the funds were geared towards investors in early-stage companies, and every government dollar had to be matched with two dollars from the private sector. This means that sufficient funding was available for risky start-ups that with best practices in the selection process can lead to identification of some ventures with high growth potentials (Lerner, 2010). The NZVIF understood the need for the provision of early stages investment to raise the overall number of start-ups that can spurn and graduate to thriving business which can be huge potentials in accelerating the development of a venture capital industry (Lerner, 2005).
The concentration of efforts in the Singaporean entrepreneurial programs on High-tech ventures did not result in rapid development of the entrepreneurial landscape until they realized the need to gravitate towards the provision of sufficient funding for small and medium-sized enterprise sector did the entire entrepreneurial ecosystem really evolved (Choo, S., & Wong, M., 2006). Lerner also noted the importance of Singapore’s sound macroeconomic policies towards the entrepreneurial initiatives which have contributed in stimulating growth of the entrepreneurial ecosystem. (Lerner 2010). Gnyawali and Fogel noted that the provision of low-interest loans and government grants facilitated entrepreneurship development (Gnyawali, &Fogel, 1994).

However, it is stressed that “easy money” should not be thrown at entrepreneurs, even high-potential entrepreneurs can lose their innovativeness as soon as easy money is on the table. Isenberg (2010) noted that entrepreneurs and start-ups can be taught toughness and resourcefulness early through the strategy of carefully meting out funding to them and ensuring that only serious entrepreneurs take advantage of government entrepreneurial funding programs and systematically weeding out opportunists (Isenberg, 2010).

4.4.3 Conducive Culture
On the cultural front, Isenberg’s framework was preoccupied with societal norms to pursuing entrepreneurship as against taking up paid employment. The general disposition towards such things as failure or huge economic mistakes resulting in loss of investments is a very important factor that will influence entrepreneurial mindsets. Also, society reaction towards massive wealth creation and what status entrepreneurs command can be a driving force compelling many people to start their own venture and try to be creative, should society encourage these, there is high tendencies for innovation, creativity and experimentation to become a norm which can contribute in no small means to the evolution of an entrepreneurial ecosystem.

This kind of tendencies if well embedded culturally can lead to the formation of strong non-governmental institutions which can drive entrepreneur-friendly associations; contributions to non-profits entrepreneurial initiatives and also drive competition among would be entrepreneurs. Place-specific assets can also trigger the evolution of entrepreneurial ecosystem, these may include nearness to big industrial clusters or institutions of research. Most importantly they are typically desirable places to live either on account of their cultural attractions or their physical attributes which provide avenues for lots of leisure activities that can attract the creative class that drive an entrepreneurial ecosystem (Mason & Brown, 2013[1][2]).

Enlightenment program can be driven by government and business development organizations to raise the level of public awareness and propagate the importance of entrepreneurship (Gnyawali and Fogel, 1994). The entrepreneurial community also has to create its own culture as soon as the ecosystem takes form and actors are identified, this will enhance the sharing of experience and expertise. Also, the entrepreneurial community can
quickly absorb failed entrepreneurs and learn from their failure (Mason & Brown, 2013[1]).

There is also need for entrepreneurs to develop what Wright and Stigliani referred to as “strategies of recovery” in the ecosystem. This is what will allow critical self-reflection and not bring about exclusion from their networks and relationships within the ecosystem (Wright and Stigliani, 2013).

Figure 3: Entrepreneurial Culture

(Cropped and scaled-down image of a bar chart showing the perception of entrepreneurship as a respectable and prestigious career path in 2013 Israel. The chart shows data for different groups: Jewish, Arab, and Immigrants from the former USSR, broken down by gender (Man, Woman), and Total. The chart indicates that around 60% of Israeli adults view entrepreneurship as lucrative.)

Source: GEM National report for Israel 2013

The presence of positive entrepreneurial culture predates the establishment of the Yozma program in Israel, the program was a response to the teeming number of well-trained engineers already working on promising technologies that will later put the face of Israel on the innovation technology map, figure three shows around 60% of Israeli adults population viewing entrepreneurship as a lucrative career path. This entrepreneurial culture is also evident in the fact that many of the Israeli partners recruited by the foreign venture capital firms were able to spin off and establish their own firms and grew it to a point that other global firms started investing in them because of their impressive track record, but this would have not been made possible without the presence of the overseas venture firms who brought in lots of experience from their many years of financing new venture in Europe and America and also helped in smoothing the frosty relationships between existing local venture firms to the level that the industry graduated to been accepted for young inventors to feel confident to put forward their intellectual work for funding (Lerner, 2010).
The entrepreneurial culture of New Zealand cannot be said to be growth oriented especially in innovation and technology due to the noted point that the economy was based heavily on production of commodity goods (Lerner et al, 2005), once the government realized that the economy based on this may not be favorable on the long term, the switch to evolving and entrepreneurial ecosystem was swift and determined. According to Lerner et al, orientation was focused on developing the country's knowledge base through series of programs such as providing funds for research consortia, providing grants for private sector R&D and establishing centres for excellence for research. All these were targeted actions at awakening an entrepreneurial mindset with the knowledge community and the country in general.

Although the NZVIF was tailored along the lines of the Israeli Yozma program, Lerner et al noted that they chose to differ in the investment stage covered. Only seed investments was covered in the beginning and only loosened up to include early expansion investments. This was a very brilliant move as the initiators of the program realized the cultural differences between the two countries in terms of propensity towards entrepreneurship and diligently targeted early stage start-up to encourage people to embrace entrepreneurship. In this example New Zealand initiative corroborated the findings in many literatures on entrepreneurial ecosystem development that there is no a 'one size fits all' approach and every ecosystem is unique and should be customized to fit local circumstances (Mason & Brown, 2013[1][2])

In the case of the evolution of the entrepreneurship landscape in Singapore, the process suffered culturally as the general population consistently pulled back due to the existence of a not so favorable mindset towards entrepreneurial risk taking. According to Choo and Wong, Wong in a quantitative study of Singapore’s entrepreneurial development found that the social norms and cultural value towards entrepreneurial pursuit is very discouraging that often constitute a push from starting a venture. They also found out that the Singaporean society does not accord any special status to successful entrepreneurs hence it was not regarded as a good career choice. Similarly, Mason and Brown pointed out that “in Singapore, entrepreneurs do not enjoy a high social status and families prefer their children seek jobs in large multinationals” (Mason & Brown 2013[1], Pg23). Even government initiative to create an award for failed entrepreneurs all in a bid to spur up risk taking and encourage more people to embrace entrepreneurship did little to entice people (Lerner, 2010).

This cultural setback was even very difficult to be countered by numerous government initiatives which were targeted at encouraging entrepreneurial mindsets such as relaxation of bankruptcy law to encourage risk taking, a $1 billion venture capital fund for high-tech start-ups, and tax deductions for Singaporeans who invested in new companies (Mellor, 2001 in Choo & Wong, 2006). This can be attributed to the risk-averse propensity of Singaporeans, although Choo and Wong’s study also showed that “the pervasive influence of the government in the economy through its vast network of government-led corporations (GLCs) contributed to a lack entrepreneurial culture in the city state” (Choo, & Wong, 2006. Pg48).
Although Isenberg in his 2010 article on “How to start an Entrepreneurial revolution” noted that Ireland and Chile have demonstrated that it is possible to alter social norms about entrepreneurship in less than a generation (Isenberg, 2010, Pg7)

### 4.4.4 Institutional Support and Infrastructure

An entrepreneurial ecosystem will obviously not evolve in a vacuum, it does not revolve around financial incentives alone, there are certain basic economic and social factors that need to be present (Mason, & Brown, 2013[1][2]). The need for ancillary infrastructures and other support cannot be over emphasized in the budding stage of an individual entrepreneur as well as for the evolution of an ecosystem. Gnyawali and Fogel noted that entrepreneurs spend nearly half of their time during their start-up phase in making contacts and networks with other entrepreneurs and related agencies (Gnyawali and Fogel, 1994).

The role of support professions to the ecosystem is very important. The lawyers, bankers, insurance brokers and so on are an integral part of this ecosystem and should also be made aware of the peculiarities of the start-up communities. The processes and behavior differs from one country to another, Wright and Stigliani attributed this difference to the urgency placed on time to achieve result (Wright and Stigliani, 2013).

The presence of ancillary infrastructure will increase the attractiveness of the ecosystem to entice entrepreneurs from far and wide, who will like to work and live there. Mason and Brown (2013) concluded that “traditional industries like food and drink, energy, logistics, water industry, manufacturing all provide a platform to create dynamic, high-value added entrepreneurial ecosystem” (Mason and Brown, 2013[1]. Pg19).

The three examples under review were all well placed in terms of infrastructural development before the evolution of the entrepreneurial landscape, but support professionals have to be reoriented towards what form it needed to take in order to function properly in the ecosystem. Although appropriate legislations in Israel and New Zealand enabled the transition in Yozma program and the NZVIF policy to carry on well, coupled with a matured business culture that has evolved over the years.

The Singapore program was also very diverse although it was difficult to identify literatures which deal specifically on policy statements outside of government financial contributions.

### 4.4.5 Quality Human Capital

Large numbers of start-ups is encouraging, meaning even with a high rate of start-up failures we can still have substantial contribution to the ecosystem, coupled with the existence of educational institutions offering not necessarily entrepreneurship or technological specific academic and professional degrees can make significant contributions to the human capital base of an entrepreneurial ecosystem. But, Isenberg taunts his ‘law of small numbers’ that only a handful of entrepreneurial successes are needed to have a major benefits for the ecosystem with spillover effects in terms of role models, serial entrepreneurs, angel investors, venture capitalists, board members, advisors and mentors. (Isenberg, 2011 in Mason and Brown, 2013[1]. Pg9). The sharing of information is a key aspect of a successful ecosystem,
these is how knowledge about market trends, new and evolving technologies, service and marketing concepts spread be it in organized or accidental meetings. But the quality of this information will be determined by the robustness of the quality of human capital available in the entrepreneurial ecosystem (Mason & Brown, 2013[2]).

The presence of few or numerous large established businesses is a boost to any entrepreneurial ecosystem, according to Isenberg, they act as ‘talents magnets’ attracting large number of skilled well educated workers, and may end up releasing into them the ecosystem after they have gained both technical and managerial skills and decided to start their own business (Mason, & Brown, 2013[2]).

The Israeli Yozma program greatly benefitted in this respect, firstly, the influx of well-educated scientist and engineers from Russia mentioned earlier represented a large reservoir of human capital to tap into. The program was in response to the potentials of the numerous technological breakthroughs that many of them were working on. Also the education level of Israeli population continued to improve, throwing up high quality graduate. Chorev and Anderson pointed out the Israeli Defense Force (IDF) special program which isolated highly talented youngsters and provide them with high level technological education, many of them going on to start and successfully grow high-tech ventures (Chorev, & Anderson, 2006).

The New Zealand NZVIF was not so fortunate to tap into such human capital reserve, notably the program was a response to the dearth of resources in the knowledge based industry and the necessary human capital have to cultivated from the foundation (Lerner, J., 2010). But the NZVIF proceeded successfully and gradually to achieve ‘entrepreneurial recycling’ which Mason and Brown described as that set of entrepreneurs who have built successful companies which they then sell or take public so that they have built tangible wealth but they remain in the ecosystem reinvesting their wealth and experience to create more entrepreneurial activities (Mason and Brown, 2013[1]).

As stated earlier, the Singapore initiatives was experimental in nature and a lot of programs were started and jettisoned leading to general apathy and the unsuccessful development of a concrete human capital base. Lerner et al highlighted the number of programs started by government, their variety may have influenced the quality of human capital developed in the entrepreneurial landscape, the programs included: the Economic Development Bank (EDB) created in 1985 as a venture capital fund with S$100 million as a government equity fund; National Technology Plan managed by the National science and technology board with a capital of S$2 billion founded in 1991 with the objective to increase national expenditure on R&D to 2 percent of GDP; A second National Technology Plan which raised the capital to S$4 billion; the Regional Investment Company (RIC) founded in 1994 with a capital of S$100 million with the main objective of assisting SME’s with high growth potentials; Techno-preneurship Investment Fund (TIF) with a capital of $250 million in 1999; Venture Investment support for start-ups started in 1999 with a capital of $10 million; and Start-up Enterprise Development School (SEEDS) with a capital of S$50 million started in 2001 to provide funds for start-ups on a matched funding basis (Lerner et al. 2005, Pg46). What the
scenario above portrait is an ecosystem where a strong network of human capital may be difficult to aggregate, however it affords the ecosystem the possibilities of spurning in a number of directions.

4.4.6 Venture Friendly Markets
Developing the market in an evolving entrepreneurial ecosystem can be challenging when introducing innovative products, this can be due to the need to generate a reasonable number of early adopters, the need to make product licensing less cumbersome, good and credible experts in productizing and a good channel of innovation exportation to a global market. All these can be made possible through a strong network which the ecosystem has built both locally and globally (Isenberg, 2011)
Mason and Brown submitted that “efforts to stimulate high growth entrepreneurship cannot be restricted to top-down efforts which simply focus on framework conditions. Bottom-up efforts, involving other tiers of government as well as non-government actors, are also required” (Mason and Brown, 2013[1], Pg19).
Bathelt et al pointed out that “wider global linkages beyond those connecting firms to product markets play an important role in the development of entrepreneurial ecosystems. That as well as engaging in localized learning, firms also seek to build channels of communication with selected external partners to access more specialized knowledge and assets not available locally” (Bathelt et al., 2004 in Mason and Brown, 2013[1]. Pg12)
Mason and Brown as stressed the concept of ‘local buzz’ which they likened to Marshall’s ‘industrial atmosphere’ in a cluster. Bathelt et al who elucidated on this refers to local buzz as “the information and communication ecology created by face-to-face contacts, co-presence and co-location of people and firms within the same place or region” (Bathelt et al 2004 in Mason and Brown, 2013[1]. Pg7).

The Israeli Yozma program scored high on this domain, the mere fact that it was able to attract experienced venture capital firms from the United States, Germany and Japan for example means great potentials for technologies and innovations emanating from the scheme to make it the global scene. It also means the fund Venture capitalists were very aware of what is trending in the global innovation terrain and since they are now aware of the strength of the Israeli entrepreneurial ecosystem, they can provide good directions of what the scientists and engineers should focus on. They are also able to bring products to a much global market since Israel’s local market is limited. As pointed out by Chorev and Anderson the need of penetrating foreign markets due to the smallness of Israel’s domestic market (Chorev and Anderson, 2006).

The New Zealand program was more localized as government did not explicitly encourage the influx of foreign venture capital firms as partners instead they encouraged local VC’s firms and partnered with them. Lerner et al noted that a major structure of the Yozma program not adopted by the NZVIF is the preference of a model of local venture capital fund in an unincorporated joint venture as against the Yozma’s standard Delaware limited partnership structure. The implication of this is the loss of the wealth of experience that the
more international firms would have injected into the program from the beginning. Although consultants were brought in to provide expert's opinion, even the founder of the Israeli Yozma fund was invited to New Zealand in year to advice on the implementation of the NZVIF (Lerner, et al. 2005).

Singapore’s various attempt at evolving an entrepreneurial ecosystem could be said to have bear little hallmark of outside influence and the various policies can be noted to be developed aggressively along the lines of local competence (although literatures are really scarce on these as most of the documents are not available for public or even academic consumption). Yet Singapore continues to appear among the lists of countries that have succeeded in building a thriving entrepreneurial ecosystem.
5. Nigeria’s Entrepreneurial Ecosystem

5.1 Developing Entrepreneurship in Nigeria

The Nigerian economic development strategy have been largely export oriented, starting with agricultural products based export in the nation’s pre-independent era (political independence was attained on October 1st 1960) which later gave way to crude oil export orientation after the discovery of vast amount of crude oil reserves in the nations Niger delta region in the dawn of independence in 1958 (NNPC, 2016),

This export based orientation continued over the years, though there have been periods of industrial sector development, but many years of political upheaval and disruption of the democratic process through series of military rule has truncated the development of a successful diversification of the nation’s economy away from reliance on export of natural resources (which has now remained crude oil).

However, as noted by Ogunleye (2004) the Nigerian government began concerted efforts at developing the entrepreneurial landscape in the early 1970’s. Three major steps taken can be identified as: Setting up and funding industrial zones aimed at reducing overhead cost of doing business through clustering of industrial activities; Provision of finance through governmental financial institutions such as the Central Bank of Nigeria (CBN), Federal ministry of Industry (FMI) and the Nigeria Industrial Bank (NIDB) established in 1964; and Facilitating and guaranteeing external financing though external and international lending organizations such as the World Bank, African Development Bank (ADB) and other such regional or global institutions (Okafor, 2009).

From an historical perspective, the Nigerian national government has initiated a number of schemes geared towards development and promotion of entrepreneurship as a contributor to economic development. At the national level, government initiatives towards entrepreneurship development have been primarily driven by the public sector. This is visible through the establishment of wholly government conceived and controlled agencies which tend to drive these programs, until recently the active participation of the private sector of the economy in these programs has been limited, but this seems to be changing.

As highlighted by Okafor (2009) in his dissertation where he detailed the sequence of schemes and institutions which the government has established to meet the objectives of provision of strong institutional support, ensuring easy access to credit facilities, provisions of continuous training, research and development and provision of monetary and fiscal policies. Some of these schemes include:

- Central Bank of Nigeria’s Support and Schemes for SMEs Financing which in the late 1970’s and early 1980’s stipulated that 10% of lending’s should be set aside as loans to SMEs which increased to around 20% by 1989. In 1992 N23.9 billion (Nigerian Naira) was granted as loans to SMEs representing a total of 45.1% of the CBN’s total loans and advances.
• Rural Banking Scheme established to address the disparity in access to credit by SMEs located in the rural areas. It was created in 1977 to bring about development in the rural economy which was predominantly agrarian but accommodated a significant proportion of the Nigerian population.

• The National Economic Reconstruction Fund (NERFUND) established in 1990 to bridge the resource gap and make funds available directly to SMEs through medium and long term loan tenure of 5-10 years period. The fund disbursed US$144.9 million and N681.5 million (Nigerian Naira) in providing capital to 218 start-ups. The fund was merged with other government development to establish the Bank of Industry (BOI) in 2001 and this remains the main instrument of government to direct funds towards entrepreneurial activities.

• World Bank-Assisted SME II Loan Project was borne out of the continuous need to make funding available for new businesses, established in 1989 with a loan facility of US$270 million from the World Bank and administered by the CBN through participating commercial banks in the country.

(Okafor, 2009)

It’s possible to mention a few more of such initiative, but the pattern has shown that a majority of these earlier government initiatives has basically been focused on the provision of financial capital to drive the SMEs. More recently, especially with the active involvement of the private sector, the need to advance most of the other non-financial domains of the entrepreneurial ecosystem has start to emerge and even educational institutions have started including the teachings of entrepreneurship into their academic curriculum as well attempts at commercialization of their researches.

Only recently have we started seeing the emergence of a number of human capacity development centers, incubation centers, science parks and so on springing up around the country, a few will be mentioned under the discussion of the domains of entrepreneurial ecosystem growth as it relates to Nigeria.

It will be correct to assert that Nigeria’s economic space is dominated by the informal sector, a lot of small businesses or enterprises are what can be termed “survivalist entrepreneurs”. According to ILO (2004) these informal or survivalist entrepreneurs are engaged in entrepreneurship for the purpose of generating income for day-to-day consumption and not growth oriented. Note the concentration of Nigerian entrepreneurs under “retail trade, hotels and restaurants” sector with over 67% of total entrepreneurs in figure 4 below. They do not distinguish between personal finances nor do they keep records and are not usually registered with any authorities which means no taxes are paid, it also means they are not eligible to any formal credit facilities, but they are noteworthy for their sheer number and contribution for providing some kind of employment to a significant percentage of the work force (Okafor, 2009).
5.2 Entrepreneurial Ecosystem Development in Nigeria

We will throw the searchlight on the domains of entrepreneurial ecosystem in Nigeria and attempt an understanding of what the ecosystem looks like under the different domains used in describing the examples in previous chapter. The aim here is not a comparative task, but to briefly describe the Nigeria entrepreneurial landscape using the six domains as put forward by Daniel Isenberg.

5.1.1 Policies and Leadership

It can be noted from the opening to the chapter on the Nigerian entrepreneurial policy initiatives that the government has shown serious intentions to drive and promote small and medium scale enterprises, but to what degree these programs have delivered on their objectives is beyond the scope of these paper. However, the continuous absence of high numbers of spin-offs from these governments initiated programs needs no deep digging. These initiatives have not translated to positive contributions to the competitive advantage of the country nor the entrepreneurial advantage of the country (Iyang and Enuoh, 2009; GEM 2, 2005). While the former which represents the top part proposes that national frame-work should foster robust business policies that will enhance competiveness of major established firms which will eventually trickle down to micro, small and medium firms and propel national economic activity and growth. While the entrepreneurial framework conditions which represent the bottom path should provide support for new businesses and start-ups by allowing that creative part of the population to create that high volume of activities that will

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Source: Source: African Entrepreneurship- GEM 2012 Sub-Saharan Regional Report
provide a positive net number of businesses which should propel the economic growth (GEM 2, 2005).

As enumerated by Okafor (2009) and Iyang and Enuoh (2009), the Nigerian government have shown strong leadership by churning out lots of initiatives over the years to foster entrepreneurship. Yet lots of these programs have been left in the hands of government and the general norm is that a successful ecosystem can at best bear the hallmark of government, but to succeed, it has to be private sector driven. Steve Blank (2011) strongly alluded that government led entrepreneurship can easily miss some important basics as there is high tendencies to give a blanket treatment to all kinds of entrepreneurial endeavor which in reality requires different approaches. He believes that government should not be using entrepreneurial programs as an exercise in fairness or a direct job creation tool, that instead a scalable start-up ecosystem is ultimately a venture capitalist exercise (Steve Blank, 2011).

What the Nigeria government has succeeded in doing is the provision of policy directions targeted at industry categorization of entrepreneurship into traditional lines of agriculture, manufacturing, crafts and arts and the likes. However, literatures suggest that entrepreneurial endeavor can be categorized into six distinct organizational paths namely: Lifestyle entrepreneurs who start a business to live their passion; Small business start-ups which is aimed at sustenance; Scalable start-ups which are created to be big; Buyable start-ups mostly created and nourished to be sold off; Large company start-ups created as new lines of products within a large company; and Social start-ups which are only targeted at making a difference in society (Steve Blank, 2011).

From the forgoing, it can be inferred that government can at best provide an enabling policy thrust that will provide the business climate for entrepreneurship to thrive. In doing so, policies should not be confusing, according to Mason and Brown, policy makers should not distort the ecosystem by not making distinction about policy directions. High growth firms, technological commercialization, Small enterprises, Venture capital firms, R&D spending policies and so on requires different policy strategies (Mason and Brown, 2013[1][2]). It could even be suggested that an evolving entrepreneurial ecosystem can enhance the formulation of pertinent entrepreneurship policies by giving the right signals to policy makers and help guide policy direction towards the desired end that can propel the ecosystem (Sheriff and Muffatto, 2015). Government interventions requires private sector know-how in the design of programs and evaluation and measurement of progress, bureaucrats should be excluded as much as possible.

5.1.2 Financing Entrepreneurship
Entrepreneurial financing has not been a problem in the Nigerian landscape, but whether appropriate financing is available remains to be investigated. Series of governmental interventions culminated in the establishment of quite a number of institutions and agencies many of which are controlled and run by government selected bureaucrats some who have experience in the private sector but are quickly made to adopt the public service work ethics.
Most notable government established initiatives (entrepreneurship financing oriented) as highlighted by Iyang and Enuoh (2009) include:

- Small and Medium Enterprises Equity Investment Scheme (SMEEIS) - established through the Central Bank of Nigeria (CBN) in 2001 to liberalize access to funds through all existing commercial banks in the country, with a total fund of N42 billion (Nigerian Naira) set aside as deposits in the commercial banks while another N21.7 billion was invested in 523 start-ups nationwide (Iyang and Enuoh, 2009).

- Bank of Industry (BOI) - created in 2001 from an amalgamation of existing funding schemes namely: Nigerian Industrial Development Bank (NIDB); Nigerian Bank for Commerce and Industry (NBCI) and National Economic Reconstruction Fund (NERFUND). The BOI was has as it main objective the provision of long and short term funding to small and medium enterprises with a generous interest rate (Okafor, 2009; Iyang and Enuoh, 2009).

- Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) – established in 2000 to provide seed funds in the predominantly agrarian rural parts of Nigeria (Iyang and Enuoh, 2009).

- Microfinance Banks – these were established the Microfinance regulatory framework and policy in Nigeria starting in 2000 to provide credit facilities to the poor but economically active population, increase the percentage share of micro credit in the country, reduce gender disparity by making loans available to women who hitherto have less access to credits and also increase linkages among universal banks, development banks and specialized financial institutions (Okafor, 2009).

- Small and Medium Enterprises Agency of Nigeria (SMEDAN) – established as a federal government institution in 2003 as an umbrella of small and medium enterprises in Nigeria, providing supports and informational services to entrepreneurs both new and existing. Not a fund disbursing agency, it guides businesses on how to develop their ideas and gain access to government funding. (Okafor, 2009).

From the foregoing, it becomes evident that lots of efforts have been concentrated on provision of funds and may have resulted in some kind of neglect of other domains that are equally important in the evolution of an entrepreneurial ecosystem. One can also point out that government had no “withdrawal plans” from financing start-ups and small businesses as no visible private Venture capital industry policy exist in all literatures explored neither does search threw up any results. Meanwhile, there is a general agreement by scholars that government must have an exit strategy after initiating programs to fund entrepreneurship, they have to allow the private sector to take and dictate the direction of growth. Examples exist where government programmes are targeted at “replicating” other successful ecosystems but desired results are hardly achieved, Steve Blank noted how most of the policy papers by government trying to replicate the Valley seem to miss the basic lessons (Steve Blank, 2011). While Isenberg concluded that even Silicon Valley cannot replicate itself (Isenberg, 2010).
5.1.3 Cultural Disposition

The entrepreneurial culture within the Nigerian landscape can be said to be robust, as the average Nigerian whether employed, under-employed, unemployed or even retired is interested in some form of entrepreneurial activity albeit informally in most circumstances. Figure 5 shows a near regional average for adult population of Nigeria that are favorably disposed to becoming entrepreneurs. The point here is that generally the propensity to becoming an entrepreneur is quite high, GEM data shows that over 80% of the adult population perceive good business opportunity in their immediate environment, although only about 44% are adjudged as latent entrepreneurs and go on to start a business (GEM 1, 2005). Lots of external factors within the immediate environment have strong influence on whether an individual finally decide to go into entrepreneurship, societal norms, risk taking disposition and the general disposition towards been wealthy can have influence on an individual decision (Gnyawali and Fogel, 1994; Abimbola and Agboola, 2011 in Sheriff and Muffatto, 2015).

Figure 5: Societal attitudes in seven sub-Saharan African countries and comparisons with other regional averages, percentage of the adult population (18 to 64 years of age)

<table>
<thead>
<tr>
<th>Economy</th>
<th>Entrepreneurship as a good career choice</th>
<th>High status to successful entrepreneurs</th>
<th>Media attention for entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>76%</td>
<td>73%</td>
<td>79%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>76%</td>
<td>62%</td>
<td>73%</td>
</tr>
<tr>
<td>Ghana</td>
<td>84%</td>
<td>91%</td>
<td>62%</td>
</tr>
<tr>
<td>Namibia</td>
<td>73%</td>
<td>76%</td>
<td>62%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>82%</td>
<td>76%</td>
<td>78%</td>
</tr>
<tr>
<td>South Africa</td>
<td>74%</td>
<td>74%</td>
<td>73%</td>
</tr>
<tr>
<td>Zambia</td>
<td>67%</td>
<td>79%</td>
<td>72%</td>
</tr>
<tr>
<td>Sub-Saharan Africa Average (unweighted)</td>
<td><strong>76%</strong></td>
<td><strong>80%</strong></td>
<td><strong>77%</strong></td>
</tr>
<tr>
<td><strong>Latin America and Caribbean Average</strong> (unweighted)</td>
<td>75%</td>
<td>71%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>MENA Average (unweighted)</strong></td>
<td>70%</td>
<td>61%</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Asia Pacific and South Asia Average (unweighted)</strong></td>
<td>59%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>European Union Average (unweighted)</strong></td>
<td>58%</td>
<td>69%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Non-European Union Average (unweighted)</strong></td>
<td>62%</td>
<td>66%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: African Entrepreneurship- GEM 2012 Sub-Saharan Regional Report

The findings from literatures and field interviews during this studies point in the direction that a large proportion of entrepreneurship in Nigeria revolves around micro and small businesses, many of them run on subsistence bases for sustenance (See figure 4). While a few qualified as lifestyle entrepreneurs, majority are small business start-ups which are for sustenance such as restaurants and catering services, hairdressers, beads and Jewry makers, wood works, metal works are so on. A few have started taking up manufacturing of household cleaning items, soap making, Cream making, paints while many are into agriculture and agro-allied businesses where government have targeted most of their job creation and skills acquisition efforts. Under this domain the Nigeria ecosystem can score high if such method is adopted, failure in business can be frowned at but the propensity to try again is always present and since entrepreneurship or small business is viewed as the only
source of income for a lot of poorly educated individuals or those without any formal education. Recently, government campaigns have also targeted graduates and high school leavers to venture into entrepreneurship and become employers of labor rather than scampering for few available white and blue collar jobs (Okafor, 2009; Iyang and Enuoh, 2009).

5.1.4 Institutional Support and Infrastructure

Only until recently has the Nigerian drivers of the entrepreneurial landscape start to realize the importance of this domain. Networks and collaborations are still very rare amongst most of the agencies set up by government as many of them have their clear mandate and will hardly go outside it. It makes it for start-ups to work together once they are not in the same industry even though linkages may exist between them. SMEDAN represents the only linkage identified in government policy thrust that has capacity building has it clear mandate, yet it has not been deemed very important by most entrepreneurs since it has no financial incentives to give out.(Iyang and Enuoh, 2009).

Also the essential support professionals such as Lawyers, bankers, insurance brokers who are supposed to be an integral part of the entrepreneurial ecosystem, do not see start-ups as viable clients so not so keen on having them as clients. Coupled with the general atmosphere of mistrust, entrepreneurs rarely share vital information in the Nigeria.

5.1.5 Human Capital

Level of literacy can be encouraging in Nigeria entrepreneurial space but the ability to ideate is difficult to measure. If we go by the quality and number of scalable start-ups in recent times then this domain can be said to be weak in Nigeria. While Nigerians in diasporas have contributed to or are well placed in other countries ecosystem, searches have not shown any Nigerian start-up making it to the global scene. Recent efforts have been geared towards training and retraining of entrepreneurs, many universities are creating entrepreneurship centers and most of the government schemes are realizing the need to not only provide funding but also build the human capacity in the entrepreneurial ecosystem.

The private sector is taking the lead in this regards as incubation centers and start-up hubs have started springing up around the country in recent years. Pioneers include: Enterprise Development Centre (EDC) a spin off from the Lagos Business School (LBS) which teaches entrepreneurship; Fate Foundations; Elumelu Foundations; and a host of other entrepreneurship targeted accelerators programs started by commercial banks as part of support for their small businesses customer base.

5.1.6 Market

The Nigerian market has depended heavily on imported foreign goods and goods produced by MNCs present in the country which has contributed to the decline in the country’s manufacturing base. This has also rubbed off on new ventures, many of which are products based as they struggle to make market penetration and compete with competitions with strong
supply chains. Also diffusion and adoption of innovative products are in some cases been hampered by competitors who control most of the supply outlets, results from interviews points to this and the absence of a good network of channels to introduce new products to the market. Rate of adoption seems not to be a problem but channels to reach the market are not well developed and attempts by the entrepreneurs to personally spend too much time in product marketing results in time away from attending to the product development process.
5.3 Results of Interviews
The results of the interview will be organized under the six domains of the entrepreneurship ecosystem and juxtaposed with findings from literatures to provide an easily understood summary in the table 1 below.

Table 2. Interview results

<table>
<thead>
<tr>
<th>Domains</th>
<th>Indicators</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Policies and Leadership</td>
<td><strong>Indicators from Literatures</strong></td>
<td>Policies relating to entrepreneurship are better drawn up with active participation of the private sector. Most policies stretch beyond 4 year election tenures and can better be overseen with active participation of the private sector.</td>
</tr>
<tr>
<td></td>
<td>-Government can initiate but must do so in conjunction with the private sector.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Enabling laws to protect investors through venture friendly legislature.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Indicators from Interviews</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Government have continued to be active in rolling out policies after over 4 decades and only minor signs of public/private partnership.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Policies have been directed at fund provision, why legislation to protect entrepreneurs from MNCs has not yielded results. Foreign goods, sometimes cheaper and “deemed superior” stifle out new businesses.</td>
<td></td>
</tr>
<tr>
<td>Appropriate Financing</td>
<td><strong>Indicators from Literatures</strong></td>
<td>Large amount of money paid out yet no significant spin offs achieved. Entrepreneurs still don’t have access to funds at different growth periods.</td>
</tr>
<tr>
<td></td>
<td>-Funds are better managed when put in the hands of funds managers, as venture funding is not an exercise in equality.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-With a robust ecosystem rich in all domains, government only need to create the environment, capital can flow in from abroad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-If government is still funding start-ups after 10 years of any program then the experiment has failed</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Indicators from Interviews</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Government still funding start-ups after 40 years and no significant contributions to economic development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Most funding comes from government</td>
<td></td>
</tr>
</tbody>
</table>
and controlled by bureaucrats. 
- Government has not shown clear understanding of the right mix of support needed by new businesses leading to paucity in funds during critical growth stages.

<table>
<thead>
<tr>
<th><strong>Conducive Culture</strong></th>
<th><strong>Indicators from Literatures</strong></th>
<th>Cultural disposition should continue to be strengthened and success stories celebrated.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Societal norms must encourage starting business, taking risk and been adventurous.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Venture failure should not be stigmatized.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Success must be celebrated to encourage others to become entrepreneurs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Indicators from Interviews</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Entrepreneurship is encouraged and success is celebrated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Failure can be tough to overcome, others may want to keep away from a failed entrepreneur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Many become entrepreneurs because of unemployment and easily stop once a suitable job is available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Institutional Support and Infrastructure</strong></th>
<th><strong>Indicators from Literatures</strong></th>
<th>Support for new ventures must be improved. More incubation centers are needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Both physical and human institutions need supports to be able to cater to the specific needs of start-ups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Indicators from Interviews</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Start-ups struggle and have to spend huge parts of their capital on legal, accounting and other services. Except where some form of cooperative exists within the same industry, every entrepreneur must bear such cost on their own.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Infrastructure is deemed inadequate, power supply is not stable leading to massive overhead cost of running business operations.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Human Capital</strong></th>
<th><strong>Indicators from Literatures</strong></th>
<th>Entrepreneurship studies need to be introduced into the educational</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- The more new firms are created, the more percentage of success stories that</td>
<td></td>
</tr>
</tbody>
</table>
can be told.
- Quality manpower must also be available around entrepreneurial hubs and if it must be imported into the area, the area must be suitable to live in.
- Large and established companies also serve as magnets of skilled workforce and can also be a reservoir of well-trained management level manpower who go on to become entrepreneurs.

**Indicators from Interviews**
- Creative manpower is in short supply
- Product copying is the norm, intellectual property laws are very weak and tough to enforce
- Start-ups cannot pay industry standard wages, employees are therefore migratory.

<table>
<thead>
<tr>
<th>Venture Friendly Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators from Literatures</strong></td>
</tr>
<tr>
<td>- Market development in an entrepreneurial ecosystem requires good planning.</td>
</tr>
<tr>
<td>- New products licensing must be made less cumbersome</td>
</tr>
<tr>
<td>- Global market requires expertise and network; this is where the role of a robust venture capital industry comes to bear.</td>
</tr>
<tr>
<td>- Local market must be easy to reach and communicate with.</td>
</tr>
<tr>
<td>- Distribution channels must be effective and venture friendly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Synthetic: Venture Friendly Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators from Interviews</strong></td>
</tr>
<tr>
<td>- Products based ventures struggles to reach wide market</td>
</tr>
<tr>
<td>- Middlemen in the supply chain buy on credit and delay payments without penalties</td>
</tr>
<tr>
<td>- Entrepreneurs have less bargaining power leading to low profit margin especially at the early stages of a product cycle.</td>
</tr>
</tbody>
</table>

Efforts must be made to help start-ups penetrate markets. Credit terms have to be enforced by law.

Indicators from Interviews
- Survival of many start-ups will depend on finding quality workforce that can grow with them.
6. Discussion and Conclusions

This paper set out to understand the role governmental interventions either financial or institutional has played in the evolution of an entrepreneurial ecosystem in successful stories around the world. This was borne out of various policy attempts by governments around the world (with special focus on developing countries) who are starting to redirect their economic policies towards pursuit of entrepreneurship, R&D in innovation and technology; they seem also to be realizing the role of the private sectors in achieving success. As Isenberg puts it, a robust and vibrant entrepreneurial ecosystem have become a kind of holy grail for governments around the world aiming to diversify from natural resources exploration and attain a lasting economic development. Yet, the way to go is not a “copy and paste” approach especially copying an economy that is not like their own in many respects (Isenberg, 2010).

6.1 Discussion

Most of the global hubs of entrepreneurial activity bear the marks of government investments and involvement (Lerner, 2010).

It is difficult to point to any entrepreneurial ecosystem that has arisen through direct government intervention (Mason & Brown, 2013[1]).

Both submissions above are relatively correct and it goes to explain the level of rigor that may be required in the pursuit of an entrepreneurial ecosystem through government policies or programs, however care must be taken to avoid the path of many programs which have ended up wasting billions of taxpayer’s money in an attempt to drive entrepreneurship through government intervention. Isenberg (2012) argues that “whereas governments have the mandate to intervene they do not necessarily have the competence to do so effectively” (Isenberg, 2012 in Mason & Brown, 2013[1], Pg24)

A key question in attempts at fostering an entrepreneurial ecosystem is, “Which should come first”? The strategic promotion of technology and innovation or the policy design and implementation of venture capital industry (assuming this is the best financing option). Mason and Brown noted that most of the discourse on entrepreneurial ecosystem has not showed a good time dimension, it is not certain how they are established and how momentum is developed. This has left the issue of causality unresolved; they noted that “if X is needed to produce Y, but only appears after Y is present, then how does X initially emerge”? (Mason & Brown, 2013[1], Pg18).

Yet a list of “endless” preconditions abounds in literatures on evolution of an entrepreneurial ecosystem. For instance, the importance of venture capital cannot be over emphasized, government interventions, personal savings, family support or small loans can aid the development of an idea, invention or product. Taking the individual venture or the aggregate numbers of ventures in the ecosystem to a scalable level requires more that seed funds. There seems to be a general opinion that without venture capital entrepreneurial ecosystem may sooner or later stagnate (Gnyawali & Fogel, 1994; Isenberg et al, 2005; Chorev, & Anderson, 2006; Isenberg, 2010; Lerner, 2010; Mason & Brown, 2013[1][2])
The provision of partnership funding to venture capital firms (usually referred to as Fund of funds) should not be the end of government intervention, provision of financial support should not be the hallmark of policy programs, and policy intervention needs to take a holistic approach. The sooner governments realize the dynamic nature of the entrepreneurial ecosystem rather than treat it as a static phenomenon, the less thorny the process can be. Thriving ecosystems have shown to have emerged under unique set of conditions and circumstances, no two entrepreneurial ecosystems are the same. Germany learnt this the hard way, Isenberg mentioned how the German government expended around $20 billion trying to create biotechnology clusters on a par with those found in California, it ended in failure (Isenberg, 2010). Countries like Nigeria can learn from what is not working and redirect the mainly financial interventions towards strengthening other domains such as: Institutional supports and infrastructure; and Enabling policies and leadership which has shown weakness from literatures and results of interviews.

Most policy statements are set out more often than not to promote small businesses which require a different approach from promoting entrepreneurship. Therefore, the need to have a clear understanding of what interventions are aimed to achieve, making the distinction between small business policies and entrepreneurship will give a clearer policy direction (Mason & Brown 2013[1][2]). It is also imperative to develop measuring criteria to evaluate the impact of government interventions, this helps to serve as a compass to know when to change direction or strengthen a particular objective and when the government need to exit the scene and let the private sector drive the ecosystem. Measurement metrics for such interventions can include: new business creation rates; immigration of talented and creative individuals into the region; the establishment of regional hub of venture capital and growth equity can send strong signals that the ecosystem is growing.

No quick fix solutions in developing an entrepreneurial ecosystem, it will take time (not 4 years election cycles) that is why the private sector is crucial as they understand better the risk and rigor that it may take.

It is instructive to observe that all venture capital markets of which we are aware were initiated with government support. These markets do not appear to emerge without some form of assistance. This leads to the question as to what it is that requires the need for government support in these markets, at least in their formative stages. (Lerner et al, 2005). To get some kind of understanding, we can turn to the six domains of Isenberg’s model, namely: enabling policies and leadership; availability of appropriate finance; a conducive culture; quality human capital; venture friendly markets for products; and a range of institutional support (Isenberg, 2011). A strong presence of all these can be traced to entrepreneurial centers around the world, from Silicon Valley to Boston, from Colorado to Canada, Stockholm, Israel, Singapore, New Zealand and so on.

6.2 Limitations

The choice of research paradigm, the interpretivist approach represents a limitation as it laden with bias from the author and can be compensated for through strict adherence to research ethical issues (Collis and Hussey, 2013). The rather broad scope of study selected by the
researcher from the proposal stage made it difficult to go deep into the topic as time was limited, making in-depth analysis a difficult task.

The interview process has shown to consume time and resources, hence interview was restricted to the country’s commercial hub of Lagos and the nation’s political capital of Abuja, which does not translate that entrepreneurial activities only take place in this cities nor suggest that these cities are more entrepreneurial than other cities in Nigeria. Time and financial constraints also limited the number of completed interviewees to about 19; the low number was compensated for by the varied industry background of the interviewees. The interview cannot also be totally biased free both in terms of questions asked, researchers body language and social desirability bias where interviewees try to give answers that seems polite to interviewer or to satisfy and follow a particular trend (Fisher, 1993).

6.3 Suggestions for Future Study

This research based largely on qualitative data and literature review which has been largely descriptive on what is working and what can be learnt from such success stories hence little reference to quantitative data usage. A quantitative oriented research can be important in the sense that it can shed some light on the cost of pursuing the developing an entrepreneurship ecosystem vis a vis gains recorded. A research in this direction will help to understand the rate of return on such policy program thereby advising on the need to pursue such economic policies or the need to follow another route to economic development.

Future research can also attempt to calculate the cost of such programs versus the number of job created, since job creation ranks high on the objectives of many of such government programs. Desired results can be to calculate the cost of individual job created. A wider scope in future research may include a comparative analysis establishing some relationship between programs that have shown success and others that have been deemed to have failed with a larger focus than a few case studies.
References


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Appendices

Appendix A: List of Interviewees
3. Olasumbo Adeleke – SheaBlossom
4. Tolu Ajose – XtraSparklean
5. Kanayo Okonkwo – VeeKayContinental Products
6. Idowu Agbelekale – Arcom Treasures
7. Roxanne Akhidenor – Beaded Jewelry Design
8. Testimony Salu – Fashion Accessories
9. Emerson Bot – Em Daniels Ltd
10. Temisan Gambo – FrootyChoos
11. Femi Fatoba – Global Care Creations Nigeria Ltd
12. Samuel Babajide – Information Connectivity Solutions Ltd
15. John Aderoh – Moraines Nigeria Ltd
16. Ewuola Muslim – Food Processing and Preservation
17. Femi Egbesola – President Association of Small Business Owners of Nigeria (ASBON)
18. Raymond Adenuga – State Officer, Lagos (Bank of Industry)
19. Yinka Fisher – State Officer, Lagos Small And Medium Enterprises Development Agency Of Nigeria (SMEDAN)
Appendix B: Interview Guide

QUESTIONNAIRE

1. Background of founder(s)
   Age ( ); Education Background ( ) Gender ( )

2. Founding circumstances?
   Have you been in paid employment after education?
   How many years work experience do you have?
   Was the job related to your venture?

3. Your cultural disposition towards entrepreneurship/starting a business

4. How do you fit with the Venture?

5. Has your venture gotten any support from institutional agencies? NAME

6. How do you know about the scheme?

7. What were some non-financial incentives gained from the agency(s)?

8. 6 Domains of Entrepreneurial Ecosystem Growth

   How do you view/rate the Nigerian Entrepreneurial Ecosystem/Landscape during your founding years and now under the following domains?

   A, Entrepreneurial Culture
   B, Enabling policies and Leadership from government
   C, Appropriate financing
   D, Institutional support & infrastructure
   E, Quality human capital
   F, Venture friendly Market