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Entrepreneurship ecosystem evolution strategy of Saudi Arabia

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Abstract:

In majority of times when a potential start-up strikes a brilliant business idea, he/she has little knowledge of 'how to move from there'. They lack information on the stakeholders of entrepreneurship ecosystem who can help and assist these startups in numerous ways and help them materialize their concepts. Availability of this information will help the ecosystem stakeholders to avoid replication and duplication of efforts. Similarly, knowledge of status quo helps identify opportunities and supports plan development to endeavor through right strategy for the start-up. Critical review of existing initiatives of Saudi Arabia for entrepreneurship growth and identification of the existing stakeholders of the entrepreneurship in the country is conducted. Similarly their work and potential for practicable interventions to further entrepreneurship reflecting country's economic development process is examined. This paper benefits from a cross sectional basic study of Saudi Arabia that utilized primary and secondary sources to discover the initiatives, understand entrepreneurship growth and then map the national entrepreneurship ecosystem. A number of interviews from CEO's, General Managers and other senior executives were carried out to know the role of the different organizations in entrepreneurship growth. It was coupled with a detailed secondary research from existing resources. It has been identified that the ecosystem is swiftly expanding but yet under development and infancy stage where the institutions are prospering. The research is based on country analysis. The paper also shows that the Saudi Arabian government has taken proactive stance in developing the entrepreneurship ecosystem and startup landscape and highlights the transformation of the ecosystem strategy.¹

Keywords: entrepreneurship; ecosystem; ecosystem evolution; strategy; startups; Saudi Arabia

JEL codes: L26, M13, Q57

¹ This study is based on Rahatullah (2013). There have been numerous changes since that study and this paper incorporates a variety of new literature, information, stakeholders and their activities besides others, providing evidence of the evolution of entrepreneurship ecosystem in Saudi Arabia. The initial period of study had been September 2012 to June 2013. Then the study for the current work spanned from July 2014 to September 2014. However, there could be a case that a particular stakeholders on map is missing it is because of the research period or the non-availability of secondary data.

1. INTRODUCTION

This section familiarizes with the concept of eco system strategy for entrepreneurship growth and its practice in different parts of the world. It also refers to the purpose and the research questions based on the gaps and helps understand the contribution of the paper to both academia and the practice.

The aim of this paper is to identify the existence of an entrepreneurship ecosystem as well as to show that the use of this ecosystem helps energize and organize the sector and explore a deliberate or otherwise strategy of Saudi Arabia to strengthen the eco and enable entrepreneurship. The paper further endorses a need for an entrepreneurship ecosystem map and shows the evolution of Saudi Arabian map and its evolution over years. It underscores an entrepreneurship ecosystem development strategy to address some of the less stressed upon issues and policies essential to toughen entrepreneurship and generate economic development. It is pertinent here to understand the status quo and identify the evolution of the ecosystem by mapping the role of different stakeholders of entrepreneurship in the kingdom. This would help in understanding the strategy and then becoming an example for the mapping strategy itself. The maps provide a one page snap shot of the ecosystem at the respective level. It will provide the understanding of evolution through a map of both strategic and institutional levels since 2013. It will then point out the changes that have happened over the years. The achievements of the strategic level's strategy become clearer as we move on to conclusion. It is a cross sectional basic study and through the help of secondary sources maps the ecosystem of Saudi Arabia and then identifies the evolution of the ecosystem over three years.

2. LITERATURE REVIEW

Zimmerman (2007) suggests that "Entrepreneurship is the recognition or creation of an opportunity, coupled with action by an individual or group of individuals, to form a social, intrapreneurial, lifestyle, middle-market, or highly-liquid venture".

Looking at the importance of SME and entrepreneurs it is evident through the management academics and practitioners that successful new ventures contribute to employment, political and social stability, innovation, and competition (Dunkelberg, 1995; Hoffman *et al.*, 1998; Zedtwitz, 2003; Thurik & Wennekers, 2004). Similarly the success of SME's is also largely attributed to entrepreneurs' abilities and role of different organizations and institutions to enable the entrepreneurship (Covin & Slevin, 1989; Szabo, 2006; Dyer & Ha-Brookshire, 2008; Isenberg, 2011).

Malhi (2004) contends that the Government of Canada underlines the important contributions made by entrepreneurs and distinguishes them as a dynamic group vital to the progress and growth of the country, hence puts the emphasis on entrepreneurs. He also suggests that the entrepreneurs are the backbone of the Canadian economy and generate employment opportunities for thousands of job seekers. He further identifies that there is a need to further foster the entrepreneurial

activity by the government initiatives as it is a positive force contributing to the economy. The Canadian success is tangled with that of entrepreneurs.

On the other side in the UK, its secretary for the business, enterprise and regulatory reform (2007) argues that number of businesses in UK has grown by more than half a million as a result of the entrepreneurial activity guaranteeing thousands of jobs. This helped the UK remain Europe's leading destination for inward investment. Its competition regime has been ranked third in world while welcoming the creation of a department to equip Britain to seize new opportunities in the changing global economy. Across the Atlantic Congressional documents report on entrepreneurship for 2012 provided by the Kauffman Foundation suggest that fast-growing nascent firms comprise less than 1% of all companies but generate roughly 10% of new jobs in any given year. Over the last three decades, young firms less than five years old have created 40 million new jobs.

America's booming entrepreneurial sector is responsible for much of today's economic prosperity and the largest economy of the world (Abid, 2007) provides the entrepreneurs' opportunities to take advantage of new wealth-creating prospects that regularly arise from constant change. This phenomenon of "creating opportunity from change" has been part of the American culture since the 19th century Industrial Revolution. Zimmerman (2007) argues that today, an entrepreneurial renaissance is transforming American business and society.

This discussion has evidenced that the governments of developed countries emphasize the entrepreneurship and SME development and distinguish them as growth engines. Governments evidently stride and promulgate business friendly laws, rules and regulations. It identifies the underlying importance of entrepreneurship in creating prosperity and developing living conditions of the society.

3. UNDERSTANDING AN ECOSYSTEM

The oxford dictionary at describes ecosystem as a complex network or interconnected system. In general, we can distinguish:

- Biological ecosystem – In the new shorter oxford English dictionary (1993) a biological ecosystem is explained as "a system of organisms occupying a habitat, together with those aspects of the physical environment with which they interact". Whereas, the Merriam-Webster Third New International Dictionary of the English Language (1986) defines biological ecosystem as "a community of living organisms with air, water and other resources". This definition underlines and emphasizing the community aspect of an ecosystem. However, furthering this definition the World Resources Institute (2000) adds that ecosystems do change. Kauffman's stipulated similarly, saying that cells, ecosystems and economic systems are also "real equilibrium systems" and thus behave in ways that are their "own shortest descriptions" (Kauffman, 1995, p. 22).

- Business ecosystem – Peltoniemi and Vuori (2004) define business ecosystem as “a dynamic structure consisting of an interconnected population of organizations”. They suggest that these organizations could be of any size, business sector or public or private in nature and influencing the system. They further argue that business ecosystem develops through self-organization, emergence and co-evolution and provides it much needed adaptability, hence in such a system there is both competition and cooperation prevailing.
- Entrepreneurship ecosystem – Wiklund *et al.* (2008, p. 5) underscores that producing entrepreneurship firm growth is a complex phenomenon and cannot be completed as standalone but needs support of numerous players in the economy. They require a serious and cohesive action for its growth and development. Complexity research tries to find applications in social and economic systems (Peltoniemi & Vuori, 2004).

The literature on entrepreneurship ecosystems and entrepreneurship ecosystem strategy is scarce. There has been very little information available on the ecosystem. Rahatullah (2013) provides a comprehensive look at the ecosystem strategy and maps the Saudi Arabian entrepreneurship ecosystem. This provides an initial and pioneering look and evidence that ecosystems in entrepreneurship do exist. However, there are seminal work carried out in the entrepreneurship and its growth and development like Zimmerman (2007), Szabo (2005, 2006) and Isenberg (2011).

4. PIONEERING MAP OF ENTREPRENEURSHIP ECOSYSTEM OF SAUDI ARABIA

Rahatullah (2013) provides a detailed look at the mapping of an entrepreneurship ecosystem. The study develops an understanding of the entrepreneurship and its role in economic development. Then deliberating on the Szabo (2006) and Isenberg (2011) studies on the levels and domains of entrepreneurship ecosystem the study develops a measurement in line with levels and domains narrated by the Szabo and Isenberg in a cross sectional basic study.

Szabo (2005, 1995) and Isenberg (2011) assert that public / government leaders including the elected representatives, professional and private sector responsible to work cohesively and on several inter-related principles to form an ecosystem for entrepreneurship growth.

In Szabo (2005, 2006) and United Nations Economic Commission for Europe (UNECE) suggested that development of the SME's in the countries in transition materializes with the activities and assistance from an integrated and three distinct levels. These levels they argue are 1) strategic level (*policy making*); 2) institutional level (*support institutions*) and 3) enterprise level (*entrepreneurs and business entities*). Szabo studies on “Business Incubation as Element of Business Service Institution and SME Development Infrastructure for Creation of New Enterprises in CITs” provided a more comprehensive account of these three levels. These are adapted in table 1.

Isenberg (2011) on the other hand identifies 3 domains of ecosystem adding to Szabo perspective. The domains show that the ecosystem requires stakeholders who can develop certain skills and services for enterprise growth arguing for Culture, Support Services and Strategic Domains. The support activities of the Isenberg include the expertise and networking opportunities at the market level made available and possible through the governmental policies. These are shown in table 2 below.

Table 1. Levels of entrepreneurship ecosystems

Level, Responsibility and Requirements	Why
<p>Strategic level</p> <ul style="list-style-type: none"> - Governments are responsible for execution of this level where a clear Government policy is required - Creating a conducive political environment which is favorable to accept private business undertaking 	<p>To Develop Sustainable Environment and to promote and then creating the entrepreneurial activity through SME development and growth. It requires the following:</p> <ol style="list-style-type: none"> 1. Legal entrepreneurship instrument 2. SME Support programs by the governments <p>Government sponsored financial resource commitments</p>
<p>Institutional level</p> <p>The following are responsible to enable enterprise</p> <ol style="list-style-type: none"> 1. Government institutions. 2. Chambers of commerce. 3. Professional and trade associations. 4. Training institutions. 5. Enterprise development agencies at both the national and regional levels. 6. Banks and financial intermediaries, and 7. Non-governmental organizations including professional bodies, consultants and universities etc. <p>Information on how to start up a business is required.</p>	<p>To promote SMEs by providing effective business support services including support and information on:</p> <ol style="list-style-type: none"> 1. how to prepare business plans 2. Organization and dissemination of information on business formation and licensing etc. 3. Marketing intelligence 4. Access to financial resources and credit guarantees 5. Human resources 6. Real estate 7. innovation and facilitating cooperation
<p>Enterprise level</p> <p>Entrepreneurs and enterprise is responsible</p> <p>Strengthening entrepreneurial and managerial skills is required</p>	<p>It will require practical interventions such as</p> <ol style="list-style-type: none"> 1. Consulting Services 2. Business Information Hubs and Centers 3. Incubators, techno-parks and industrial estates. 4. Access to technology and technology transfer. 5. Quality awareness 6. Management systems 7. Awareness for consumer protection. 8. Intellectual property right. <p>SME internationalizing</p>

Source: adapted from <http://www.unece.org/indust/sme/sme-role.htm> (13.01.2012).

Szabo (2005, 2006) and UNECE 1997 report accounts the public or government leaders including the elected representatives, professional and private sector responsible to work cohesively and on several inter-related principles to form an

ecosystem for entrepreneurship growth. He also suggests an ecosystem strategy to addresses some of the less stressed upon issues and policies essential to toughen entrepreneurship and generate economic development. Isenberg identifies 3 domains of ecosystem forming a little different perspective than Szabo. He argues for Culture, Support Services and Strategic Domains of the ecosystem.

Table 2. Isenberg’s domains of entrepreneurship ecosystem

Strategic		Support			Culture
Policy	Human Capital	Markets	Finance	Support Services	
Government Institutions: - Financial Support - Laws and rules, e.g. tax benefits - Developing research institutions - Business friendly laws - Contract enforcement, - Labor rights	Labor: - Skilled and Unskilled - Serial Entrepreneurs - Colleges and Universities - Entrepreneurship Training	Expertise: Expert knowledge and information for dissemination to enterprise	Micro loans: Essential loans for survival of micro scale businesses that generate jobs	Infrastructure: - Telecoms - Transportation - Energy - Industrial zones - Incubators - Clusters	Success Stories: - Visible Success - Wealth generation - for founders - International reputation
Leadership: - Clear support - Society support by recognizing the - SME/Micro business as viable and respectable work		Networks: - Personal networks of entrepreneurs - Diaspora networks around the markets - Multinational corporations	Investment (by): - Angel investors - Crowd Investors - Institutional Investors - Venture Capital - Private Equity - Pubic Capital - Markets	Support Professions: - Legal - Accounting - Investment - Advisors Non-Government Institutions: - Business planning contests - Conferences	Societal Norms: - Tolerance of Risks, Failures and mistakes - Innovation, Creativity and Experimentation - Social Status of Entrepreneur - Wealth Creation - Ambition, Drive, Hunger

Source: adapted from Rahatullah (2013).

Rahatullah (2013) reported furthering Szabo and Isenberg’s studies and suggested the following flow in ecosystem.



Figure 1. Ecosystem proposal

Source: own elaboration.

Based on these findings from literature a cross sectional basic study was carried out in 2012-2013 (Rahatullah, 2013) and here it continues to understand the evolution and reporting in real time.

In Rahatullah (2013) each of the levels and domains is identified with different types of organizations and at each level required for enterprise development. Hence all the services, actors and stakeholders of entrepreneurship fit at these different levels. The study maps the services of the strategic level organizations which necessarily are the government institutions and explains their work. Similarly, it then

identifies the services provided by different companies to entrepreneurs, including incubators, accelerators, research, skill development, copyrighting and patenting and many more and identifies that who provides these services. Once that is provided the study mapped the organizations of both the strategic and institutional levels to their organizations and services respectively.

Then taking through the ecosystems it maps Saudi Arabian entrepreneurship Ecosystem based on Szabo (2006) and Isenberg (2011) levels and domains of entrepreneurship ecosystem respectively.

5. THE EVOLUTION OF ENTREPRENEURSHIP ECOSYSTEM OF SAUDI ARABIA

This section will examine the entrepreneurship and SME growth initiatives and activities in the Kingdom of Saudi Arabia on the basis of Szabo (2006), United Nations Economic Commission for Europe (UNECE), Isenberg (2011) and Rahatullah (2013) mapping of ecosystem.

5.1. BACKGROUND OF SAUDI ARABIA

Saudi Arabia has been the home of business leaders since pre-Islam era. Word Jeddah (economic hub of the kingdom) means 'ancestral'. It remained center of international trade and a notable business route between Europe, Mediterranean and Africa. The Prophet Muhammad and many of his early supporters were international traders and merchants. Khadija, his wife, was a highly successful businesswoman even before she met the Prophet.

The SMEs' play increasingly vital role in Saudi Arabia's economic growth by helping to diversify its economy, generate employment, contribute to Saudization (a term used where majority of workforce would be Saudi). Currently there are more than 8.8 million expatriates working in the country; whereas total population is around 29 million) trigger regional development, enhance technical innovation and expanding the export market. According to the CIA world-fact book, Saudi Arabia has a population of 26,534,504 (July 2012 est.) including 8 million expatriates. It has a GDP per capita of \$24,000 (2011 est.) and country comparison to the world is 55. With an unemployment rate at almost 11% the sectorial composition of GDP is 2.1% coming from agriculture whereas, 67.6 and 20.4 is generated by industry and services sectors respectively. The country ranks 17 in global competitiveness index (SUSRIS, 2011) and provides crucial data regarding the SMEs in Saudi Arabia. It shows that though Saudi Arabia is the largest economy in the GCC and over the last eight years, the country's budget has risen from \$69 billion to \$170 billion. Despite this growth, SMEs contribute mere 25% of total employment and only 33% to the country's GDP, though the SMEs makeup 92% of the businesses in the country (National U.S.-Arab Chamber of Commerce, 2016). This is in stark contrast to most developed economies like in Spain SMEs contribute to 64.3% of GDP, or Austria with SMEs contribution of 44%. Realizing the importance of the

SMEs sector the government has taken numerous steps to boost the entrepreneurial activity to trigger economic growth.

Table 3. Some distinct features of Saudi Arabian entrepreneurship and business sector

Ease of Doing Business 2011*	Global Competitive Index 2010/11 (GCI)	Economic Freedom Score 2010	Information and Communication Technology Index (ICT) 2009	Innovation System Index 2009	Human Development Index (HDI) Value 2010	Education and Human Resources Index 2009	Knowledge Economy Index (KEI) 2009
12	21	64.1	6.43	3.97	0.752	4.89	5.31
1 Ranked among 183 Economies http://www.doingbusiness.org/rankings accessed on March 11, 2012							
2 GCI Index - ranked among 139 Economies							
3 Economic Freedom Score - 0 to 100, where 100 represents the maximum freedom							
4 The ICT value falls on a scale of 0-10 and is calculated from three key indicators: number of telephone lines per thousand of the population, number of computers per thousand of the population, and number of internet users per thousand of the population. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.							
5 Innovation System Index - The index value falls on a scale of 0-10 and is calculated from three key indicators: Total royalty payments and receipts in US\$ per person, number of patent applications granted by the US Patent and Trademark Office per million people, and the number of scientific and technical journal articles published per million people.							
6 HDI - Calculated based on data from UNDESA (2009d), Barro and Lee (2010), UNESCO Institute for Statistics (2010a), World Bank (2010g) and IMF (2010a).							
7 Education and Human Resources Score - The index value falls on a scale of 0-10 and is calculated from three key indicators: adult literacy rate, secondary enrolment, and tertiary enrolment							
8 The Knowledge Economy ranking index ranks the countries endeavoring to build the knowledge economies on a scale of 0-10							

Source: : Selected indicators of economic attraction & stability for entrepreneurship growth; adapted from http://en.wikipedia.org/wiki/Entrepreneurship_Policies_in_Saudi_Arabia and World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/> (23.01.2016).

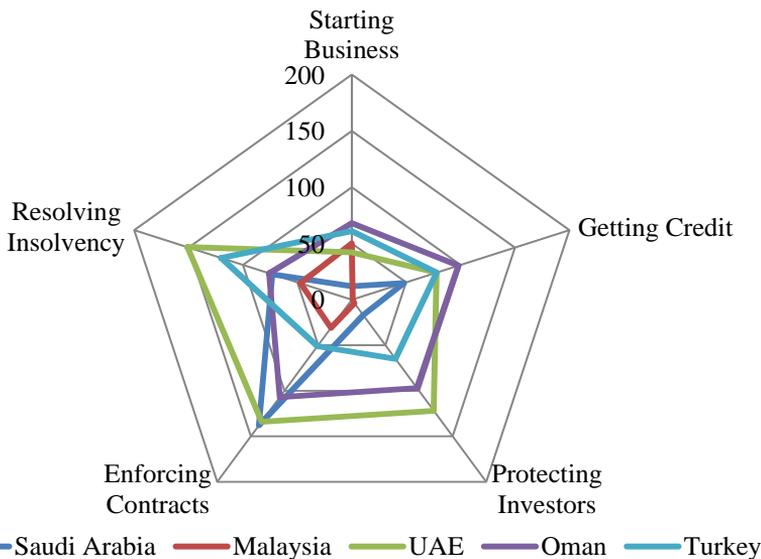


Figure 2. Selected indicators relating to entrepreneurship assistance and economic growth in Saudi Arabia

Source: adapted from Wikipedia (2016), The World Factbook (2016), National U.S.-Arab Chamber of Commerce (2016).

Saudi Arabia is the largest economy in the GCC and over the last eight years, the country's budget has risen from \$69 billion to \$170 billion. Despite this growth, SMEs contribute to only 25% of total employment and only 33% to the country's GDP, though the SMEs makeup 92% of the businesses in the country. It is in stark contrast to Spain SMEs contribute to 64.3% of GDP or even Austria where SMEs contribute 44%. Results of following table 3 show that Saudi Arabia is well placed on selected indicators for economic growth when ranked on different initiatives.

In the figure 2 below some selected indicators relating to entrepreneurship assistance, economic growth and Saudi Arabia's position viz-a-viz other countries is shown.

The index placements for the KSA is in stark contrast to most developed economies. In Spain for example SMEs contribute to more than 64% of its GDP. In Austria SMEs contribute 44%. Saudi Arabia and its ranking in different initiatives is also revealing. The results by no means are discouraging and Saudi Arabia is well placed against many other countries.

5.2. GAPS, QUESTIONS AND POSSIBLE CONTRIBUTIONS

The above discussion shows that there is some basic information available regarding the Saudi Arabian initiatives on entrepreneurship growth based on some indicators and initial studies. However, there is a lack of detailed information on the entrepreneurship ecosystem that is contemporary strategy for the growth of the entrepreneurship in the world. Therefore, following questions are raised.

1. What is the status quo of the entrepreneurship eco system and who are the stakeholders in this eco?
2. In order to further the ecosystem what initiatives the Government of Saudi Arabia has taken? Identifying the strategy.
3. How is the eco-system evolving?

Once the above questions are answered and the gap is filled in, there would be a set of recommendations developed to address the gaps that exist in the entrepreneurship ecosystem of Saudi Arabia. There would be a set of recommendations made.

The map of the latest ecosystem showing the status quo and identifying the evolution by showing the changes that have occurred over years and recommendations would help understand and identify the strategies and policies required in order to have an evolved and fuller ecosystem for the cohesive growth of entrepreneurship in any country. However, one important factor has to be kept in mind that some of the ecosystem contributors could be culture or country specific, whereas, others would be applicable universally.

This should assist the strategic, institutional and enterprise level stakeholders of Saudi Arabia immensely in knowing the challenges and developing strategies to defy issues and difficulties.

The following methodology is adopted in order to answer these questions.

6. METHODOLOGY AND DEVELOPING THE MAPPING STRUCTURE AND THE MEASUREMENT

This section identifies in detail the research methodology used, and develops the entrepreneurship ecosystem map structure based on the ecosystem components as envisaged by the literature. Keeping the above information in view it is evident that Saudi Arabia has huge potential for the growth of SME sector and entrepreneurship can play massive role. In order to explore the Saudi Arabian entrepreneurship ecosystem a cross sectional basic study for a cluster investigation through primary and secondary resources is adopted. Zimmerman (2007) suggests that “Entrepreneurship is the recognition or creation of an opportunity, coupled with action by an individual or group of individuals, to form a social, intrapreneurial, lifestyle, middle-market, or highly-liquid venture”.

All the organizations and services provided by the organizations that fall under the levels and domains envisaged by Szabo and Isenberg are classified and categorized under specific services, hence these become constituents under each level. In order to identify and understand the numerous services that the strategic and institutional level stakeholders provide to entrepreneurs at different levels a rich body of literature exists. The services identification forms the basic measurement. The examination of this seminal work by numerous scholars such as Praag and Versloot (2007), Koga (2005), Acs and Audretsch (2005), Acs and Varga (2005) were conducted. They posit the importance of the research and development facilities to foster innovation in entrepreneurial firms. Hence it formed an element of measurement in the study. Numerous studies including Mohamed and Alexandre (2010), Moensted (2010), Maritz (2010) or Klyver and Grant (2010) narrate the need for the networking as important tool for SME and entrepreneurship growth. These works also highlight the innovativeness the networking and networking opportunities bring about. Rahatullah (2014) also posited that the networking of the potential partners is important for success. Therefore, the networking opportunities available to stakeholders were be examined.

Various studies of both female and male business startups put the mentoring and coaching programs by the governmental and private stakeholders of entrepreneurship growth under perspective. These studies include but are not limited to Chautin (2011) and King (2010). They identify the importance of mentoring programs by professionals and existing successful entrepreneurs and suggest that such programs play vital role in the success of the startups. Otto (2005) identifies numerous planning activities as essential in building an effective strategic plan. These include components such as Business drivers-why is this being undertaken?, objectives and scope of business, underlying assumptions, quality assurance plan, issue resolution plan, change management plan, risk management plan, project milestones and dates, project cost estimates, risk/benefit analysis, resource requirements. Whereas, Nickols (2006) puts forward a goals grid to effective planning and providing direction to the business. These are consulting services providing expert

services (Isenberg 2011) by professional firms. Szabo (2006) also laid emphasis on this institutional support. This study will identify role of such firms if any. Mazanai and Fatoki (2011) argue that the business development services including the business startup are essential for entrepreneurship growth and survival of such forms for longer term. Similarly, Drnovsek *et al.* (2010) suggest that entrepreneurial self-efficacy is related to business startup assistance. Szabo (2006) and Isenberg (2011) also identified business startup assistance and role of such organizations providing the service as critical and important. Green & Ouellette (2007) showed that intellectual capital is positively linked to start-up company success, market value, innovativeness, marketplace agility and adaptability. They concluded that value creation potential is enhanced by incubators and they play vital role to assist start-ups by diffusing knowledge, ideas, technologies, etc.

Groups like Small Business and entrepreneurship Council exist (Covel & Kelly, 2009). Ahl (2011) suggests importance and success of lobbying. The U.S. boasts a tradition of supporting small businesses where the Small Business Administration (SBA) was created in 1953. The National Association of Women Business Owners (NAWBO) was formed in 1975 by a number of women entrepreneurs. As a result of the association's successful lobbying, in 1979 President Carter created the Office of Women's Business Ownership in the SBA (Weeks, 2002; Ahl, 2006). The National Women's Business Council (NWBC) was established in 1998. Its 15 members are appointed by the Small Business Association (SBA), and its chairman is appointed by the U.S. president. Special assistance for women in business was initiated in 1994. There are 160 local and regional resource centers for women (Ahl, 2011). Importance of lobbying and creating awareness for welfare of members is reinforced. A study of business services incubators led to websites of numerous incubators operating across the world. In order to identify services of these incubators and to explore whether the stakeholders in Saudi Arabia offer the similar services or not, a number of incubator services were randomly identified from across the world and their services examined. These incubator services can be categorized into following four areas as shown in figure 3 below.

A two part map structure was created, i.e. strategic and Institutional (Rahatullah, 2013). Through secondary research organizations were identified for each of these levels. Then these were mapped on respective level. A particular color is assigned to each service to strategic level organizations. Whereas, the institutional level services discussed above were placed column wise and organizations providing particular services were color coded under them row wise. For example, in strategic level Human Resource Development Fund (HRDF) provides five services whereas, some services of Centennial Fund and Ministry of Industries overlap. On the other hand a number of institutional level organizations provide similar services, e.g. start-up assistance is provided by more than 6 different companies.

This map helps to recognize the efforts of strategic and institutional stakeholders to develop a sustainable environment of entrepreneurship growth, business support services and progress of SME's to trigger entrepreneurship augmentation. In

the first instance the websites of different organizations working for the entrepreneurship growth were identified and thoroughly investigated, wherever information was not complete an effort was made to contact relevant manager / head of the organization to secure more inputs.

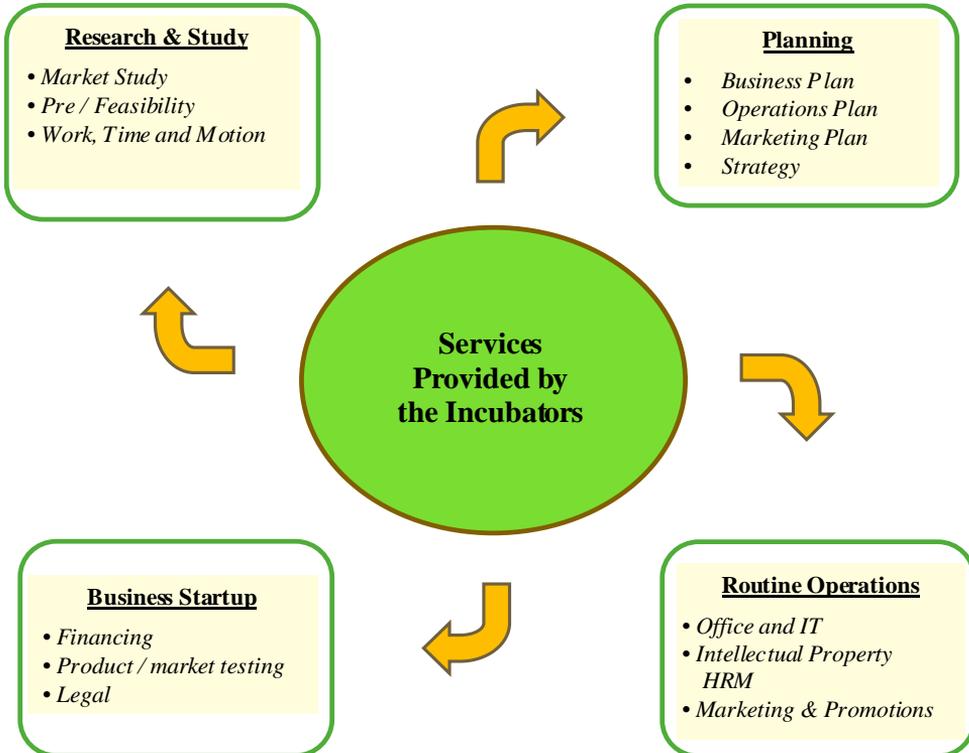


Figure 3. Business soft skills incubator services

Source: own elaboration based on the literature discussed above.

Keeping all these studies in view, the services at the strategic and institutional level consist of following services as revealed in table 4.

In the first study 48 organizations were identified and formal / informal interviews with the managers, general managers, or other senior executives of 21 stakeholder institutions of Entrepreneurship and SME development in Saudi Arabia were carried out. More than 100 magazines, periodicals and academic and managerial literature were sifted to complete the mapping. Then 5 interviews were conducted to verify the results and two workshops of the stakeholders were attended where the secondary data was presented, was discussed and substantiated. In 2014 number of organizations identified and in 2015 the services at the institutional level increased. The number of service providers swelled as well.

This mixed methodology including qualitative and quantitative means was used intentionally to achieve better results and triangulation. The information from

news sources and websites was also collated to realize the role of the government at strategic level in the economy. Analysis of the information available was also conducted. Secondary sources used were public sources such as websites of the organizations. On the other hand the commercial sources included the use of ABI/INFORM Global websites. The names of officers interviewed and their affiliations will not be divulged as the permission was not granted.

Table 4. Isenberg’s domains of entrepreneurship ecosystem

Strategic Level Services		Institutional Level Services	
Celebrating Entrepreneurs	SIC classifications	SME networking opportunities	Collaboration services
Regulating the competition	Helping international partnerships	Coaching and Mentoring	Training and Education
National & Int’l Collaborations	Laws related to institutional level support organizations	Business Consulting	Research
Financial Assistance	Laws relating to construction, Properties, Investor security, contracts, Insolvency etc.	Market Research for Data accumulation (R&D)	Financing and Investment Banks
Developing Law, Policies and Regulations for Business	Research and Development	Start-up Development Skills	Web based -Enterprise & SME Development Platforms
Industrial Surveys	Developing technical incubators	Lobbying, Soliciting, Awareness	Venture Capitalists and Funds
		Soft skills	Incubators and Accelerators
		Market Research for start-ups	
		Technical Consulting	

Source: Szabo (2005, 2006), Isenberg (2011), Rahatullah (2013).

7. THE EVOLUTION: 2013 TO 2015 STRATEGIC LEVEL OF THE SAUDI ARABIA ENTREPRENEURSHIP ECOSYSTEM

The evolution of strategic and institutional levels would be discussed separately year wise.

In 2013 study it was evident that there were 9 strategic level organizations working (Figure 4). However, it was also seen that some of the work of the institutional level as asserted by the literature was being carried out by the strategic level. For example, the HRDF was providing salaries to the individuals who were planning to start a business for a specific period of time. This was to help startups consolidate and establish the business without feeling the financial burdens. However, the modus operandi could be altered and funds paid to entrepreneurs through banking channels. Similarly, the Kafala (SIDF) and SCSB had been holding events to establish collaborations and hold events and seminars. This also signifies that in the

absence of the institutional level support the responsibility was shouldered by the strategic level thus showing a more proactive role.

SAGIA	HRDF	SIDF	SCSB	WAED	MOL	MOI	CF	KACST
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	WAED Aramco	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdullah City of Science and Technology
SFG100 – To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing		Ecosystem development	Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR – The technical and engineering incubator
NCC – National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars		Prefunding support to entrepreneurs	Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency		Business Stratup Training	R & D
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations		Post funding support to entrepreneurs	National and International Collaborations			Research Grants
Business Stratup Training		Industrial Survey			Lobbying, Soliciting and Creating Awareness			
Lobbying, Soliciting and Creating Awareness								

Figure 4. The 2013 Strategic level of entrepreneurship ecosystem in Saudi Arabia
 Source: own elaboration and map development.

The 2014 strategic level reveals that the WAED – Aramco was shifted from strategic to institutional level owing to their mandate and having further understanding of the ecosystem. The number of services was also increased by many

organizations like MOI, MOL, KACST, HRDF and SAGIA. KACST started to develop policies and training for the ecosystem, whereas, CF embarked to develop international collaborations and implementing the governmental policies and systems. SDF and SCSB commenced the policy drafting and recommendation and HRDF initiated the work on the policy development regarding the human capital development in the kingdom (Figure 5).

Strategic Level of Entrepreneurship Ecosystem of Saudi Arabia							
SAGIA	HRDF	SIDF	SCSB	MOL	MOI	CF	KACST
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdullah City of Science and Technology
SFG100 – To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing		Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR The technical and engineering incubator
NCC – National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars		Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency		Business Stratup Training	R&D and Grants for research
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations		National and International Collaborations	New Laws, rules and regulations to develop the entrepreneurial businesses	SME Networking	Policies Development
Business Stratup Training	Pay salary to startups till they succeed	Industrial Survey	Research and Dissemination of Information to all stakeholders	Lobbying, Soliciting and Creating Awareness	SME Support Programs	International Collaborations	Training
Lobbying, Soliciting and Creating Awareness	Develop Policies regarding the Human Resource development in the Kingdom	Policy Recommendations		Development of enablers	Policy implementation		R&D and Grants for research
Develop new and enable the institutions to provide more and more services to diverse range of entrepreneurs and startups							

Figure 5. The 2014 Strategic Level of entrepreneurship ecosystem in Saudi Arabia
 Source: own elaboration and map development.

A high end engineering incubator ‘BADIR’ has been developed by Kacst. It serves the engineering and technology startups from across the kingdom. BADIR also provides the technical assistance to the startups and office space and other facilities cater to the growing needs of the startups.

SAGIA	HRDF	SIDF	SCSB	MOL	MOI	CF	KACST	CSC	MODON	GASME
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdullah City of Science and Technology	Council of Saudi Chambers	Saudi Industrial Property Authority	Public Authority for Small and Medium Enterprises
SFG100 - To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing	Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR - The technical and engineering incubator	Bar coding services	Development of industrial cities with integrated infrastructure & services	New Laws, rules & regulations to develop business	
NCC - National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars	Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency	Business Stratup Training	R&D and Grants for research	Export Development	Multi stakeholder coordination			
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations	National and International Collaborations	New Laws, rules & regulations to develop business	SME Networking	Policies Development	SME Development	Creating the ideal environment for growth and development of technology zones	Oversee the SME growth and Development	
Business Stratup Training	Pay salary to startups till they succeed	Industrial Survey	Research & Dissemination of Information to stakeholders	Lobbying, Soliciting and Creating Awareness	SME Support Programs	International Collaborations	Training	Family Facilities		
Lobbying, Soliciting and Creating Awareness	Develop Policies regarding the Human Resource development in the Kingdom	Policy Recommendations	Development of enablers	Policy implementation	R&D and Grants for research	Conferences & Research				
Develop new and enable the institutions to provide more and more services to diverse range of entrepreneurs and startups										

Figure 6. 2015 Strategic level of entrepreneurship ecosystem in Saudi Arabia
Source: own elaboration and map development.

A massive shift in the governmental policy has been witnessed in the year 2015 where three more organizations have either been established or existing institutions have been granted further responsibilities (Figure 6). Long awaited SME authority has been established which will oversee the SME growth and development in the Kingdom. It will develop coordination among numerous stakeholder and identify the challenges and develop solutions through new laws, policies and regulations. It seems that future might witness this authority taking over these tasks from other organizations.

8. THE EVOLUTION: 2013 TO 2015 INSTITUTIONAL LEVEL OF THE SAUDI ARABIA ENTREPRENEURSHIP ECOSYSTEM

In 2013 few of the services required to be carried out at institutional level were being provided by even fewer organizations (Figure 7). The eco at this stage seemed to be in its infancy where the private sector seemed to start to embrace the challenge of the consolidating and sustenance of the eco. The soft skills development initiatives were limited and so was the effort in the teaching and training. However, the number of organizations was notable comparatively in the areas of research and creating awareness. Effat university became the first university in the kingdom to offer an entrepreneurship degree at the bachelors' level and conduct research in the domains of women enterprise, startups, family businesses, challenges etc.

The year 2014 witnessed the eco grow considerably, new organizations started to mushroom up and brand new services introduced (Figure 8). The universities understanding the requirement and obligation launched their own programs. Many organizations expanded the portfolio of their services and a number of new organizations started brand new services. More investors started to come but the environment remained hazy to their classification. It seemed that many organizations started many services without specializing in some and or developing niches. This is quite understandable as the transition and transformation of the sector had been happening. Strategic level and Institutional level organizations started to build coordination.

However, with in next one year, 2014 to 2015 a huge transformation of the eco took place. New services added, eco became more filled up and almost started to provide all services. A number of more organizations filled in the gaps in the support services and expansion took place both qualitatively and quantitatively. It became easier to categorize the funding services into banking, venture capitalists and funds. Web based services and groups also launched services and specialized organizations to hold events and competitions etc. emerged. Existing stakeholders like Bab Rizk Jameel entered into collaboration with Grameen bank and large public and private sector organizations like Saudi Telecom, Mobily, SEDCO and Dalah Al Baraka begin assistance through their CSR and other community development projects (Figure 9).

Institutional Level of Entrepreneurship Ecosystem of Saudi Arabia											
SME Networking	Coaching and Mentoring	Business and Technical Consulting	Startup Training	Lobbying, Soliciting and creating Awareness	Soft Skills	Market Research	Collaborations	Incubator - Accelerator	Training and Education	Research	Financing / Investment
Chambers of Commerce & Industry	Injaz	RIM (Research in Motion with SAGIA only for IT related projects)	Chambers of Commerce & Industry	Chambers of Commerce & Industry	Injaz	AlZamil Group - Feasibility and Recruitment	Chambers of Commerce and Industry	ARAMCO - Shoaibi Group, Kaufman Foundation - R&D Hub at Khobar	NCB PC Labs, Educational Development and Job Opportunities	King Saud University	SIDF
	Business Development Centers and different committees at CCIs										Price Water House Coopers
Khadija Bint Khuwailed											NCB
MILE Madinah Munawwara	Chambers of Commerce - Trainings, conferences, workshops, seminars and exhibitions etc				Qotuf	Chambers of Commerce & Industry	NCB CSR Department	BADIR	Chambers of Commerce & Industry	KFUPM	KAUST
	Qotuf	Deloitte	NCB CSR department		NCB CSR Department						Umm Al Quraa University
NCB CSR Department	Effat University		CCIs SME Dev. Centers	CCIs CSR Centres			KAUST	KFUPM	Bab Rizk Jameel		Al Rajhi Bank
KAUST	Riyadah	Alvarez & Marsal	Riyadah	CCIs Young Businessmen	Effat University	WAED - Aramco	KAUST	Effat University	WAED - Aramco		Prince Sultan Fund
WAED - Aramco	Bab Rizk Jameel	Arthur D Little	Bab Rizk Jameel	CCIs Young Business Women	SIDF	Umm AL Qura University	Qotuf	RIM - SAGIA	Umm Al Quraa University	Qotuf	
Wadi Jeddah	KAUST	Charles River Associates	Effat University	WAED - Aramco			KFUPM	KAUST	BADIR	KFUPM	
	WAED - Aramco	Ernest & Young	Qotuf		KAUST	Umm AL Qura University		Princess Noura University			Al Zamil Holding
	Umm AL Qura University	BADIR			Riyadah	KFUPM		WAED - Aramco			
	KFUPM	KAUST						KAUST			

Figure 7. 2014 institutional level of entrepreneurship ecosystem in Saudi Arabia
Source: own elaboration and map development.

SME Networking	Coaching and Mentoring	Business and Technical Consulting	Startup development Skills	Lobbying, Soliciting and creating Awareness	Soft Skills	Market Research	Collaborations	R&D Incubator)	Training and Education	Research	Financing / Investment by Banks	Web based - Enterprise & SME Development Platforms	Venture Capitalists and Venture Funds		
Chambers of Commerce & Industry	Injaz	RIM (Research in Motion with SAGIA only for IT related projects)		Chambers of Commerce & Industry	Injaz	AIZamil Group - Feasibility and Recruitment	Chambers of Commerce and Industry	ARAMCO-Shoabi Group, Kaufman Foundation - R&D Hub at Khobar	NCB PC Labs, Educational Development and Job Opportunities	King Saud University	SIDF	Angel Investors network	Amwal AlKhaleej		
	Business Development Centers and different committees at CCLs	Price Water House Coopers	Injaz								Khadija Bint Khuwailed		Bab Rizk Jameel	Women business database	Effat University
Khadija Bint Khuwailed	Business Development Centers and different committees at CCLs	Price Water House Coopers	Injaz	Khadija Bint Khuwailed	Bab Rizk Jameel	Women business database	Effat University		Taybah University	Effat University	Centennial Fund		Jadwa investment		
MILE Madinah Munawwara	Chambers of Commerce - Trainings, conferences, workshops, seminars and exhibitions etc				Qotuf	Chambers of Commerce & Industry	NCB CSR Department	BADIR	Chambers of Commerce & Industry	Umm Al Quraa University	Princess Noura University	KFUPM	Al Jazira Bank	iMENA	Aramco Energy Ventures
	Qotuf	Deloitte	NCB CSR department		NCB CSR Department								Umm Al Quraa University		Princess Noura University
NCB CSR Department	Effat University		CCLs SME Dev. Centers	CCLs CSR Centres			KAUST		Bab Rizk Jameel		Venture Capital Bank		Prince Sultan Fund		
KAUST	Riyadah	Alvarez & Marsal	Riyadah	CCLs Young Businessmen	Effat University		WAED - Aramco	KFUPM	Effat University	WAED - Aramco		Grofin	STC Ventures		
WAED - Aramco	Bab Rizk Jameel	Arthur D Little	Bab Rizk Jameel	CCLs Young Business Women	SIDF	Umm AL Qura University	King Saud University	RIM - SAGIA	Umm Al Quraa University				CGI Capital		
Wadi Jeddah	KAUST	Charles River Associates	Effat University	WAED - Aramco		KFUPM	KAUST	BADIR	KFUPM			ArabNet	Wadi Jeddah		
	WAED - Aramco	Ernest & Young	Qotuf	Effat University	KAUST	Umm AL Qura University	Wadi Jeddah	SIDF		Wadi Jeddah			Al Zamil Holding		
	Umm AL Qura University	BADIR			Wadi Jeddah	KFUPM		Qotuf					Grameen-Jameel		
	KFUPM	KAUST	Effat University		Riyadah								Malaz Capital	MBC Ventures	

Figure 8. 2015 institutional level of entrepreneurship ecosystem in Saudi Arabia
Source: own elaboration and map development.

One very special strategic level organization has been noted and that the mandate of HRDF is extraordinary and the literature lacks many such examples of an elaborate, unique and comprehensive program for potential entrepreneurs in a developing economy as it is in Saudi Arabia.

Saudi Arabia has registered 147 patents in 2011 and tops the Arab countries (Market Information Trading, 2012). However, there seems dearth of innovation houses. If a country can produce such number of patents without state of the art facilities spread across country it may perform better with a number of high tech labs available throughout the kingdom.

According to Isenberg (2011) the research institutions are important and fall under the Policy domain and Governmental initiatives. Similarly, Szabo (2006) also underlines the importance of research institutions at Enterprise level. Literature also argued for information centers development, access to and increase in technology use and awareness, developing consumer protection and intellectual property rights. Organizations like KACST, Waed and KAUST provide such facilities in the kingdom. This shows another huge potential activity for the kingdom.

As regards the SME networking both Isenberg (2011) and Szabo (2006) establish the need for networking. Isenberg identified three factors, i.e. entrepreneurs', scattered but organized and multinational networks. Whereas, Szabo taking a more qualitative look argue for networking at enterprise level. This study points out to chambers of commerce and SAGIA providing these opportunities at national level even if the number of such events may be less though. Khadija Bint Khuwailed center at JCCI create opportunities for Saudi women and help them with their routine operational problems and issue.

The importance of coaching and mentoring, business consulting and startup training has been a centre point of entrepreneurial development. The findings reveal that these services are provided by some of organizations in Saudi Arabia. These include Centennial Fund which provides business startup training through its partner organizations. Research in Motion (USA) and SAGIA will provide this training to potential IT entrepreneurs. KAUST offers the services to potential technology and engineering industry entrepreneurs. In the private sector chambers of commerce, BADIR, Al Zamil group and Bank Al Ahli's CSR department have programs for startup training. However, business consulting is provided by the chambers of commerce, private sector consulting firms and RIM. KAUST and Chambers of commerce have coaching and mentoring programs.

Lobbying, soliciting and creating awareness are considered important tools and mechanisms to solicit to the governmental bodies for grant of rights, privileges and ease of laws etc. to boost a particular sector. The Kingdom has taken initiatives in this regard. However, there are not enough number of associations and representative bodies who can effectively put up their stand point to the relevant authorities and help create networks and raise exposure of its members.

According to Isenberg (2011) the research institutions are important and fall under the Policy domain and Governmental initiatives. Similarly, Szabo (2006) also

underlines the importance of research institutions at Enterprise level where the information centers, access to technology, consumer protection and intellectual property rights play vital role. However, the findings have revealed that KACST and KAUST provide these facilities. Whereas, the private and governmental universities are now commencing such nurturing activities.

As regards the SME networking both Isenberg (2011) and Szabo (2006) establish the need for networking. Isenberg lays importance on entrepreneurs', Diaspora and multinational networks. On the other hand Szabo lays importance of networking at enterprise level. The findings reveal that the chambers of commerce and SAGIA provide such opportunities at national level. The number of events may be limited though. Khadija Bint Khuwailed center at the JCCI provides opportunities for Saudi women. However, these initiatives may be enough in short term but will require more concerted effort to realize the goals of the government.

The research shows that SIDF, KAUST, Bab Rizk Jameel, Khadija Bin Khuwailed Centre, BADIR and Injaz provide some selected services of business incubation. However, none of the organizations provide complete and full services as envisaged by the academic, applied and practice literature and discussed in methodology above. These efforts along with other endeavors seem fragmented and there seems a clear need to help the potential entrepreneur.

9. CONCLUSIONS

The paper has met the aim of its study by providing a comprehensive look and understanding on the entrepreneurship ecosystem, its need, evolution and strategy implications. It has shown as the following conclusions reveal that an ecosystem exists of entrepreneurship development exists. The organisms for development are the stakeholders both at the strategic and institutional levels. The knowledge of existence of an eco energizes all stakeholders as we witness the change in the eco and new institutional stakeholder additions offering new services to stage 1 and 2 entrepreneurs. The evolution also provides evidence that there is a deliberate or otherwise strategy of the Saudi government to strengthen the ecosystem.

The findings were also discussed with five industry experts and senior academics to validate the findings and understand their perspective. The names and titles are not revealed as per advice of the interviewees. The discussion below is also then generalized as researcher was not allowed to divulge personal information of the experts.

The question related to understanding the status quo has been amply answered and it shows the existing status of both the strategic and institutional levels of the ecosystem. The work has also underlined that the Saudi Arabian government has taken huge steps diligently and effectively. A deliberate effort of the institutions development both at the strategic and institutional levels of the ecosystem seems to be in place. The ecosystem is evolving rapidly evidencing that the eco is responding to dynamic needs of the enterprise, startups and entrepreneurs of first, second and

or the third stage. All these answers to the questions are discussed in more detail below and further conclusions are drawn.

The government of Saudi Arabia and the private sector together have taken numerous steps in keeping with the national priority of generating employment for young Saudis in particular and create economic activity and private wealth. The findings and discussion reveal a potential to further develop of institutions and create planned interventions needed at strategic, institutional and enterprise levels. This will develop a movement to further the entrepreneurship growth with snowball effects and put on mass. It is estimated that this will assist in institutionalizing the policy, human capital development, support professions, culture, markets and, micro loans, angel investors networks, financing, venture capital and public capital markets which are essential for enterprise growth.

However, an issue has come to surface, i.e. some organizations at strategic level are providing services that they are perhaps not supposed to and fall under institutional. This is may be because of the lack of and potential in institutional capabilities strengthening. For example a very important stakeholder, Centennial fund, providing coaching and mentoring and trainings to their loaned customers. They might not have had to invest time, effort and money if there were enough private sector organizations existing and offering these services. It shows that ecosystem requires specialist institutions for each of the 10 services including incubators. The strategic level financial institutions work for the entrepreneurs, SMEs, and provide financing to any level / stage entrepreneurs. Their services range from business consulting and conducting the research and providing the feedbacks. Here also it is evident that some of these banks provide loan facilities at comparable terms and conditions. There are banks and other financial institutions that do not specify the loan limits and leave it to percentages of their own equity that can jeopardize the liquidity situation of the concerned bank when they need to finance very large-scale projects.

It can be concluded that such studies should be carried out on continual basis and ecosystems evolution mapping be carried out in other countries so that the deficiencies, efficiencies and proficiencies in the ecosystem could be identified and necessary action could be taken accordingly.

It is also inferred that there should be a virtual entrepreneurship ecosystem evolution observatory that maps the eco in real time. The stakeholders should be able to update their details by logging on to a virtual observatory. Whereas, the entrepreneurs at different stages, by looking at the maps and clicking can get access to the required organization(s). The observatory is further explained below.

In the study websites of more than one hundred and fifty organizations were identified and searched again to identify any changes from previous maps. Based on the new study a new website is being developed www.effatuniversity.edu.sa/entrepreneurship_ecosystem. This will house a virtual observatory and store the yearly updated maps. Any stage entrepreneur may log into the website and search for suitable organization(s) to get assistance from.

It has been seen that when the potential startups struck an idea and are in initial, early or later stages of the startup development, majority of times they do not know where to get what kind of assistance. Similarly, they have little idea on the sources of funding, intellectual property rights and legal framework of the country. At times they get trapped and sometimes due to difficulty in finding the right organization for assistance they simply give up the idea.

Therefore, in order to make informed effective decisions it is important to have a knowledge of the prevailing conditions in the marketplace of the essentials of the startups. These include, coaching, mentoring, venture capital, training and development, consulting, personal development, soft skills, incubator or accelerator facilities required, research and development, patent and copyrighting, legal and others. This will avoid replication and duplication of efforts. Similarly, knowledge of status quo helps identify opportunities and supports plan development to endeavor through right strategy.

The names of organizations on the maps are clickable and the upon the click a brief profile opens up showing the services and contact details thus helping the start-up and later stage entrepreneurs to reach to the concerned stakeholder more efficiently. It also provides a marketplace for the companies to compete on the basis of services provided.

Like any other research this investigation also had limitations as outlined below:

- It is a tough ask to conduct the research in the kingdom as the culture is developing for investigation and there is a huge scope for it.
- As the national language is Arabic, majority of websites are in Arabic and a number of other organizations do not have the internet presence, making it difficult to reach out to the information.
- It is difficult and time consuming to get the information not available on the websites from different sources within organizations.

SME authority is a great initiative introduced at the strategic level and would notably enhance the SME sector in the Kingdom and act as catalyst of entrepreneurship growth in Saudi Arabia. It is recommended the authority works to:

- Start support professions' training and development programs needed and help them implement these programs nationwide.
- Celebrate entrepreneurship to encourage and motivate the first stage entrepreneurs to turn their ideas into reality.
- Develop Business Format Franchising in the Kingdom.
- Develop Soft Skills incubators at educational institutions.
- Develop Consulting organizations in Financing and Feasibility studies.
- Develop and implement programs for jailed inmates.
- Develop research to propose recommendations for energy, business, engineering, medicine, business research, SME development cities and SME industrial zones to the Government.

- Develop Common Facilities Centers.
- Develop and implement awards for outstanding entrepreneurs in.
- Launch Business research at educational institutions.
- Launch and market academic and applied journals and periodicals.
- Organize and launch academic and applied conferences.
- Organize and implement networking conferences on Social business, Women related businesses, Medicine and engineering

This catalyst should also:

- Develop and encourage associations of different industrial sectors.
- Develop and initially supervise franchise association. Upon completion of memberships and enforcing the laws, let it become an independent institution.
- Develop Innovation enablers.
- Develop patents and copy righting institutions.
- Carry out regular SME Census.
- Develop and implement business friendly laws on partnerships specially between local and international, forex repatriation, employment in a company where shareholding is also held by foreigners.
- Classify the businesses according to SIC codes.

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