

### Research Article

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# Entrepreneurial Ecosystem: An Exploration of the Entrepreneurship Model for SMEs in Sultanate of Oman

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#### Abstract

SME has a significant impact on the growth and development of any nation economy. The entrepreneurship in Oman expected to be a leading factor in the economic due to the opportunities afforded by increasing economic diversification and corresponding rise in job opportunities and other benefits. However, entrepreneurship has faced many challenges and obstacles to its progress and growth in Oman, despite the fact that the government has supported this sector to stimulate the market. However, studies show that many challenges are still plague both startups and governments. This study therefore aims to develop an ecosystem for entrepreneurship in the Omani context as a new solution to overcome such challenges. Entrepreneurship ecosystem has a positive influence on business growth and on the creation of new businesses, with the result that this concept has received attention from both academics and policy makers. By using a qualitative research method, a total of 10 interviewees were selected to answer the major research questions and thus provide more explanation about the issues that SME faces and find the exact factors that can influence these types of enterprises. Based on the findings from qualitative research through discussions with entrepreneurs, we can conclude that there are five factors: human capital; government; support; finance and technology, all of which have a significant impact on Omani entrepreneurship success and start-ups. These results contribute to the current literature regarding entrepreneurship ecosystems. They also give greater attention to the policy makers in Oman who facilitate the implementation of this framework as well as motivating the different business owners or start-ups to develop their business strategies based on the requirements shown in the framework. In addition, a number of suggestions have been presented as focus points when developing a strategic plan to support the entrepreneurship sector.

Keywords: Entrepreneurship, entrepreneurship ecosystem, SMEs, challenges, Oman

#### 1. Introduction

In every economy entrepreneurship plays a significant role in forming opportunities, as well as finding a better outcome of new start-ups (Borissenko and Boschma, 2017; Nylund and Cohen, 2017). In addition, significant, entrepreneurship has to be able to provide a rich resource environment to enhance entrepreneurial talent development (Geitlinger, 2016), improve the level of firms' performance and their ability to enable startups to survive (De Vita et al., 2014; Fetters et al., 2010).

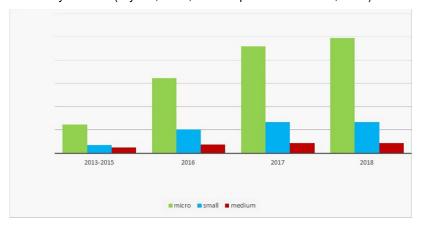
Reflecting the necessity of entrepreneurship, policy makers around the world nowadays try to advance transition to increase the quality of the entrepreneurship outcomes rather than to just

increasing the number of entrepreneurs (Acs et al., 2017b). To achieve this goal and to strengthen the context of entrepreneurship and innovation (Acs et al., 2017b; Stam, 2015) it is suggested that governments need to move to what is called an entrepreneurial ecosystem approach. However, many scholars have argued that the entrepreneurial ecosystem is a framework that can accommodate these transformations, focusing on entrepreneurial outcomes and first starting with the actors who play a role in entrepreneurship environment (Audretsch and Belitski, 2017; Belitski and Heron, 2017; Nylund and Cohen, 2017). Thus, the entrepreneurship ecosystem has emerged to provide a solution to market failures as well as to correct the deficiencies in ignoring the role of entrepreneurship in the economic system.

Entrepreneurship plays a significant role in national economies around the world, including the Sultanate of Oman, which has largely focused on SME in the current Five-Year Development Plan (2016-2020). Entrepreneurship in Oman is set as a key goal to support the economy in order to emphasize the development and the outcome of its SME. The Sultanate of Oman; moreover, aims to diversify from the current main sources of income and development, which are oil and gas, in order to cope with the increasing challenges—nowadays related to the growth of population and youth unemployment. Indeed, the Sultanate of Oman started to give the significant role of SME when a formal institution was established in 2013 (The Public Authority for SMEs Development (Ryada) by the Royal Decree number 36/2013) and this could be regarded as a critical step forward in order to enhance SME Sector. "The National Economy of a country is in fact based on small and medium industries ... these are the fundamentals, the foundations of all national economies" (Ryada, 2017). In the Sultanate of Oman, this step was taken to gradually help SME Sector to become major contributor to the Oman national economy (Al Barwani et al., 2014).

#### 2. An Overview of the Oman SME Sector till March 2018

There were 33,652 Omani SMEs operations registered in Riyada at end of March 2018. This accounts for 90% of the total firms in the private sector. Most of these enterprises (10,945) are located in the capital of Oman (Muscat Governorate), followed by Al-Batinah North Governorate (5,153), then Ad-Dakhiliyah Governorate (4,546), al-Batinah South (2,495), Dhofar Governorate (2,938), Ad Dhahirah (2.145), Al Buraimi Governorate (632), Ash Sharqiyah North (2,349), Ash Sharqiyah south (2,956), Musandam (126), and in Al Wusta which accounts for (376). In addition, most of these SMEs (24,794) are micro-enterprises which account for 74% of the total enterprises. 6,679 small enterprises account for 20% of the total enterprises, and then 2,179 medium size enterprises account for 6%. The national GDP has been benefited from SMEs by 20% annually and they represent approximately 40% of the total workforce. Moreover, most SMEs were owned by persons under 30 years old (Riyada, 2018; "SME report march 2018", 2018).



**Figure 1.** Illustrates the growing growth in all SME categories (2013-2018). **Source:** "SME report march 2018", 2018

# 3. Statement of the Problem

The Riyada annual report for 2017 showed that the percentage of contribution by SME to the Omani national GDP was lower than expected (less 20%) and significantly lower compared with other countries which have the same economy environment, like GCC countries or other Arab countries. Fig. 2 below shows an overview of countries around the world and the contribution of the SMEs to the GDP.

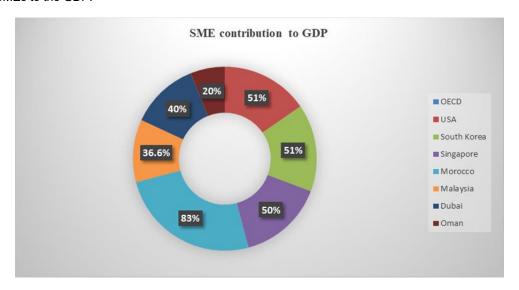


Figure 2. Overview of countries around the world and their contribution to GDP Sources: SMEs websites

Moreover, although the latest statistics from Ryada showed that the number of SME had been increased, the total number dropped during the period from April 2016 to April 2017. Therefore, it is clear that these firms faced some challenges in growth and survival. According to formal management institutions, which provide essential support to entrepreneurs (Ryada & Al-Rafd fund), the SMEs have a wide support from government and other institutions but they still suffer from difficulties that limit their growth and sustainability. This conclusion was supported by many studies (Al Barwani et al., 2014; Al Bulushi and Bagum, 2017; AlMaimani and Johari 2015; Ashrafi et al. 2014; Atef and Al-Balushi 2015; Bilal and Al Mqbali 2015; Bureau 2015; Jansen 2017; Magd and McCoy 2014; Rajasekar 2014; Sagib et al. 2017; Talal, 2017) which were conducted by Oman SMEs during the period 2014-2017. They reported that SMEs in Oman are face many challenges that limit their success. However, according to these studies we can summarize the challenges and barriers that are faced by SMEs as follows:

- Lack of business necessary knowledge.
- Lack of financial access and guarantees provided to funding institutions. (ii)
- Hidden trade and government tax as a result of lack of regulation and administrative burdens.
- (iv) Limited capacity to grow (not wanting to grow).
- Lack of will and method from employees with regard to the incorporation of modern technology in business.
- (vi) Lack of support services as a result of lack of electronic connectivity among institutions.
- (vii) Lack of networks between entrepreneurs with the same business.
- (viii) Lack of knowledge to enhance modern policy to address the barriers.
- So far, by referring to the above mentioned challenges faced by SMEs, we can conclude that

the main problem for SMEs or entrepreneurship is lack of access to the critical factors that can enhance firms' performance. While this issue remains in place, there is also a dearth of studies necessary to develop an entrepreneurship Ecosystem framework as an appropriate option for the success of entrepreneurship in the Sultanate of Oman.

# 4. Research Objective

To address the problem that current studies have explored, therefore, this study aims to analyze the current SME ecosystem situation in Oman in order to find a suitable framework for an Entrepreneurship Ecosystem, including the critical factors that SMEs need to grow and to be sustainable. The following Study Objectives (RO) are intended to contribute to the problem:

(RO1) – Explore the business environmental issues in the Oman SME Sector.

(RO2) - Develop an ecosystem framework for Oman SMEs.

This study is therefore organized as follows: Section 1 contains an introduction, an overview of the Oman SME sector till 2018, problem statement, and research objective. Section 2 is the literature review related to entrepreneurial ecosystems. Section 3 explains the study methodology used to collect data. Section 4 contains the findings and discussion, and Section 5 presents the conclusions and recommendations for adopting the ecosystem framework.

### 5. Literature Review

In recent years, much more information has appeared on entrepreneurship, reflecting the interest of academic researchers in the subject. That is because entrepreneurship has many positive factors to offer business, such as a significant role to form opportunities and space, finding better outcomes for of start-ups, and offering a richer resource environment to strengthen talent development (Autio et al., 2014; Cohen and Muñoz, 2015; Fetters et al., 2010; Ucbasaran et al., 2001; Zahra, 2007).

# 5.1 Entrepreneurship

Different scholars have presented many definitions to define what entrepreneurship means and what it is about. For example: The Global Entrepreneurship Monitor defines entrepreneurship in its annual report (2014) as; any attempt will lead to create new business (Hart *et al.*, 2015), a phenomenon related to entrepreneurial activity (Pyper, 2016) whether it is a new business enterprise or an expansion of a current business, and regardless of whether it was created individually or by group of people. Entrepreneurship activity is the human action about any new idea created by entrepreneurs which enables it to be introduced to the marketplace (Kyrö, 2015), or an act by which people can exploit a market opportunity to introduce their product or service and add value to the economy (Rahim and Mohtar, 2015).

With regard to the leading role of entrepreneurship, most recent studies have reported that entrepreneurial activities have direct and positive effects at different stages of their development, where they can offer primary or secondary sources to people in order to increase their income (Al Barwani et al., 2014), enhance innovation (Clarke et al., 2016), present a new product to the market or develop a new service (Ahmad, 2010), improve workers' skills (Hassan and Olaniran, 2011), offer additional income streams to government from tax and export and import (Najib & Bambang, 2016), and scale down the unemployment rate (Magd and McCoy, 2014).

# 5.2 Building an Ecosystem for Entrepreneurship

The term "ecosystem" was coined by James Moore in 1993 in his research in the Harvard Business Review. He argues that companies are part of a business ecosystem that crosses industrial boundaries. Many theories and models have been developed since Moore's article in 1993 (the latest model being by Spiegel (2017)) in order to gain more insight into how entrepreneurial ecosystem is designed. Moore illustrates how an entrepreneurial ecosystem would "cooperatively and competitively to support new products, satisfy customer needs, and eventually incorporate the

next round of innovation" (Moore, 1993). Furthermore, research by Stam & Spiegel (2016) showed how a rich ecosystem "enables entrepreneurship and subsequent value creation at the regional level" (Stam, 2016). Therefore, this idea has become more widespread and popular in the literature, which has encouraged governments to focus on building entrepreneurial ecosystems (Mason and Brown, 2014). However, the latest definition of an entrepreneurial ecosystem, presented by Spiegel in (2017), is as follows: An entrepreneurial ecosystem is interdependent group of local culture (actors), social networks, universities, sources of investment, economic policies (factors) coordinated in such a way as to create a good environment that enable productive entrepreneurship in a particular region (Spiegel, 2017).

In recent years, many models have been created to gain better understanding of how to develop ecosystems for entrepreneurship but this current study has limited discussion to two of the most famous models; the Isenberg (2011), and Stam (2015) frameworks.

The Isenberg framework (2011), suggests that the entrepreneurship ecosystem must include six key dimensions with twelve elements incorporated together. These are: policy (leadership, government); finance (financial capital); culture (success stories, societal norms); supports (infrastructure, support professions); human capital (labour, educational institutions); and markets (early customers, networks) (Isenberg, 2011). However, these domains largely overlap with the eight World Economic Forum pillars (WEF 2013) of successful entrepreneurship ecosystems. These are; human capital, cultural support, education & training, markets, major universities, government, funding, and regulatory framework (Sala et al., 2013). As in other examples of popular literature, the Isenberg approach puts entrepreneurship at the center of the framework, recognizing the importance that entrepreneurship plays as a key element and recognizing the main factors that are essential for the success of the entrepreneurial ecosystem. These are: actors, customers, resources, and institutions (Jansen, 2017). Meanwhile, the WEF also presented the main elements within each pillar: the actors involved; human capital; access to customers; finance & services; and institutions (Spigel, 2017; Stam, 2016).

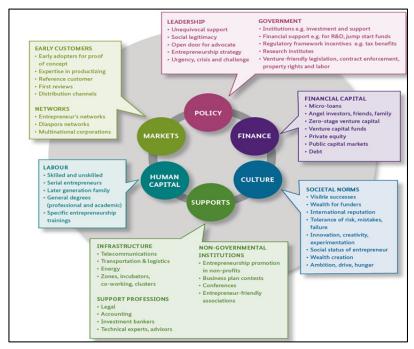


Figure 3. Isenberg's model of an entrepreneurship ecosystem Source: Regh, Für, & GmbH, 2018

Another particularly influential model of an ecosystem was designed by Erik Stam in 2015, and 2016. He argues that the key factors of an entrepreneurship ecosystem are framework conditions and system conditions respectively (Stam, 2015). A framework condition consists of the presence of four key elements. These are physical infrastructure, formal institutions, demand for new products (goods & services), and an enabling culture. These elements are considered as the basic requirement of value creation in the Stam entrepreneurial ecosystem model. The second part of this framework "at the heart" is the systemic conditions which lead to entrepreneurial activities and these consist of the presence of six elements:- leadership, knowledge, entrepreneurship networks, finance, support services, and talent (Jansen, 2017). Therefore, these elements are essential to enhance the output of entrepreneurial activities. For example, leadership is essential to provide direction and future vision that can build and maintain a healthy system, while entrepreneur networks are important for spreading knowledge, capital, and labour. Access to finance is also important for investment in start-ups, as well as to maintain groups of skilled workers. Knowledge, moreover, is an important element that can be a main source of opportunity for both public and private institutions. Finally, according to Stam; providing support services by different intermediaries in the system is important because it can reduce entry barriers for new start-ups projects and lower the time to market innovations (Jansen, 2017; Spiegel, 2017; Stam, 2016).

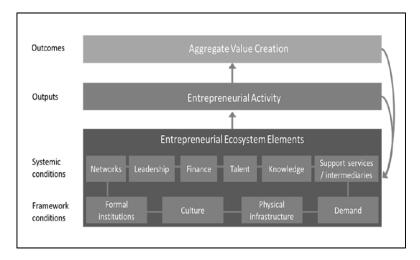


Figure 4. Key elements, outputs and outcomes of the entrepreneurial ecosystem Source: Stam. 2015

To summarize the factors that are required for entrepreneurship to be successful and sustainable, many studies have been conducted to examine different factors in different geographical areas around the world. Table: 1 below shows some of the factors that have been found, by different researchers, to enhance entrepreneurial activities:

**Table 1.** Summarize of entrepreneurship ecosystem factors from different models

No.	Main Factors	Literature	Frequency
1	Policy	(Isenberg, 2011), (Spiegel, 2017), (Audretsch and Belitski,	12
	(leadership,	2017),(Stam, 2015),(Mason and Brown, 2014), (Nir, 2014), (Sussan	
	government)	and Acs, 2017), (Bosma et al., 2017),(Acs et al., 2017a), (Suresh &	
	ŕ	Ramraj, 2012), (Mark et al., 2014), (Pyper, 2016)	
2	Finance (financial	(Isenberg, 2011), (Spiegel, 2017), (Stam, 2015), (Mason and Brown,	11
	capital)	2014),(Nir, 2014), (Bosma et al., 2017),(Acs et al., 2017a), (Suresh &	
		Ramraj, 2012), (Mark et al., 2014), (Pyper, 2016), (Jansen et al, 2017)	

No.	Main Factors	Literature	Frequency
3	Human capital (Educational institutions, labor)	(Isenberg, 2011), (Spigel, 2017), (Stam, 2015), (Mason and Brown, 2014), (Nir, 2014), (Bosma <i>et al.</i> , 2017),(Acs <i>et al.</i> , 2017a),(Cannavacciuolo et al., 2017), (Suresh & Ramraj, 2012), (Mark et al., 2014), (Pyper, 2016), (Jansen et al, 2017)	
4	professions,	(Isenberg, 2011), (Spiegel, 2017), (Audretsch and Belitski, 2017) (Stam, 2015), (Mason and Brown, 2014), (Sussan and Acs, 2017), (Mark et al., 2014), (Pyper, 2016), (Jansen et al, 2017)	9
5	Culture (Societal norms, success stories)	(Isenberg, 2011), (Spiegel, 2017), (Audretsch and Belitski, 2017), (Borissenko and Boschma, 2017) (Stam, 2015), (Mason and Brown, 2014), (Nir, 2014), (Bosma et al., 2017), (Suresh & Ramraj, 2012), (Mark et al., 2014), (Pyper, 2016), (Jansen et al, 2017)	12
6		(Isenberg, 2011), (Spiegel, 2017), (Audretsch and Belitski, 2017), (Borissenko and Boschma, 2017), (Stam, 2015), (Mason and Brown, 2014), (Nir, 2014), (Cannavacciuolo et al., 2017), (Suresh & Ramraj, 2012), (Mark et al., 2014)	10
7	Technology &knowledge	(Audretsch and Belitski, 2017), (Belitski and Heron, 2017), (Borissenko and Boschma, 2017) (Mason and Brown, 2014), (Nir, 2014), (Sussan and Acs, 2017), (Acs et al., 2017b), (Bosma et al., 2017), (Acs et al., 2017a), (Cannavacciuolo et al., 2017), (Suresh & Ramraj, 2012), (Mark et al., 2014), (Pyper, 2016)	

To conclude this part, we can say that the practices in literature review offer sufficient evidence that entrepreneurs require external environmental factors, "either macro or micro factors", for their projects to be successful and sustainable.

# 6. Methodology

As we mentioned above, this study aims to develop a suitable framework for entrepreneurship ecosystems, with special attention paid to the critical factors that Oman SMEs need to grow and to be sustainable. To achieve this aim, the study applied a qualitative approach based on the inductive logic method. This method was selected based on the recommendations of many scholars for its suitability for such research and its "effectiveness in the context of exploratory research" (Creswell, 2009; Tobi, 2016). It helps the researcher in collecting data by using interviews or focus group discussions and by using open-ended questions (Pekrun *et al.*, 2002). As a result, the data collected used an interview guide that followed the semi-structured interview format (Humphrey and Lee, 2004; Pauceanu, 2016). This technique sets out the main topics and questions to find the desired data, but at the same time it allows discussion to flow naturally (Hove and Anda, 2005). The interviews also help to identify challenges, opportunities, and trends in start-ups and the SME sector, as well as to gain more in depth insights into the experiences of the main players in SME ecosystem. The interviews were conducted through face to face meetings with interviewees. The interviews contained two main questions:-

- (i) What are the most challenging barriers that face the people when starting their business, which make it difficult for their firms to grow and to be sustainable?
- (ii) What are the critical factors that can motivate people to start up and succeed in the journey of entrepreneurship?

The results displayed in the following section include data collected through the interviews, supported by the literature review, to draw conclusions and make recommendations. Following extensive research and recommendations from a number of experts in this field, we selected ten owners of organizations (entrepreneurs) in Oman for the purpose of this study.

# 7. Findings & Discussions

According to aim of this study mentioned above, two main questions were submitted to ten entrepreneurs in interviews in different places in Oman to gain enough answers about the

entrepreneurship situation in Oman (the challenges; the critical factors).

## 7.1 Recent Challenges

Discussions with the interviewees revealed that entrepreneurs in Oman is still encounter challenges and this finding is in line with other studies reported by some of the previous researchers mentioned earlier in this paper. This is despite the fact that the policy-makers in the Sultanate of Oman have made great efforts to overcome the difficulties faced by entrepreneurs as well as to facilitate the environment for start-ups.

For example, one informant, who opened her business in 2013 in Muscat as a Designer & Artist, felt that knowledge was the most challenging factor that she experienced when she started her business. She lacked knowledge on how to start her business. More specifically, she lacked knowledge on how to manage her business, particularly when dealing with accounting issues and accessing her early customers. By contrast, the owner of an antique and gifts shop felt that the biggest challenge she faced was financial support. The amount of startup capital that she had was not enough to start her business. Anther problem was that the administrative regulations did not have flexibility required to meet the investment needs, while the long procedures involved in issuing licenses and ending transactions in government agencies was another issue. The SME manager in the Oman trading and industry chamber also believed that entrepreneurs now faced several more recent challenges. In his experience, community culture urged direct action in the private sector. He felt that entrepreneurs lacked the knowledge and skills that could enable them to enter the market and understand the current market solutions. This study has therefore highlighted the most critical barriers in the Entrepreneurship Ecosystem, according to interviewees, and these barriers have now been grouped based on the three key challenges, given in order of priority.

- (i) Human Capital Barriers "Entrepreneur itself" include:
  - a. Lack of necessary knowledge, (planning, accounting, administrative, financial, competition culture, and lack of familiarity with services provided)
  - b. Lack of confidence.
  - c. Lack of work skills,
  - d. Unwillingness to accept the clusters concept.
- (ii) Institutional barriers include:
  - a. Lack of support services (no clear procedure map, long processes, unwillingness to implement smart government or one stop points, and no update with new activities),
  - b. Social insurance policy,
  - c. Regulatory and administrative boundaries,
  - d. Weaknesses in legislation
- (iii) Financial and Market barriers include:
  - a. Guarantees provided to funding institutions,
  - b. Networks,
  - c. Funding policy and insurance conditions,
  - d. Finding customers or suppliers,
  - e. Monopolies (hidden trade)

Based on the challenges mentioned above, that were expressed by the entrepreneurs during discussion, one key finding that emerged is that Oman entrepreneurship requires a model that can capture all the factors that enhance entrepreneurial activities success or failure. Of course we accept the fact that the components by themselves are factors that have a direct, positive effect on entrepreneurship, but arranging these factors in a single framework, to study their influence, will facilitate systematic understanding of the requirements of Omani entrepreneurship.

# 8. Mapping the SME Ecosystem

### 8.1 Human capital

According to the business owners, Human capital is the key of to startups and growth. The majority

of interviewees faced challenges on how to start their business and make sustainable progress. They complained that they did not have the basic knowledge and skills to enable them to learn the fundamental requirements for business management. Entrepreneurs have to be well educated or trained if they seek to succeed and to be sustainable. However, the respondents outlined some of the basic skills that any potential entrepreneur should have, including planning; accounting; administrative, financial, and competitive culture, as well as being familiar with services provided by formal and informal institutions. It should be remembered that the majority of SME owners and 70% of their work force are still under thirty years old. It is imperative that these issues be solved, and they have been raised by other scholars, who suggest that there should be a link between the educational system and labour market requirements ((Audretsch and Belitski, 2017; Isenberg, 2011; Jansen, 2017; Stam, 2015; WEF, 2013).

#### 8.2 Government

Another key factor examined during interviews is that of regulations and administrative processes. The majority of interviewees claimed that regulations applied by formal institutions did little to facilitate their businesses and that regulations were not updated, thus hindering attempts for new activities to enter the market. The interviewees (entrepreneurs & formal managers) would prefer that all formal agencies of SME were integrated and that new regulations were formulated in accordance with the market's need to encourage investment in the Sultanate of Oman. This issue was supported by most of the models in the literature review.

#### 8.3 Finance

The findings also suggested that access to finance is an essential requirement of start-ups growth and that government should give the funding institutions assurances to facilitate the finance for entrepreneurs. This is also encouraged by many previous studies(Isenberg, 2011; Mason and Brown, 2014; Nir, 2014; Spiegel, 2017; Stam, 2015).

### 8.4 Support

80% of interviewees said that support factors were very important to Oman SME success or failure. Support is important for start-ups and growth, especially if it comes from the entrepreneur's family or from the government or NGOs. This finding was again supported by many researchers such as Suresh and Ramraj, (2012) in their India ecosystem framework and Isenberg, (2011) for his Babson project framework.

# 8.5 Technology

Finally, the majority of interviewees regarded technology, include access databases and using the internet as essential to daily work. Technology is an important factor in today's world. It improves the working environment, shortens procedures and supports global communication between the supplier and entrepreneur on one hand and between the entrepreneur and customers on the other. This finding was supported by more recent researchers who find that technology's importance means that it cannot be excluded from any framework. (Berger and Kuckertz, 2016; Jahanmir, 2016).

Based on the findings from interviews and to summarize the discussion, a framework for an Omani entrepreneurial ecosystem diagram is designed below:

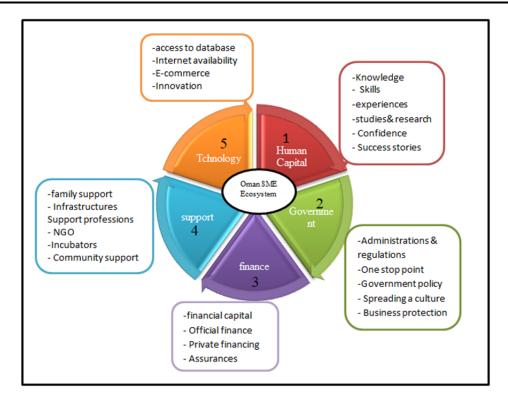


Figure 5. SME supporting Ecosystem Model for the Sultanate of Oman

The Ecosystem model for Oman SMEs has been developed by determining the factors and actors who can contribute to overcome the challenges that the entrepreneurs are facing. The model was designed to form a framework that consists of five domains as the basic requirements for any entrepreneurial activities by SMEs in the Sultanate of Oman. Several elements have been found as the main categories related to the domains that contributes to the structure of the model. Finally, the factors in the structure were designed according to their respective importance.

### 9. Conclusions and Recommendations

In conclusion, the current study aims to achieve two goals: firstly to identify the recent challenges that entrepreneurship in Oman is facing, and secondly to develop an ecosystem for Oman SMEs in line with a modern concept of business success. Based on the findings from interviews with number of SME business owners and some official managers, it is confirmed that entrepreneurship in the Sultanate of Oman is still in its early stages and that it is adversely influenced by several challenges that have negatively affected business growth. These issues are the result of different factors, but the main reason appears to be the absence of an integrated environmental system that brings together the various elements of entrepreneurship in the Sultanate of Oman. In order to complement entrepreneurial efforts, these entities must be integrated to provide a sustainable and active investment environment. Therefore, this study has developed a model for an entrepreneurial ecosystem that will overcome the challenges and light the way that entrepreneurship in the Sultanate of Oman should follow. The model consists of five domains (Human capital; Government; Finacial capital; Support; and Technology) as the basic requirements for any entrepreneurial activities in the Sultanate of Oman. It also includes several elements as the main categories related

to the domains that contribute to the structure of the model, and the factors in the model have been reviewed according to their priority. Based on the findings of the study, we can conclude that the five factors which were derived for Oman SME ecosystem have a significant impact on the success of entrepreneurship and start-ups.

Our recommendations are that, to assure entrepreneurship in the Sultanate of Oman is on the right track to achieve the government vision of creating a sector that is able to contribute to the national GDP and to the economic diversification of the country, the following must be taken into account:

- (i) Spread the culture of entrepreneurship in society, especially among the next generation, in different ways such as educational institutions; media; rewards; and success stories.
- (ii) Provide knowledge & skill supports for initiatives.
- (iii) Provide finance and technical support to start-ups to adopt the initiatives.
- (iv) Follow-up the start-ups and provide the financial support to continue their activity and growth or give the necessary guarantees with assistance to obtain the required finance.

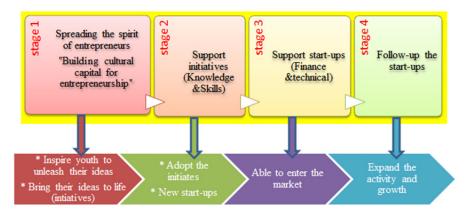


Figure 6: Proposed steps for a successful entrepreneurial ecosystem

# 10. Limitations and Delimitations

There are some limitations in this study, which will encourage future researchers to continue research in this area. First; the ecosystem concept is still new, so the discussion with entrepreneurs was limited by the number of interviewees (10). Second, limited statistical data provided from formal institutions prevents a complete overview of the current Omani ecosystem. We recommend that future researchers intensify their efforts on this subject and expand their research methodology rather than concentrating on one type, such as that used this current study (qualitative method). This may uncover more entrepreneurial factors that can improve Oman's entrepreneurship performance.

### 11. Acknowledgements

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### References

- Acs, Z. J., Estrin, S., Mickiewicz, T., and Szerb, L. (2017a). Institutions, entrepreneurship and growth: the role of national entrepreneurial ecosystems.
- Acs, Z. J., Stam, E., Audretsch, D. B., and O'Connor, A. (2017b). The lineages of the entrepreneurial ecosystem approach. *Small Business Economics*, 49(1), 1-10.
- Ahmad, H. M. (2010). Personality Traits among Entrepreneurial and Professional. *International Journal of Business and Management*, 5(9), 203.
- Al Barwani, K. M., Al Jahwari, M. R., Al Saidi, A. S., and Al Mahrouqi, F. S. (2014). Towards a Growing, Competitive and Dynamic Small and Medium-Sized Enterprises Sector in Oman: Strategy and Policies: Central Bank of Oman London.
- Al Bulushi, B. H. S., and Bagum, S. (2017). Growth strategies of sme in Oman-Issues and challenges. International Journal of Small Business and Entrepreneurship Research, Vol.5, No.2(March 2017), pp.21-61
- AlMaimani, J., and Johari, F. B. (2015). Enhancing Active Participation of SMEs and Islamic Banks towards Economic Diversification in Oman. *Procedia Economics and Finance*, *31*, 677-688.
- Ashrafi, R., Sharma, S. K., Al-Badi, A. H., and Al-Gharbi, K. (2014). Achieving business success through information and communication technologies adoption by small and medium enterprises in Oman. *Middle-East Journal of Scientific Research*, 22(1), 138-146.
- Atef, T. M., and Al-Balushi, M. (2015). Entrepreneurship as a means for restructuring employment patterns. *Tourism and Hospitality Research*, 15(2), 73-90.
- Audretsch, D. B., and Belitski, M. (2017). Entrepreneurial ecosystems in cities: establishing the framework conditions. *The Journal of Technology Transfer*, 42(5), 1030-1051.
- Autio, E., Kenney, M., Mustar, P., Siegel, D., and Wright, M. (2014). Entrepreneurial innovation: The importance of context. *Research Policy*, 43(7), 1097-1108.
- Belitski, M., and Heron, K. (2017). Expanding entrepreneurship education ecosystems. *Journal of Management Development*, 36(2), 163-177.
- Berger, E. S., and Kuckertz, A. (2016). Female entrepreneurship in startup ecosystems worldwide. *Journal of Business Research*, 69(11), 5163-5168.
- Bilal, Z. O., and Al Mqbali, N. S. (2015). Challenges and constrains faced by small and medium enterprises (SMEs) in Al Batinah governorate of Oman. World Journal of Entrepreneurship, Management and Sustainable Development, 11(2), 120-130.
- Borissenko, J., and Boschma, R. (2017). A critical review of entrepreneurial ecosystems research: towards a future research agenda: Lund University, CIRCLE-Center for Innovation, Research and Competences in the Learning Economyo. Document Number)
- Bosma, N., Sanders, M., and Stam, E. (2017). Time series and panel data analysis of GEI and growth performance indicators.
- Bureau. (2015). SME sector's growth in Oman. Retrieved November 21, 2015, 2017
- Cannavacciuolo, L., Iandoli, L., Ponsiglione, C., and Zollo, G. (2017). Learning by failure vs learning by habits Entrepreneurial learning micro-strategies as determinants of the emergence of co-located entrepreneurial networks. *International Journal of Entrepreneurial Behaviour & Research*, 23(3), 524-546.
- Clarke, R., Chandra, R., and Machado, M. (2016). SMEs and social capital: exploring the Brazilian context. European Business Review, 28(1), 2-20.
- Cohen, B., and Muñoz, P. (2015). Toward a theory of purpose-driven urban entrepreneurship. *Organization & Environment*, 28(3), 264-285.
- Creswell, J. w. (2009). Research design: Qualitative, quantitative, and mixed methods approaches: Sage publications.
- De Vita, L., Mari, M., and Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal*, 32(3), 451-460.
- Fetters, M. L., Greene, P. G., Rice, M. P., and Butler, J. S. (2010). The development of university-based entrepreneurship ecosystems: Global practices. In.
- Geitlinger, S. P. (2016). Entrepreneurship in South Africa: a comparative study between the Global Entrepreneurship Monitor, the Global Entrepreneurship Index and opinions of industry experts in the entrepreneurship field (Publication., from http://hdl.handle.net/2263/52391:
- Hart, M., Levie, J., Bonner, K., and Drews, C.-C. (2015). Global Entrepreneurship Monitor United Kingdom 2014 Monitoring Report.
- Hassan, M. A., and Olaniran, S. O. (2011). Developing small business entrepreneurs through assistance institutions: the role of Industrial Development Centre, Osogbo, Nigeria. *International Journal of Business and Management*, 6(2), 213.

- Hove, S. E., and Anda, B. (2005). *Experiences from conducting semi-structured interviews in empirical software engineering research*. Paper presented at the Software metrics, 2005. 11th ieee international symposium, 10 pp.-23.
- Humphrey, C., and Lee, B. H. (2004). The real life guide to accounting research: a behind-the-scenes view of using qualitative research methods: Elsevier.
- Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. *Presentation at the Institute of International and European Affairs*.
- Jahanmir, S. F. (2016). Paradoxes or trade-offs of entrepreneurship: exploratory insights from the Cambridge eco-system. *Journal of Business Research*, 69(11), 5101-5105.
- Jansen, H. H., Denise van Blitterswijk, and Jurgen Nieuwenhuijsen. (2017). SME Ecosystem in the Sultanate of Oman, Sensing and Seizing Opportunities in the Tourism Industry. Oman. (E. C. o. Entrepreneurship o. Document Number)
- Kyrö, P. (2015). The conceptual contribution of education to research on entrepreneurship education. Entrepreneurship & Regional Development, 27(9-10), 599-618.
- Magd, H. A., and McCoy, M. P. (2014). Entrepreneurship in Oman: Paving the way for a Sustainable Future. *Procedia Economics and Finance, 15*, 1632-1640.
- Mason, C., and Brown, R. (2014). Entrepreneurial ecosystems and growth oriented entrepreneurship. *Final Report to OECD. Paris*, 30(1), 77-102.
- Moore, J. F. (1993). Predators and prey: a new ecology of competition. Harvard business review, 71(3), 75-86.
- Najib & Bambang. (2016). The Relationship between Strategic Planning and Malaysian SMEs
- Business Performance: The Effect of Employee Participation, Implementation Incentive and Strategy Evaluation and Control. The International Journal Of Business & Management (ISSN 2321–8916), Vol 4(Issue 3), 16.
- Nir, K. (2014). Developing successful entrepreneurial ecosystems: Lessons from a comparison of an Asian tiger and a Baltic tiger. *Baltic Journal of Management*, 9(3), 330-356.
- Nylund, P. A., and Cohen, B. (2017). Collision density: driving growth in urban entrepreneurial ecosystems. International Entrepreneurship and Management Journal, 13(3), 757-776.
- Pauceanu, A. (2016). Innovation and entrepreneurship in Sultanate of 0man –an empirical study. Entrepreneurship and Sustainability Issues, 4(1), 83-99.
- Pekrun, R., Goetz, T., Titz, W., and Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational psychologist*, *37*(2), 91-
- Pyper, R. C. (2016). An Entrepreneural Development Framework for SMEs in South Africa. Nelson Mandela Metropolitan University.
- Rahim, H. L., and Mohtar, S. (2015). Social entrepreneurship: A different perspective. *International Academic Research Journal of Business and Technology*, 1(1), 9-15.
- Rajasekar, J. (2014). Factors affecting effective strategy implementation in a service industry: A study of electricity distribution companies in the Sultanate of Oman. *International Journal of Business and Social Science*, *5*(9).
- Riyada. (2018). annual report 2017, Oman- Muscat: public Authority for SME development (https://riyada.om/en-us/Pages/Home.aspx o. Document Number).
- Ryada. (2017). His Majesty's vision. Retrieved 15/12/2017
- Sala, X., Bilbao-Osorio, B., Blanke, J., Hanouz, M. D., Geiger, T., and Ko, C. (2013). The Global Competitiveness Index 2013–2014: sustaining growth, building resilience. *The Global Competitiveness Report, 2014*, 3-52.
- Saqib, M., Baluch, N. H., and Udin, Z. M. (2017). Moderating Role of Technology Orientation on the Relationship between Knowledge Management and SMEs' Performance in Oman: A Conceptual Study. *International Journal of Economic Perspectives*, 11(1), 433-441.
- SME report march 2018 (2018, 16/5/2018). alwatan,
- Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, 41(1), 49-72.
- Stam, E. (2015). Entrepreneurial ecosystems and regional policy: a sympathetic critique. *European Planning Studies*, *23*(9), 1759-1769.
- stam, E., Spiegel, B, . (2016). Entrepreneuerial Ecosystems, . *Utrecht School of Economic, Tjalling C. Koopmans Research Institute.Discussion paper Series 13-16, Utrecht, the Netherlands.* .
- Suresh, J., and Ramraj, R. (2012). Entrepreneurial ecosystem: case study on the influence of environmental factors on entrepreneurial success.
- Sussan, F., and Acs, Z. J. (2017). The digital entrepreneurial ecosystem. *Small Business Economics, 49*(1), 55-73.
- Talal, a. R. (2017). Oman 9th Five-Year Development Plan and the Strategic Economic Sectors (2016-2020) (Publication.: https://www.deutschoman.de

- Tobi, S. s. U. M. (2016). *Qualitative Research, Intreview Analysis and Nvivo 11 Exploration*. Malaysia: ARAS. Ucbasaran, D., Westhead, P., and Wright, M. (2001). The focus of entrepreneurial research: contextual and process issues. *Entrepreneurship theory and practice*, *25*(4), 57-80.
- WEF. (2013). The travel & tourism competitiveness report 2013. Paper presented at the The World Economic Forum.
- Zahra, S. A. (2007). Contextualizing theory building in entrepreneurship research. *Journal of Business venturing*, 22(3), 443-452.