

**ENTREPRENEURIAL ECOSYSTEM:  
ISLAMIC LEADERSHIP MODEL –  
AN EXPLORATION OF THE  
ENTREPRENEURIAL ECOSYSTEM  
IN SULTANATE OF OMAN**

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Doctor of Philosophy**

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Date:

31 March 2021

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## Definition of terms

**ACM** – Adaptive Co-Management Model: conceptual perspective illustrating the integrating nature of factors within an ecosystem, aimed at ensuring continuity within the ecosystem (Fabricius & Currie, 2015).

**AMIDEAST** – America-Mideast Educational and Training Services Inc.: a US based organization formed to support skills development in the middle east and North Africa (AMIDEAST, 2018).

**EE** – Entrepreneurial Ecosystem: a socio-economic environment which affects the levels of entrepreneurship within a geographic location (Shuresh & Ramraj, 2015).

**GEI** – Global Entrepreneurship Index: a researched ranking system that determines the levels of entrepreneurship within a region by evaluating people’s attitudes towards entrepreneurship and potential in future (GEDI, 2018).

**GEM** – Global Entrepreneurship Monitor: Globally recognized institutions that evaluate levels of entrepreneurship across the globe on behalf of policy makers and other institutions.

**MENA** – the Middle East and North Africa: abbreviation denoting a regional trade bloc consisting of the 22 countries which make up the middle east and north Africa.

**OECD** – Organization for Economic Co-operation and Development consisting of 36 countries that use the platform to foster economic growth within their member states by developing trading and development agreements.

**Tanfeedh Program** – Omani’s diversification initiative aimed at integrating economic activities to shift the economy from oil dependency.

## Abstract

Oman's economic growth and development have recently shifted from the declining oil-dependent economy to other diversified sources of income generation, such as enhancing the performance of entrepreneurship as an economic growth driver. One of the ways through which such economic goals can be achieved is through the efficient management of entrepreneurial ecosystems. However, the review of existing literature features limited details in terms of how entrepreneurial ecosystems work in reality, as well as in terms of policy-related challenges in the management of entrepreneurial ecosystems. By conducting interviews on 36 participants consisting of 18 policy makers and 18 entrepreneurs, the present research established that even though there are some positive factors that support the growth of the entrepreneurial ecosystem (such as the existence of the support systems, networks, and connectivity), there are a lot of challenges that are hindering efficiency with regards to the entrepreneurial ecosystem in Oman. The most noted challenges to the effective management of entrepreneurial ecosystems are policy vulnerability and the government's use of a top-to-bottom approach in policy and decision-making that do not involve or engage entrepreneurs, creating, in return, a disconnect and lack of balance in the ecosystem. Low stakeholder engagement and poor implementation of set policies also hinder entrepreneurship in the country. Thus, this study recommends an Islamic leadership management (ILM) approach to the management of entrepreneurial ecosystems. In this regard, effective management can be attained when skills are developed through inclusion and information sharing, incorporating religious principles such as fairness in policy making towards building institutional links, respecting cultural aspects such as diversity for an adaptive ecosystem, prioritizing strong relationships leading to effective networks, and viewing humans as custodians of earthly resources leading to equitable allocation of resources in the ecosystem. Additionally, an adaptive co-management approach can help reinforce the Islamic model as it emphasizes on learning-by-doing, relationships and the capacity of the communities and resource users.

## Chapter 1: Introduction

### 1.1 Introduction

Entrepreneurial ecosystems can be defined as complex socio-economic structures embedded in multiple interactions between organisational and individual stakeholders that form the ecosystem (Spigel, 2017). Entrepreneurial ecosystems are also defined as an institutionally embedded interface between entrepreneurial attitudes, capabilities, and aspirations of individuals in the country that can be dynamic (Autio and Levie, 2017). These definitions show that entrepreneurial ecosystems are complex structures that cannot be effectively managed using conventional top-bottom approaches, as suggested by previous studies (Dissanayake et al., 2017). Given this research gap, this study explores how to effectively manage the entrepreneurial ecosystem in a complex socio-economic structure (Al-Ghafri, 2018). In Oman's case, the socio-economic environment discourages new business ventures, especially if they are not related to the oil and gas industry, which creates a complex socio-economic environment for entrepreneurs (Yarahmadi and Magd, 2016).

In this context, Autio and Levie (2017) argued that most start-up ventures typically have brilliant business ideas, still, they fail due to a lack of support from the stakeholders in the entrepreneurial ecosystem. This is mainly because little research attention had been paid to effective strategies that govern and manage entrepreneurial ecosystems. Galán-Muros et al. (2017) showed that entrepreneurial ecosystem management conventionally relies on the top-bottom approach of policymaking and addressing specific non-complex structural and market issues such as offering subsidised funding for new ventures or improving entrepreneurs' approach to research and development facilities. However, Dissanayake et al. (2017) challenge the top-bottom policy approach and show that it has proven ineffective in addressing systematic and complex issues such as the management of entrepreneurial ecosystems. Policy change in a country is difficult to be implemented in the industry to create a favourable business environment for the entrepreneurs in Oman. Policy

change in a country mainly depends on the assessment of the need for policy change, government influence, and the enactment or non-enactment of the reformed aspects of political events and crises. Therefore, political instability may occur during policy reform and legal structure and system. However, policy reform can have consequences on the business environment and entrepreneurs' ecosystem.

Sussan and Acs (2017) note that entrepreneurship activities' success depends on the individual's support. This statement implies that when creating an effective entrepreneurial ecosystem, there is a need to consider the importance of support structures. These structures can be in the form of mentorship programs, which are beneficial to entrepreneurial activities' success as they guide the start-up ventures in the market. In most Arabic countries, these support structures are not available for people due to the region's preferred leadership and management style. The management is mostly autocratic, which implies that a start-up entrepreneur has little or no access to the leaders who can guide them on how to make their venture successful, as indicated by (Stam, 2015).

For instance, in several countries, a mentorship approach to leadership is used in formulating policies, which helps support various stakeholders in creating a conducive entrepreneurial ecosystem (Coduras et al., 2018). In this approach, leaders are not limited to recruiting people for the company and assigning them specific tasks. Thus, the leaders are responsible for guiding and keeping a clear vision in front of them to accomplish and understand the purpose of achieving the goal. Moreover, by discussing the individuals' activities and ideas and taking their opinions, the organisation leaders can set the business's future growth goals. Therefore, this approach provides individuals with the power and proper guidance to improve their working style and idea generation to match the organisation's culture and engage them in work. This, in turn, makes them able to rectify their mistakes and to get the desired outcome. However, this approach is not applicable in most Arab nations due to various issues such as culture. As a result, one of the emerging research gaps, in this case, is linked to how different management policies in Arab countries influence the

development of an environment that supports start-ups and entrepreneurial ventures.

Spigel (2017) explores the usefulness of an approach based on an alternative model in solving structure and agency problems regarding cultural issues that might confine entrepreneurs to a certain way of thinking and acting. By employing an economic geography lens, Spiegel's (2017) approach attempts to locate the developmental practices via how individual and social actors understand entrepreneurship rules. In the process, a direct link between economic, cultural, and entrepreneurial practices is created, which enables entrepreneurs to choose specific goals they would like to attain objectively and sensibly. Entrepreneurs use practices that make sense to them, which are useful to their business, which means that cultural and geographical limits do not bind them. As a result, this process enables entrepreneurs not to be confined by the local forces because they acknowledge and accept multiple fields on how entrepreneurship can operate. E.g., local, geographical, and even global fields, giving the entrepreneurs a wide scope of exploring what best fits their business model and utilising it as a strategy. Spigel (2017) emphasises a Bourdieu-based approach to question the dominant thinking that culture could bind entrepreneurs to a particular cultural orientation's prescripts. Entrepreneurs can use this model to develop independent and individual decisions. The current study specifically aims at outlining the type of entrepreneurial ecosystem that can be adopted in the region of Oman for attaining sustainable growth of the country.

Oman is officially known as the Sultanate of Oman. It is located in the southeast of the Arabian Peninsula. It overlooks three seas: The Arabian Gulf, the Sea of Oman, and the Arabian Sea. It is bordered on the west by the United Arab Emirates and Saudi Arabia, south by the Republic of Yemen, north by the Strait of Hormuz, and east by the Arabian Sea. It occupies 309,500 square kilometres, with a coastline stretching 3,165 km from the Strait of Hormuz in the north to the border with the Republic of Yemen. Oman has a population of 4.44 million, with foreigners accounting for 38.39% of the total population. The regime of the Sultanate of Oman is monarchical, and Sultan Qaboos bin Said ruled Oman from 1970 to January 2020 (MOFA, 2018). During

this era, Oman has witnessed rising living standards and development in the country. Slavery has also been reduced, and modernisation policies have made Oman break out of its international isolation.

Oman is not as wealthy as its other oil-exporting neighbours in the Gulf Cooperation Council (GCC). However, the commercial export of oil that began in 1967 has been its significant source of wealth (Stam, 2015). Currently, the Omani government is under pressure to develop its other resources due to its diminishing oil reserves. This ranges from natural gas and non-oil sectors to other sectors such as agriculture, tourism, light industry, services, and fisheries for economic growth and sustainability (Slamet et al., 2020). In addition, the high investment in the education system in Oman has led to an increase in graduate enrolment. These graduates are now facing tremendous competition to acquire a suitable job due to limited job opportunities (Magd and McCoy, 2014). As a result, the government is seeking to employ graduates other than the public sector that lacks the capacity. As a result, the focus in the Sultanate of Oman has now been on the private sector and, more specifically, on promoting entrepreneurship in order to grow the private sector. This will help in creating employment opportunities, diversifying the economy, and reducing the country's over-dependence on diminishing oil reserves. Egel and Fry (2017) point out that entrepreneurship is one of the most effective ways of enhancing aggregate economic growth. Similarly, Othman et al. (2018) assert that entrepreneurship enables a country to make optimum utilization of its scarce and limited resources like oil, gas, and minerals. The government of Oman taps into human, natural, and capital resources.

Regardless of the value and importance of entrepreneurship in economic diversification, growth, and sustainability, SMEs in Oman have been neglected over the years and lack the required support from both the public and private sectors. Thus, Oman's entrepreneurship has not yielded the desired results due to a lack of cooperation from large firms, the government, and SMEs. Their coordination plays a significant role in shaping the entrepreneurial ecosystem (Galanou and Farrag, 2015). In addition, the current poor infrastructure and negative macro-environmental factors

in Oman play a significant limiting role in channelling most entrepreneurial activities. It also ventures into destructive and unproductive economic directions instead of creating wealth, as noted by Al-Shanfari (2012). Magd and McCoy (2014) suggested that the government creates a sustainable environment in which entrepreneurial activities are encouraged in Oman's sultanate to reduce oil reserves dependence.

Despite these challenges, Oman has the opportunity to create one of the most effective entrepreneurial ecosystems. This is due to Oman's free economy, low taxes, stable government, and growing sectors such as agriculture, tourism, light manufacturing, service, and fishing. The country could achieve diversified economic prosperity based on more than just oil reserves if these resources are well utilised. Galanou and Farrag (2015) note that sustainable entrepreneurship models are developed only through entrepreneur's commitment and enhancement of ethical issues that integrate businesses, social responsibility, economic development, and community engagement- they must consider the quality and innovation of the product or service developed. Jamil (2015) argued that investment in tourism activities has significantly diversified Oman's economy, which in turn helps to strengthen the country's overall economy. For this purpose, it can be stated the development and management of a viable entrepreneurial ecosystem is essential for attaining sustainable development in Oman.

The context and environment for Oman's entrepreneurship are similar to other developing countries in the Middle East and beyond. Studies indicate that most developing economies have low entrepreneurial activities levels because they do not provide an enabling environment for innovation and creativity, which is a prerequisite for entrepreneurship (Galanou and Farrag, 2015). The lack of proper systems affects entrepreneurship development regarding the ease of entrepreneurs to start a business (entry into a business), access to finance, and availability of information, awareness, and training. The entrepreneurial ecosystem in Oman depends on the pillars via which the entrepreneurial mindset can be seen in Sultanate Oman: opportunity perception, start-up skills, and risk acceptance. This also includes cultural support, technological absorption, government policies and regulations, competition,

networking, human capital, market competition, market growth, innovation, risk capital, and internationalisation. Therefore, the absence of any of the entrepreneurship elements in Oman will lead to problems in the country and affect its entrepreneurial ecosystem. The country's entrepreneurship is not very developed and has an economic impact on the country. This is due to the lack of educational infrastructure that provides knowledge about entrepreneurship. The culture is also different from other countries. Therefore, the entrepreneurial start-up activity is limited in Oman which reduces the number of successful startups

On the other hand, the culture, which is shaped by Islamic leadership traits, has a significant impact on entrepreneurship. The management decisions also have an impact on EE. As mentioned earlier, the Sultanate of Oman's characteristics drive a certain leadership style that influences Oman's business environment. Therefore, Omani culture is different as Islamic leadership has a significant impact on the entrepreneurial ecosystem's business culture. Moreover, management plays a vital role in setting the policies and rules in the system. Hence, policymakers change the laws in businesses that affect the entrepreneurial ecosystem in Oman. Therefore, the present study will demonstrate the impact of Islamic leadership on the culture and management of an organization's entrepreneurial ecosystem.

The context and environment for Oman's entrepreneurship are analysed below based on the general business environment's metrics, the government's policies on entrepreneurship, and economic freedom. The Index of Economic Freedom was introduced by the Heritage Foundation and the Wall Street Journal to measure the countries' economic freedom worldwide using a universal set of matrices (Swanson and DeVereaux, 2017). The Heritage Foundation publishes annual freedom scores. Swanson and DeVereaux (2017) also noted that the economic freedom index uses several attributes: property rights, judicial effectiveness, government integrity, and tax burden. These attributes also include government spending, fiscal, health, business, labour, monetary, trade, investment, and financial freedom to measure the country's overall economic freedom.

### 1.1.1 The context and environment for the study

Based on Oman's State Budget 2020 released by the Royal Decree 1/2020 and the Ministry of Finance, Oman focuses on minimising expenditure and increasing non-oil and gas revenues (Ministry of Finance, 2020). Some of the measures that the Oman government plans to use in diversifying non-oil and gas revenues include the Tanfeedh programme, which refers to the economy's diversification and the expansion of public-private partnership projects that stimulate growth and sustain employment. Other key proposals in the budget include increasing the income tax to 15% and introducing selective excise duties (a tax levied on products and the point of manufacture) on certain products such as alcohol and tobacco. Oman's national budget for 2020 envisages a deficit of RO 2.5 billion, 80% of which is financed by external and domestic borrowing, with the remainder to be covered by drawing on reserves. Oman's actual oil and gas revenue for 2019 totals RO 7.7 billion, accounting for 72% of total revenues as shown in Figure 1. This was mainly due to the decline in global oil prices. The actual revenues excluding oil and gas also fell by 6% compared to the 2016 budgeted figures.

|                              | 2020 Budget   |             |                    | 2019 Budget   |             |
|------------------------------|---------------|-------------|--------------------|---------------|-------------|
|                              | OMR (m)       | % of total  | % change from 2019 | OMR (m)       | % of total  |
| <b>Revenues</b>              |               |             |                    |               |             |
| <b>Oil</b>                   | 5,500         | 51%         | 1%                 | 5,465         | 54%         |
| <b>Gas</b>                   | 2,200         | 21%         | 11%                | 1,980         | 20%         |
| <b>Total Oil and Gas</b>     | <b>7,700</b>  | <b>72%</b>  | <b>3%</b>          | <b>7,445</b>  | <b>74%</b>  |
| <b>Taxes and Fees</b>        | 1,573         | 15%         | 8%                 | 1,450         | 14%         |
| <b>Non tax revenues</b>      | 827           | 8%          | -3%                | 850           | 8%          |
| <b>Others</b>                | 600           | 5%          | 69%                | 355           | 4%          |
| <b>Total Non-Oil and Gas</b> | <b>3,000</b>  | <b>28%</b>  | <b>13%</b>         | <b>2,655</b>  | <b>26%</b>  |
| <b>Total Revenues</b>        | <b>10,700</b> | <b>100%</b> | <b>6%</b>          | <b>10,100</b> | <b>100%</b> |

Figure 1 Oman State Budget 2019 (Oman Ministry of Finance, 2020)

According to the Economic Freedom Index (2018), Oman has a GDP of \$184.8 billion and a growth rate of 4.7%. The national unemployment rate is 17.5%, and the inflation rate is 1.1%. The country's Foreign Direct Investment (FDI) inflow is \$142.0 million, which has been achieved by expanding liquefied natural gas and increasing foreign investment in telecommunications, petrochemicals, and electric power. Cordesman (2018) notes that oil reserves are Oman's primary source of income, accounting for 42% of the country's GDP, and the government's vision is to reduce this to 9% by 2020. Based on early estimates for 2020, it seems that the country is not on track to reduce oil and gas revenue as the primary source of revenue. However, the recent Coronavirus outbreak has changed all dimensions of doing business in Oman. It has also affected all industries and businesses, bringing changes in the business world and impacting the GDP. According to an analysis of the country's budget plan done by PricewaterhouseCoopers (2020), 72% of the country's total revenue comes from the oil and gas sector, while the rest comes from other non-oil sectors.

Considering that Vision 2020 is not on track to be achieved due to the Covid-19 situation, the government needs to examine what factors have caused such a delay in shifting to non-oil revenues to ensure a significant and rapid improvement. Thus, the government should understand the current situation and implement the plan to improve Oman's business environment and its contribution to the GDP. This is another proof that the entrepreneurial ecosystem requires a lot of effort and adjustment.

The government is making significant efforts to create an attractive environment to establish a thriving business environment in Oman. For instance, Magd and McCoy (2014) argue that Oman is considered a tax haven because the government taxation policy does not levy taxes on real estate, capital gains, and personal incomes. The highest corporate tax in Oman is 12%, and the country has no value-added or excise taxes. The total tax burden accounts for 8.5% of total domestic income, and government expenditure accounts for 50.0% of total GDP (Hakro and Omezzine, 2016). Oman's fiscal deficit is 12.3% of the GDP, while the government debt is 34.3% of the GDP. Besides, the country allows foreigners to take mortgages and own properties without having a local sponsor. Oman also has a relatively clear and transparent legal system favourable to businesses, and there are limited cases of investment disputes in the country involving both local and foreign investors (Jamil,

2015). There have been several corruption cases involving executives and government officials of state-owned oil companies that have been prosecuted in recent years. In summary, the Index of Economic Freedom (2018) rates property rights at 59.9%, government integrity at 51.5%, judicial effectiveness at 57.4%, government expenditure at 25.0%, tax burden at 98.5%, and fiscal health at 17.7%.

However, the financial and banking sector, which is a critical key to entrepreneurship's success, has a legacy of poor regulation (Al-Muharrami and Murthy, 2017). The financial institutions in Oman are very cautious and have strict rules regarding lending and direct investment decisions. Mostly, they review the entrepreneur's track record rather than the entrepreneurial idea itself when deciding whether or not to finance a project (Magd and McCoy, 2014). As a result, aspiring entrepreneurs with promising ideas but without a good financial track record end up with inadequate capital funding for their ventures (Zahlan, 2016).

In terms of regulatory efficiency, the Index of Economic Freedom (2020) rates Oman's entrepreneurial freedom at 74.6%, labour freedom at 56.9%, and monetary freedom at 78.4%. The index shows that Oman's overall entrepreneurial freedom (63.6%) has improved, although there are some challenges regarding the regulatory policies' inefficiencies. Finally, the Index of Economic Freedom (2020) analysed the open markets and trade-in Oman. It found that the value of imports and exports in the country is 108.1% of the country's GDP while the average tariff rate is 1.7%. There are no existing screenings of foreign investments, although state-owned enterprises cause economic distortions. Credit is offered at market rates, and the government provides subsidised loans to promote investment. Trade freedom is rated at 81.6%, freedom of investment at 65%, and financial finance at 60%. The general recommendation of the Index of Economic Freedom (2020) is that the Sultanate of Oman should continue its efforts to improve economic freedom that supports the government's efforts to develop the non-oil economy, increasing entrepreneurial activities business development.

Galán-Muros et al. (2017) note that one of the main challenges to Oman's demographic structure is the massive number of young people, commonly referred to as the 'youth bulge.' The MENA region is an area with a high number of young people, which makes policy-making related to the labour market, security, welfare programs,

and education a major challenge. Statistics from the Sultanate of Oman Ministry of National Economic show that 50% of the country's total population comprises people aged below 25 years, and the rate of youth unemployment is over 20%. These statistics suggest the need to create employment opportunities for this population. In this regard, entrepreneurship has been considered a timely idea to tap into this population's skills and assist them in utilising their skills.

Sussan and Acs (2017) investigated the Oman youth's entrepreneurial attitudes. They found that most youth (67%) were interested in entrepreneurship, but they expressed their apprehension to engage in it as they considered it risky and feared that they would not receive any support from the government or bank financing. The study also found a lack of awareness and knowledge of the available opportunities; hence, their reluctance to engage in entrepreneurial activities. The study called for more government support, both policy and finance, vocational education, skills development, and training initiatives to tap into the existing resources (Schwab, 2015). More than 50,000 students graduate from secondary education each year in Oman, and this number is increasing every year. The people aged below 25 make up 55% of the total Omani population. The chart in Figure 2 shows the Omani population according to results of Census 2020.

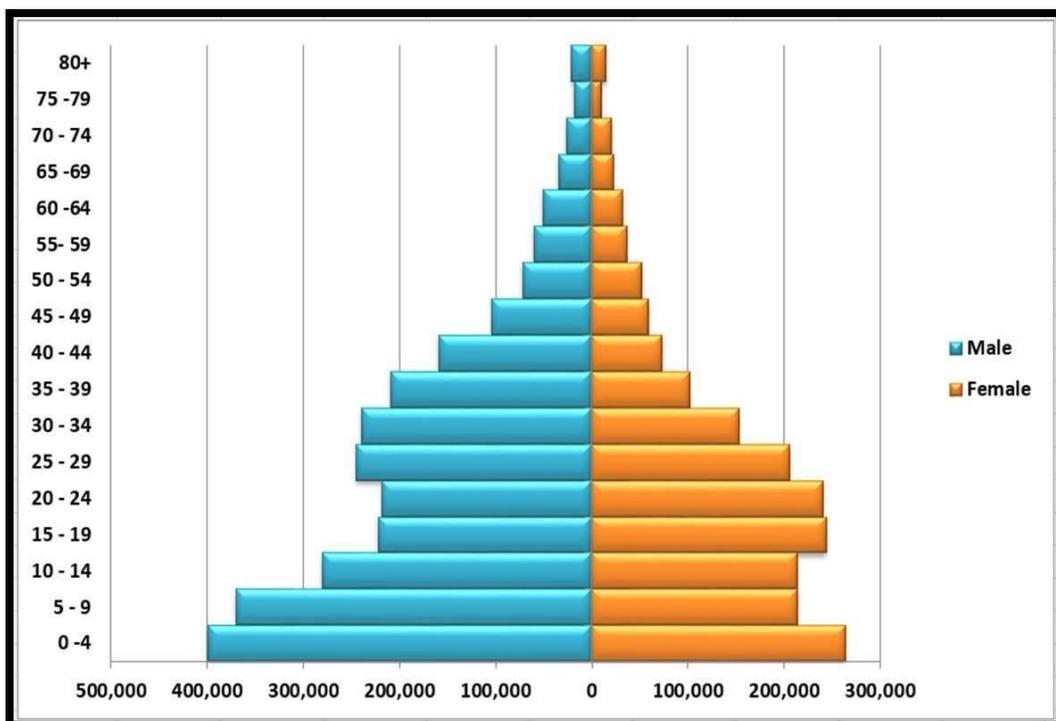


Figure 2 Omani population in 2020 (P.20)

### 1.1.2 Summary of socio-economic challenges in promoting entrepreneurship

From the above description of the environmental context, several challenges emerge that prevent the country from advancing rapidly into entrepreneurship. These challenges are summarised in this section.

One of the main challenges hindering the promotion of entrepreneurship in Oman is the over-reliance on the oil sector, leading to a decline in other government sectors' investments. With oil and gas still accounting for at least three-quarters of the government revenue, transformation is significantly hampered and slowed down. The government uses these funds from one source to create development opportunities, stimulate non-oil sectors, and address the rising youth unemployment. The lack of diversification of revenue sources hinders the progress of development from enabling more economic progress. Diversification of revenue is useful because it can generate significantly more revenue and cushion a country from the effects of fluctuating market conditions affecting a particular sector.

Additionally, Oman's cultural and social norms pose one of the biggest challenges as the culture is not conducive to the country's entrepreneurial establishment. According to the Hofstede cultural model analysis, it has been revealed that the country's masculinity is high, and individualism prevents the growth of businesses in the country. Moreover, the education system and support for training entrepreneurs are not improved in the early years, supporting them and escalating businesses to increase Oman's GDP. Thus, a positive attitude and mindset towards the business environment have not significantly supported economic development through entrepreneurial expansion due to lack of clear communication and attitude to achieve the goal.

Intense competition from other oil producers has led to many cases of lowered oil prices (Al-Mawali, Hasim, and Al-Busaidi, 2016). Lowered oil prices mean that there is less revenue from oil. Diversification of the economic sector implies that other sectors can compensate when one sector is not doing well. A more recent case of how Oman could be seriously challenged in achieving its goals by relying too much on oil is the current health crisis caused by the COVID-19 pandemic. This disaster has health,

social, and economic implications, and one of the severely threatened sectors is the oil and gas sector. Reduced oil and gas demand and increased oil production from countries such as Russia, Saudi Arabia, and Iran have reduced oil prices (Kang, de Gracia, and Ratti, 2017). This means that Oman has been heading towards reduced revenues from oil in 2020. Lower revenue would result in fewer funds available for development, and thus entrepreneurship will continue to lag behind.

Another factor that poses a challenge to promoting entrepreneurship is the weak financial and public sectors. While the government has allowed open market policies, these have not been strengthened by policies that support other non-oil sectors to operate equally strongly. The ministries responsible for the development process lack sufficient resources and motivation, making it impossible to encourage entrepreneurship. Until recently, the government has only insisted that there should be a focus on entrepreneurship, but no clear policies to develop it. Therefore, recent goals like Vision 2040 include an entrepreneurship development agenda and a reduction of hydrocarbon dependency.

High youth unemployment rates result from insufficient diversification to enable more of them to find employment in alternative sectors. Many of the graduates often compete for few jobs, making it more difficult for them to secure jobs. Therefore, it is essential to change youth's educational background and mindset and support them through policies to foster innovation and enable them to be more involved in finding alternative business solutions rather than wait to compete for few jobs in the public sector.

Saqib, Baluch & Udin (2017) point out that the technology and infrastructure of innovation and R&D in Oman are still in their infancy stages. Research collaborations, scientists, and scientific institutions represent a vital facet to enable the proper development of entrepreneurial infrastructure. Technology and IT support frameworks allow enterprise infrastructure to thrive. This infrastructure type helps deliver quick solutions to customers, employees, and even suppliers in a business ecosystem (Lim & Xavier, 2015). Therefore, this is another hindering factor that has not yet enabled the development of Oman's entrepreneurial ecosystem.

## 1.2 Statement of the research problem

### 1.2.1 The contextual research problem

Oman's economic growth and development have been dependent on the country's oil reserves. However, as the oil reserves continue to diminish, the government has been forced to look for other diversified sources of income and activities that will lead to prosperity and promote economic growth. One way this economic diversification goal can be achieved is through the entrepreneurial ecosystem's development (Stam, 2015). Stam (2015) notes that Oman has a high potential for developing a strong entrepreneurial ecosystem, mainly because it has a free economy, low taxes, stable government, and growing sectors such as agriculture, tourism, light manufacturing, service, and fisheries. If these resources are well utilised, the country could achieve diversified economic prosperity that is not solely based on oil reserves (Oman Economic Review, 2016)

Despite these existing opportunities, current research and literature show that Oman's entrepreneurial ecosystem is still underdeveloped (World Bank, 2017), which points to promoting independent entrepreneurs in the country. Conceptualising this problem, Al-Shanfari (2012) noted a lack of entrepreneurial ventures was not the main challenge in Oman, but rather a poor infrastructure and negative macro-environment factors that channel most entrepreneurship activities and new ventures into destructive and unproductive economic directions, instead of creating wealth. Al-Shanfari (2012) further suggested that the challenge with Oman's entrepreneurial ecosystem, which resonates with those in emerging economies, is that opportunity to enter, the access to knowledge and skills, and the access to capital is limited. Al-Shanfari (2012) further estimated that Oman's oil reserves would be depleted by 2032. Thus, the urgency to develop entrepreneurial ventures in the country as an economic diversification method cannot be under-estimated.

Several issues must be addressed to achieve the desirable entrepreneurial ecosystem model that can foster economic growth and development. For instance, statistics show a lack of indigenous entrepreneurship in Oman, with 2 out of every 100 people starting a new venture compared to the USA's international rate, where 10 out of every 100 people start a business (Al-Shanfari, 2012). Further, statistics show that most of these entrepreneurial ventures in Oman are mainly by non-resident expatriate

entrepreneurs, who are mainly Pakistanis and Indians who moved into the country in search of means to improve their living standards. Other economic growth measures, such as the number of IPOs issued in the stock exchange market, show that the Muscat Securities Market has had only one IPO since 1995 (Galán-Muros et al., 2017). This IPO was issued by Phoenix Power, one of the largest power plants in Oman, and raised USD 146.2 million in the capital with an oversubscription due to the high numbers of interest from investors. This demonstrated what Al-Shanfari (2012) described as “an underlying entrepreneurial malaise” (p.3); this entrepreneurial malaise was caused by a low national entrepreneurial activity and a small private sector in Oman.

Further analysis of Oman's entrepreneurial ecosystem model shows that the country has a major scarcity of self-made and successful entrepreneurs who can serve as role models (Kawamorita, Kesim et al., 2016). The media coverage of entrepreneurship, as well as the availability of information, is limited. The limitations in accessing information make it challenging to design the most appropriate entrepreneurial ecosystem model. For instance, this study identified the number of existing organisations or programs that help upcoming entrepreneurs enhance their ideas. A group of Oman entrepreneurs established one of the programs identified as Start-up Oman to inspire other entrepreneurs, bring together other SMEs, promote the society, and facilitate trade. The platform showcases successful ventures from both local and international entrepreneurs, providing a blended global perspective. Despite the high presence of programs and stakeholders in Oman's entrepreneurial ecosystem, studies show that Omani entrepreneurs lack the exposure and information needed to understand their business structure and operation, target market, and appropriate financial model.

The other main problem within the Omani entrepreneurial ecosystem is the lack of innovation and creativity. Cumming and von Cramon-Taubadel (2018) point out that entrepreneurship is centred on not only the ability to come up with new ideas (creativity) but also the ability to transfer the new ideas into a useful product service or method of production (innovation). Within the Omani entrepreneurial ecosystem, Tlaiss (2015) notes that creativity and innovation lack as most new ventures coming up in the country are based on business models and ideas that others have repeatedly done. Galán-Muros et al. (2017) add that most entrepreneurship ventures in Oman

have failed because they are disruptive ideas that lack originality. Most entrepreneurs start up new ventures without considering the existing challenges of competition eminent in saturated markets. Ibrahim, Devesh, and Ubaidullah (2017) also pointed out that entrepreneurs in Oman seldom consider sustainability practices while starting a venture. The ventures are started as a necessity to support the existing businesses. The lack of information on entrepreneurship also limits most entrepreneurs from researching and testing their ideas. Research studies show that most successful entrepreneurs spend much time researching the market, comparing various business models, understanding their competitors, reviewing market research data, and understanding their target market's needs and preferences (Kawamorita Kesim et al., 2016). However, the likelihood of starting up a successful or high-impact venture becomes limited within the Omani entrepreneurial ecosystem where such information is curbed.

### 1.2.2 The conceptual problem

Several scholars have noted the role of religion and culture in managing entrepreneurial ecosystems (Harrison and Roomi, 2018). However, the existing scholarly works have largely ignored how Arabic culture and leadership concepts affect how entrepreneurial ecosystems are managed in such distinctive cultural and religious settings (Gümüşay, 2015).

Evidence suggests that leadership plays a vital role in motivating people to work in an organisation by organising and executing plans to become successful. As a result, entrepreneurial leadership entails organising a group of people to work together by optimising the risks, bringing new innovations to the organisation, finding opportunities, and taking advantage of it for its benefit and making it successful. Several factors affect the organisational leadership that helps maintain the business environment, communication skills, shares success, support to the team, involvement in the task, certain beliefs, and a positive environment for its growth.

Since each country and its people follow a distinct culture, blindly following western cultures in entrepreneurship will not be conducive to attaining success. Instead, there is a dire need to embrace one's culture and thereby follow its nuances in the entrepreneurial settings for better results. This is because this culture is already

embedded as values in not only the entrepreneurs but also in the employees, which will help in attaining goals that support both the stakeholders.

**Thus, the current study is directed towards attaining the research objectives:**

- To accentuate the process through which entrepreneurial ecosystem policies are formulated and implemented in Oman.
- To analyze the effectiveness of the management of entrepreneurial ecosystems in Oman.
- To highlight the leadership approach that should be adopted for the entrepreneurial ecosystem in Oman for the future business environment.
- To outline the role of leadership and different leadership approaches used to solve the current leadership issues in the entrepreneurial ecosystem in Oman and the general MENA region on the entrepreneurial ecosystems.
- To underline the challenges that affect the effective management of entrepreneurial ecosystems in the case of Oman.

Similarly, the data generated in this study answers the following research questions:

- ***How can the Omani entrepreneurial ecosystem be effectively managed?***

The sub-research questions are:

- *How are the entrepreneurial ecosystem policies formulated and implemented in this context in Oman (Al-Balushi and Anderson, 2017)?*
- *What are the challenges to the effective management of entrepreneurial ecosystems in the Omani culture in EE (Bilal and Al Mqbali, 2015)?*
- *Which approaches can be effectively used in the management of entrepreneurial ecosystems in Oman's culture (Ennis, 2015)?*

By meeting the research aims and answering the research questions, this thesis' final goal is to develop a conceptual framework that outlines and explores the

Islamic leadership model and the adaptive co-management concept as an alternative to the effective management of the entrepreneurial ecosystem in Arabic culture.

### 1.3 Research approach

#### 1.3.1 Theoretical orientation of research

The interpretation of Oman's entrepreneurial ecosystem in the present study is based on the theoretical ideas and assumptions of the adaptive co-management (ACM) model (Plummer *et al.*, 2012). Islamic leadership model has emerged from the data, which further contributed to the theoretical framework. (Fozia, Rehmana and Farooq, 2016; Davis and Winn, 2017; Ramadani *et al.*, 2017). In line with the opinion of Fabricius and Currie (2015), the adaptive co-management model is used to analyse the ecosystem dynamics and governance systems. On the other hand, the Islamic leadership model is explored as an alternative to the effective management of entrepreneurial ecosystems within an Arabic cultural context (Ramadani *et al.*, 2017). A more detailed discussion on the study's theoretical orientation is provided in Chapter 4, theoretical framework.

#### 1.3.2 Methodological orientation

The study adopted an inductive interpretivist qualitative Grounded theory based approach. It is complemented by the Global Entrepreneurship Monitor (GEM) methodology in terms of entrepreneurial frameworks, sample selection of the experts and interview process. The study relied only on the qualitative data collected from the 36 interviews.

Therefore, a qualitative approach was adopted for the study, involving a semi-structured interview to understand the phenomena. Since the study initially adopts grounded theory and the secondary information from various sources, the data will be analysed after collection through observation. Thus, the study adopted an inductive qualitative inquiry to determine how Oman's entrepreneurial ecosystem is managed in an Islamic context. First, the study adopted a qualitative theoretical approach based on a version of the Glaserian grounded theory approach. Data was collected using face-to-face semi-structured interviews with 36 key informants (18

entrepreneurs and 18 key experts) selected from different specialisation areas within the Oman entrepreneurial ecosystem. I asked open-ended questions developed based on the research purpose, and these interviews were conducted in the form of a discussion. This implies that the study did not exclusively rely on these questions because other ideas and issues that emerged during the interviews were also considered. This approach was used because it enables the research participants to express their opinions freely being influenced or direction and because it allows new evidence to become known (Galán-Muros et al., 2017). The interviews were undertaken in Arabic; then, they were transcribed and translated into English, after which they were qualitatively analysed using the NVivo software.

The inductive interpretivist qualitative Grounded theory approach informed by elements of the methodological approach to identify the impact of the Islamic leadership model on the entrepreneurial ecosystem's culture, and the other theories will relate to the management's impact.

## 1.4 Significance and Justification of the Research

### 1.4.1 Importance of entrepreneurial ecosystem

There are several benefits of researching the entrepreneurial ecosystem in Oman. As mentioned earlier, one of the motivations for this study is the urgent need for economic diversification from oil dependency and the need to create more jobs to solve the problem of unemployment in the country. According to the Sultanate of Oman National Centre for Statistics and Information, youth constitute more than 50% of the population, and the youth unemployment is at 20%, compared to the national unemployment rate of 6.3%, which shows the need for urgent mechanisms of creating employment. In this sense, entrepreneurship is regarded as a source of employment and a mechanism of economic diversification. The entrepreneurial ecosystems are also an important research subject because they drive innovation and creativity in an economy, leading to the production of new products and services (Samuel and Sarprasatha, 2015). The potential growth of the entrepreneurial ecosystem is also important because it contributes to the country's GDP by generating additional revenue streams for the government and the expansion of the government taxation base (Kawamorita Kesim et al., 2016)

#### 1.4.2 The choice of research topic/purpose

This study explores how the entrepreneurial ecosystem is managed in Oman, with a special focus on exploring how the entrepreneurial ecosystem management policies are formulated and implemented. It identifies the challenges that hinder the effective management of entrepreneurial ecosystems in Oman; and examines the approaches that can be effectively used in the management of entrepreneurial ecosystems. In fulfilling these research aims, this study aims to fulfill the existing research gaps and explore the role of the Islamic leadership model to better manage the entrepreneurial ecosystem in an Arabic culture (Stam, 2015). Gümüşay (2015) states that the concept of Islamic leadership has not received much research interest, and these investigators have called for more studies on entrepreneurship in the Islamic context as part of their recommendations.

Similarly, few studies have examined the impact of the management and leadership approach in developing entrepreneurial ecosystems in Arab countries. Thus, studies have mostly focussed on how to develop an entrepreneurial environment in the country. However, they have largely failed to provide a detailed analysis of leadership and management style's contribution to the process (Mas-Tur et al., 2019). Furthermore, an evaluation of the support offered to entrepreneurial ventures from a leadership perspective has also not been extensively researched; hence, further research is needed in this area.

As mentioned earlier, there is very little research interest in analysing the role of adaptive co-management in an Islamic leadership and Arabic culture context. Although ACM has been used in various fields of study, specifically in environmental and tourism studies, analysis of existing literature shows that the concept has rarely been applied in studying entrepreneurial ecosystems (Mehtap *et al.*, 2017). Laplaza and Tanaya (2017) notes that adaptive co-management blends adaptive and collaborative themes in resource management. In the current research study, it would be important to comprehend how adaptive co-management can contribute to the entrepreneurial ecosystem considering an Islamic leadership approach and the Arabic culture in the case of the Sultanate of Oman.

#### 1.4.3 The position of the study with relation to others in this field

The present study stands out from previous studies that have analysed the entrepreneurial ecosystem in Oman. While several studies have conducted qualitative studies to study Islamic leadership in entrepreneurship and the entrepreneurial ecosystems based on the Arabic cultural models, most of these have followed a descriptive qualitative approach as opposed to the qualitative interpretive approach of the present study. The previous studies that relied on quantitative methods limit the researcher's ability to interact or dialogue with the participants and gain a deeper insight into the social phenomenon under study and find out the underlying issues (Thompson, 2017). However, by adopting an interpretivist qualitative approach, this study can conduct a deep exploration of the research subject and lead to new business knowledge (Idowu, 2017).

Moreover, this study adopts a research method informed through a version of the Glaserian grounded theory approach, which offers the opportunity to explore the Islamic leadership model and the adaptive co-management concept as alternatives to the effective management of the entrepreneurial ecosystem in Arabic culture (Tlaiss, 2015). The Glaserian grounded theory approach emphasizes emergence or induction, which allows the researcher to conceptualise the abstracts of place, time, and people. Besides, theories developed by adopting the Glaserian grounded approach can be easily used outside the practice area where they were generated (Stern and Kerry, 2016). For instance, Solhi and Koshkaki (2016) used networked grounded theory in exploring how the business and social setting of developing countries influence entrepreneurial, innovative behaviours. From this, they developed a path model for entrepreneurial, innovative behaviour applicable in other areas beyond their case study, Iran. This implies that the conceptual framework exploring the Islamic leadership model and the adaptive co-management concept as an alternative to the effective management of entrepreneurial ecosystem in an Arabic culture that is conceptualised in this study could be used beyond Oman and the Middle East and North Africa (MENA) region with the proper contextualisation

An analysis of previous studies also shows that most previous studies have used various tools such as the OECD Entrepreneurship Measurement Framework and the Babson Entrepreneurial ecosystem Project in their data collection. GEM's NES tool

is considered one of the world's most famous and reliable instruments in terms of entrepreneurial studies, with a reputation of providing high quality, in-depth and reliable information (Su *et al.*, 2017). The NES tool also allows for flexibility, where the researcher can choose between qualitative and quantitative analysis (Shukla *et al.*, 2018). In this sense, this study stands out from the rest that has been undertaken in this field by determining the implementation of adaptive co-management to manage the entrepreneurial ecosystem.

#### 1.4.4 Choice of Context

Welter (2011) suggests that previous research in entrepreneurial ecosystems has attempted to neglect the role of context in creating models of entrepreneurial activities that are generalisable. Welter (2011) adds that the context should be the specific focus of research because contexts such as the location cannot be merely treated as simple control variables but rather requires a deeper investigation into how the social, economic, cultural, and economic processes and structures that are associated with a place affect all the other aspects of the entrepreneurial journey. Johannisson (2011) adds that a context such as location is not a result of a specific practice but instead reflects a much more multifaceted influence on entrepreneurship.

As earlier mentioned, the present study used primary data collected through semi-structured interviews with local entrepreneurs and key players within the Omani entrepreneurial ecosystem. The face-to-face interaction with the participants also allowed a conducive environment for data collection. Semi-structured interviews are broadly used in qualitative research by structuring the dialogue, establishing the flexibility of questions, and allowing local entrepreneurs to express their feelings, beliefs, and thoughts about the questions in demand. Kallio, Pietilä, Johnson, and Kangasniemi (2016) note that the semi-structured interview requires the skill and the ability to focus on the research question, purpose of the study, identification of participants, consideration of logical aspects, analysis of data, and demonstration of trustworthiness of the research. Ensuring quality is very important in the semi-structured interview process because the strength of the process lies in the researcher's practical guidance through the appropriate data collection strategy. The

following is the process of data collection for the study to assess the study's estimated time, which shows the steps of the data collection and analysis process to achieve the aim and objectives of the study. The following figure 3, refers to the process and timeline of the research analysis, which would systematically analyse the collected information.

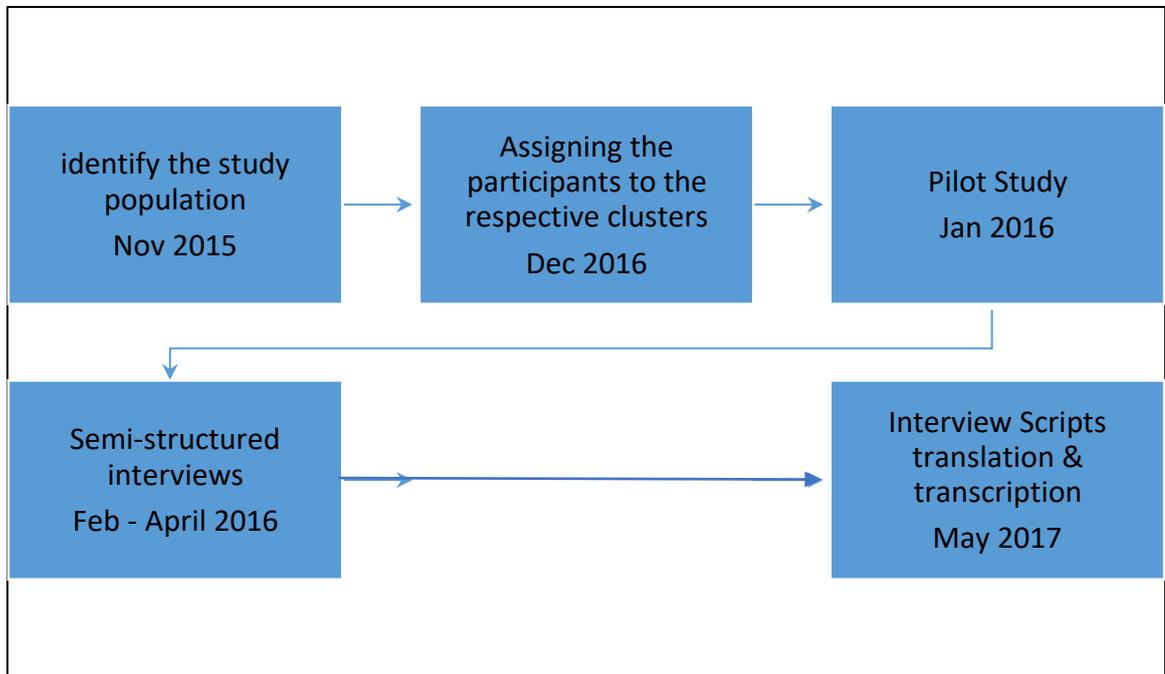


Figure 3 Process of Data collection for the Study

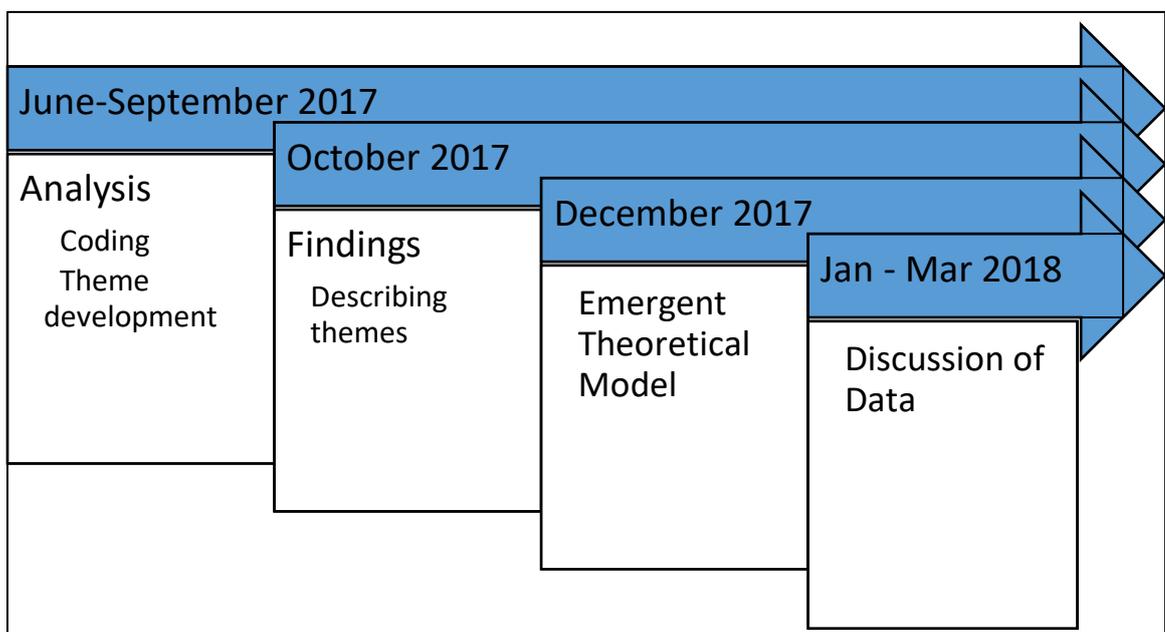


Figure 4 Timeline and process of data analysis

## 1.5 Research contributions

This research serves as a cornerstone in understanding the implications of the Omani entrepreneurial policies under an Islamic leadership model. Furthermore, this study will provide an insight into the current limitations and policy issues related to the Omani entrepreneurial ecosystem via a qualitative research study based on a version of the grounded theory approach.

- **Theoretical Contributions**

The current study accentuates the role of Islamic leadership in enhancing the entrepreneurial ecosystem of Oman. Many scholars have noted the role of religion and culture in entrepreneurship (Harrison and Roomi, 2018). The way in which the Arabic culture and Islamic leadership concepts affect how entrepreneurial ecosystems are managed in such distinctive cultural and religious settings (Gümüşay, 2015) has been largely ignored in the existing scholarly works. Nonetheless, in the last decade, the concept of Islamic leadership in management and entrepreneurship has received increased interest, even though it requires more research focus.

The study explores how the entrepreneurial ecosystem is managed and led in Oman, especially in government policies and practices. This study is motivated by the identified research gaps. For instance, a review of existing literature shows limited evidence regarding how entrepreneurial ecosystems work in Oman and the policy-related challenges in the management of entrepreneurial ecosystems, as suggested by Autio and Levie (2017).

Some of the leadership/policy approaches (such as the bottom-top approach) that are conventionally used in the management of the entrepreneurial ecosystems are also explored. The literature shows inefficient ecosystems due to the complex nature of socioeconomic structures of entrepreneurial ecosystems (Dissanayake *et al.*, 2017)

A review of existing studies also shows that there is very little research evidence in analyzing the role of adaptive co-management in an Islamic leadership and Arabic culture context (Patel, Salih and Hamlin, 2018). Also, the concept of ACM has been used in various fields of study, specifically in environmental and tourism studies

but has rarely been applied in studying entrepreneurial ecosystems (Bhardwaj, 2019). Laplaza and Tanaya (2017) note that adaptive co-management blends adaptive and collaborative resource management themes. In this case, the study contributes to understanding how adaptive co-management can contribute to the entrepreneurial ecosystem within the Islamic leadership approach and Arabic culture.

The current study contributes to developing a theoretical framework that highlights and explores the Islamic leadership model and ACM as alternatives to effectively manage the entrepreneurial ecosystem in Arabic culture.

Besides contributions in understanding how the Islamic leadership model influences entrepreneurial ecosystems' governance structures, the study also contributes to understanding the efficacy and application of top-down management structures and how this impacts the 'top-down' versus 'bottom-up' policy debate in Oman. Understanding how the current governance models influence the development of entrepreneurial ecosystem support structures is critical to make recommendations for improvement. Thus, the present study also explores these ideas to understand how governance models influence entrepreneurial ecosystem development.

- **Empirical/contextual Contributions**

The qualitative nature of the study helped identify knowledge and skills, institutions, systems and policies, capital/finance, attitudes and culture, market and low stakeholder engagement as the main themes under the Oman entrepreneurial ecosystem's challenges. The support systems, networks, and connectivity will be identified as the Omani entrepreneurial ecosystem's main strengths. The recommended reforms suggested by the study participants will be discussed in light of the current literature.

A review of the previous research shows a lack of detailed analysis of the role of the different leadership and approaches preferred in Arab countries in developing an effective entrepreneurial ecosystem (Davari and Najmabadi, 2018). Furthermore, in the light of the literature review, there is insufficient empirical evidence to support and examine the management approaches that the Arab nations such as Oman use when developing policies to establish an efficient entrepreneurial ecosystem.

The analysis of the entrepreneurial ecosystem of Oman has presented both policy and practical importance in the current study. For instance, one of the motivations for undertaking this study was that the oil reserves in Oman have been declining and the unemployment rate is rising which requires an urgent need for economic diversification and creation of employment opportunities for the upcoming graduates. This analysis of how the entrepreneurial ecosystem in Oman is managed has identified the critical issues in the ecosystem. It has also gathered resourceful information on the existing challenges, opportunities and changes that can be adapted to achieve an effect of entrepreneurial ecosystem management in the country. This, in turn, would enhance the current socio-economic situation in the country.

*Table 1 Research gaps & contributions*

| Theoretical Gaps                                                                                                                                                                                                                                                                                                                                                                                                           | References                                             | Contribution                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>- Limited research study efforts were taken on how the culture of a society affects the entrepreneurial ecosystem.</li> <li>- Limited research attention has been directed towards effective policies that govern and manage the entrepreneurial ecosystem.</li> <li>- How the entrepreneurial ecosystem can be effectively managed in a complex socio-economic context?</li> </ul> | Autio and Levie (2017)<br>Walsh & Winsor (2019)        | A theoretical framework that highlights and explores the role of the unique Arabic culture and Islamic religion in the entrepreneurial ecosystems. The Islamic leadership model is explored as an alternative approach to the effective management of entrepreneurial ecosystems within the Arabic culture. |
| Insufficient theoretical knowledge to support the impact that the top to bottom management and leadership                                                                                                                                                                                                                                                                                                                  | Almobaireek et al. (2017)<br>Al Ramadani et al. (2017) | The adaptive co-management model helps analyse the ecosystem dynamics and governance                                                                                                                                                                                                                        |

|                                                                                                        |  |                                                                                                       |
|--------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|
| approach adopted in most Arab countries supports an effective and favourable entrepreneurial ecosystem |  | systems approach to the effective management of entrepreneurial ecosystems within the Arabic culture. |
|--------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------|

| <b>Empirical/contextual Gaps</b>                                                                                                                                             | <b>References</b>                                               | <b>Contribution</b>                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The limited focus of the prior literature concerning policy-related challenges faced by entrepreneurs in Oman for the effective management of the entrepreneurial ecosystems | (Dissanayake <i>et al.</i> , 2017; Stam, 2015; Kawamorita Kesim | Resourceful information on the existing challenges and changes that can be adopted to achieve the desired entrepreneurial ecosystem in the country. The data can be used by various stakeholders, both practitioners and academicians, in creating a conducive entrepreneurial ecosystem in Oman.                                                                                                                                |
| Lack of detailed analysis on the role of the different leadership and approaches preferred in Arab countries in developing an effective entrepreneurial ecosystem.           | (Tappeh and Ghorbaninia, 2015) (Davari and Najmabadi, 2018)     | The study generates information that can be used to make significant policy contributions towards developing mechanisms of enhancing entrepreneurship that is collaborative and effective in Oman.<br>Islamic leadership model can lead to the formulation of policies that are productive for entrepreneurship, and the right decisions will be made to create a suitable environment for the operation of business enterprises |

## 1.6 Research limitations

The study also has certain limitations and research gaps. These include cultural aspects divergence in the entrepreneurial ecosystem and the management aspects of Oman's entrepreneurial ecosystem. The present study's cultural aspects gaps have been perceived as the entrepreneur ecosystem, which includes certain actors to develop a new venture or start a new business to be successful in the country. One of the entrepreneurial ecosystem's critical domains is the cultural aspects, which include social norms to start a business and educational aspects that improve the business environment by generating new ideas. Oman's education system and training centres have been developed to motivate individuals to choose different occupations to address job-related conveniences. Therefore, the country lacks inspired individuals who can generate new ideas and start a business to shift the country from oil and gas industry income to other income modes. Moreover, the individuals' attitudes towards each other and the creative and young business minds are different. Furthermore, the culture, mindset, attitude, and learning of the people also differ from region to region, significantly impacting the planned ideas of starting a business and its progress.

Management aspects gaps of an entrepreneurial ecosystem have been seen as the only sector contributing to Oman's economy is the oil and gas sector. Therefore, there is a lack of available information on the entrepreneurial environment of the country. Moreover, the management aspect includes legal support for businesses in Oman. The policies have been implemented to create a successful business environment in the country. There is also a lack of investment bankers in Oman to help with business's financial aspects and create proper infrastructure for starting businesses. The government has made a plan to create a proper business environment for the country's individuals and contribute to the country's GDP. Therefore, a lack of educational institutions and structured training centres would provide necessary training and guidance to the young generation to establish a business for its future growth and shift the business towards other sectors. This would reduce the dependency on the oil and gas industry. Moreover, the management lacks the knowledge and skills to develop the business infrastructure and contribute to the country as the dependency on one sector increases in recent years. However, the

government and policymakers have developed new policies and rules to improve its entrepreneurial ecosystem. However, they are yet to be implemented and executed due to the current COVID-19 situation. Hence, to understand Oman's entrepreneurial ecosystem, it is essential to analyse the impact of Islamic leadership on culture, and the co-adaptive model on the management needs to be analysed using the grounded theory adopted in the study.

### 1.7 Outline of the thesis

The study is divided into 8 chapters.

**First Chapter:** The first chapter is the introduction, which provides a general overview of the study, including the background issues, the background statement, the purpose and significance of the study, and the research gaps. It introduces the reader to the study and provides a summary of the key sections.

**Second Chapter:** The second chapter is the literature review which reviews the existing empirical evidence on the entrepreneurial ecosystem concept.

**Third Chapter:** The fourth chapter is the theoretical framework that reviews the existing theoretical concepts on the topic.

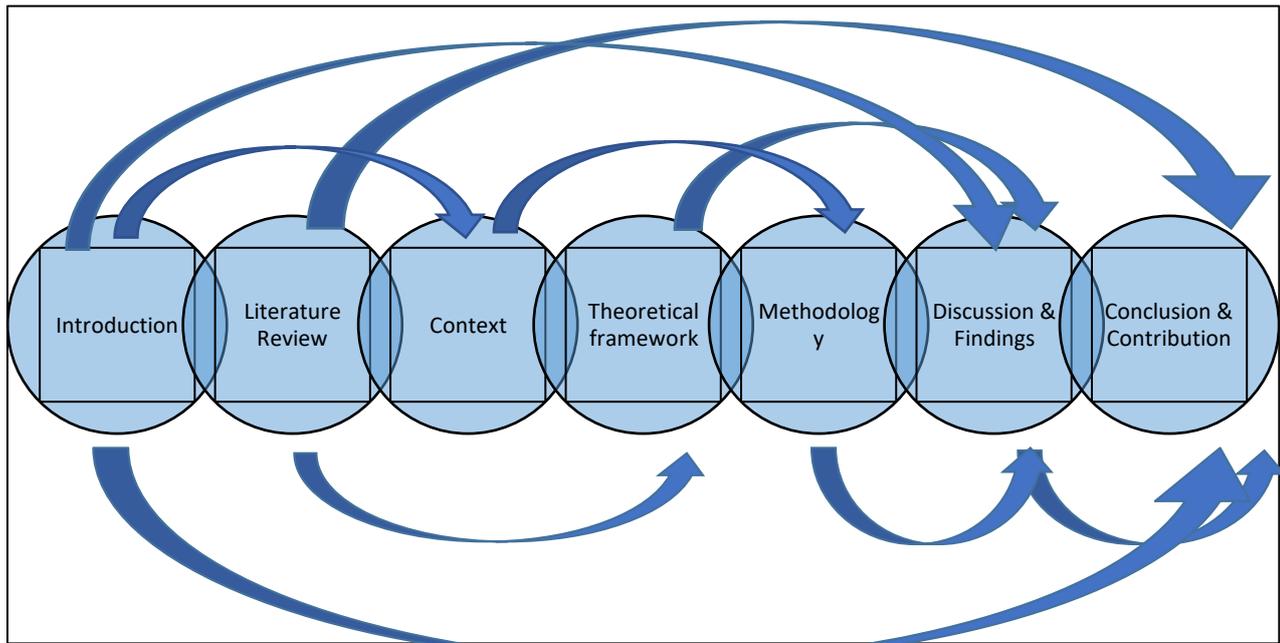
**Fourth Chapter:** The third chapter is an overview of Oman's ecosystem, which provides the reader with background information about Oman's entrepreneurial ecosystem based on its structure and operations.

**Fifth Chapter:** The methodology chapter provides the theoretical and systematic analysis of these methods used to collect and analyze data that informed this study.

**Sixth Chapter:** The sixth chapter presents the qualitative findings that present the study's data.

**Seventh Chapter:** This chapter discusses the findings concerning the identified literature and theoretical concepts.

**Eighth Chapter:** This chapter discusses the main conclusions, identifying areas for further research, recommendations, and contributions of the study.



*Figure 5 Link Thesis Chapters Influence of Induction*

### 1.8 Chapter summary

This chapter has introduced the study and provided the background and statement of the research problem and its significance. Through this chapter, the existing challenges and opportunities for entrepreneurship development in Oman have been identified. The chapter has also highlighted the urgent need for an effective entrepreneurial ecosystem in Oman to create employment opportunities and provide the country with much-needed economic diversification. The research gaps have also been discussed and the study's contribution to both academic theory and practical/policy formulation. The study has also been justified in terms of the importance of the entrepreneurial ecosystem, the choice of the research topic, and the study's position concerning others. A methodological overview and the study limitations have been identified. Finally, an overview of the entire study has been provided.

## Chapter 2: A literature review

### 2.1 Introduction

The completion of the literature review was conducted in an iterative fashion as they thesis was developing following a grounded theory approach. The existing literature was analysed with a view to developing the theoretical framework pertaining to the dynamics of an entrepreneurial ecosystem. The grounded theory approach is best supported by a preliminary review of the literature using the dynamic, reflexive, and integrative (DRI) framework (El Hussein, Kennedy and Oliver, 2017). Using the DRI framework has provided an informed theoretical framework to build core concepts. The literature review is presented with a view to adding to the scope of scientific activity rather than merely reporting the literature. The reflexive nature of the grounded theory approach prevented personal bias from being presented in the following literature review. Finally, the integration of existing literature with the identification of the gap in the literature was also developed according to the grounded theory approach.

Despite the increasing research interest regarding the management of entrepreneurial ecosystems in recent years, a review of existing literature shows that there is limited knowledge on how entrepreneurial ecosystems are managed, especially in the case of the Sultanate of Oman (Stam, 2015; Autio and Levie, 2017; Galán-Muros, van der Sijde, Groenewegen and Baaken, 2017; Song, 2019). These studies focus on different aspects that make up an entrepreneurial ecosystem. The entrepreneurial ecosystems draw upon different theoretical angles such as inclusive growth, gender gap, value creation (Hill, Rezaei and Rocha, 2018). Hill et al., (2018) emphasize the need to discuss and bring studies concerning entrepreneurial ecosystems among the popular press and academic institutions, particularly concerning the Middle Eastern region. There is a strong need for researchers to conduct studies that are based on the overall environment of entrepreneurship in regions like MENA. This will particularly help the other researchers due to the fact that innovation and a positive environment for entrepreneurship generally result in a significant job creation potential and value addition to economies, while also

increasing the technical expertise of the population. It is also crucial that a significant infrastructure exists for the optimum development of an entrepreneurial ecosystem.

Furthermore, entrepreneurial ecosystems are defined as complex socioeconomic structures embedded in multifaceted interactions between organizational and individual stakeholders (Spigel, 2015). This suggests that each entrepreneurial ecosystem is unique depending on the social, cultural, economic and political dimensions within which it exists (Stam, 2015; Spigel and Harrison, 2018). The effective management of entrepreneurial ecosystems can drive productivity growth, enhance innovation, create employment opportunities, and promote the internationalisation of businesses among others. This, in turn, will aggregately contribute to the economic growth of that region (Brown and Mason, 2017). This chapter reviews existing empirical and theoretical literature on the effective management of an entrepreneurial ecosystem. The chapter begins with an explanation of the entrepreneurial ecosystem, that is, its history, definition, the emergence of entrepreneurial ecosystem policy and its development and the critical elements. The other issues discussed in the chapter include the relationship between entrepreneurial ecosystems and policy role in entrepreneurial ecosystems, the role of culture in the entrepreneurial ecosystems and a review of stakeholder engagement in entrepreneurial ecosystems. The grounded theory approach reflects the evolved interpretation of currently-existing literature.

## 2.2 Historical perspectives and definitions of the entrepreneurial ecosystem

In order to outline the major variables concerning the entrepreneurial ecosystems, it is critical to understand the history and the various definitions of this concept. In the late 1980s and the early 1990s, the fundamental idea behind the concept of entrepreneurial ecosystems was first developed. As a result of this shift, entrepreneurship studies drifted away from the personality and individualistic perspective towards a more comprehensive perspective that incorporated the role of economic, cultural and social forces in the entrepreneurship process at the time (Stam and van de Ven, 2019). During this period, both researchers and policymakers were moving their focus from the Schumpeterian solitary 'economic supermanship'

towards a more nuanced perspective that viewed entrepreneurship as a social process that is embedded in the wider contexts (Stam, 2015). In this revolutionary period, the place in which entrepreneurship took place, was defined as the entrepreneurial ecosystem and observed to have a significant effect upon the entire entrepreneurship process (Malecki, 2018). This included the willingness and ability of nascent entrepreneurs to start a venture based on their ability and find the needed venture capital and finally, their ability to structure an exit from the business (Stam, 2015).

Some of the works that led to the conceptualization of an 'entrepreneurial ecosystem' or 'environment' described the influence of social and regional economic factors in the entrepreneurship process (Spigel and Harrison, 2018; Stam and van de Ven, 2019). These studies and movements led to a de-centralised focus from the individual entrepreneur as the solitary locus of value creation. Thus, a new contextual perspective emphasised the significant positioning of the entrepreneurial activity within the wider perspective that incorporated the temporal, organisational, market, social and spatial dimensions of the context (Zahra, Wright and Abdelgawad, 2014). Even though researchers and policymakers have become more sensitive to some contextual aspects of entrepreneurship such as the location, often the context of entrepreneurship is "taken for granted, its influence underappreciated or...controlled away" (Welter and Smallbone, 2011, p. 173-174). Various studies have attempted to define entrepreneurial ecosystems. The differentiation of the entrepreneurial ecosystem from a business ecosystem has been argued, the latter being a view through which people understand the manner in which economic communities' function (Demil, Lecocq and Warnier, 2018; Guerrero, Liñán and Cáceres-Carrasco, 2020).

Such a concept applies to entrepreneurship because the distinction between these two is that business remains linked with established firms, rather than entrepreneurial ventures and startups. Based on a perspective informed by geography, Vogel (2013, p. 446) defined entrepreneurial ecosystems as comprising "an interactive community within a geographic region, composed of varied and interdependent actors (for example, entrepreneurs, institutions and organizations)

and factors (for instance, markets, regulatory framework, support setting, entrepreneurial culture), which evolves over time and whose actors and factors live and interact to promote new venture creation". Mason and Brown, (2014) define an entrepreneurial ecosystem as a set of potential and existing entrepreneurial actors (such as processes, organisations and institutions) that come together, informally or formally, either to facilitate, connect or govern the performance within the local entrepreneurial environment. Acs, Autio and Szerb, (2014) consider entrepreneurial ecosystems as closely related to other systems of entrepreneurship that focus on innovation.

According to Stam (2014), entrepreneurial ecosystems involve networks, institutions and cultures that grow within a given region over time. Moreover, it does not depend upon the global market trends as it is largely shaped by internal forces and actors. Thus, entrepreneurial ecosystems are considered as the source of entrepreneurial activity, or rather, as the process through which potential entrepreneurs innovate to create business opportunities (Stam, 2014). Tsvetkova (2015) considers entrepreneurial ecosystems as the source of productive entrepreneurship. Productive Entrepreneurship can be defined as a set of entrepreneurial activities that yield a direct or indirect net output of the economy or improve the capacity for producing additional output. Further, Sheriff and Muffatto, (2015) defined an entrepreneurial ecosystem as an integration of two both complex and wide multidisciplinary concepts. This complexity and broad nature render the realisation of a comprehensive and precise definition of entrepreneurial ecosystems both elusive and challenging. Despite this challenge, previous literature presents us with several definitions. For example, Temko (2009) portrayed entrepreneurial ecosystems as systems that are responsible for promoting informal and formal structures and affiliations among institutions of research, private, government and public businesses and institutions. These affiliations subsequently form a scaffolding upon which ideas develop into businesses at infancy. Usually, there are expectations that most of these embryonic ventures will evolve into well-developed firms that may develop into large firms with options of going public or being incorporated into bigger

established organisations (Temko, 2009). Thus, an entrepreneurial ecosystem is essential in developing a platform where new ventures develop into big firms.

Alvedalen and Boschma (2017) identify the gaps in the literature of entrepreneurial ecosystems with a lack of comparative approaches to other systems and a static approach rather than an evolutionary one to further define the concept. Looking at a business ecosystem as a metaphor could be helpful in disambiguating the concept of business networks and could prove worthwhile in applying creative thinking when assessing such business networks (Anggraeni, Hartigh and Zegveld, 2007). Such a concept resembles and applies to entrepreneurship because the distinction between these two is that business remains linked with established firms and on the other hand, entrepreneurship majorly entails the founding of new ventures based on new opportunities as per the need and requirements of the target market (Sheriff and Muffatto, 2015). Blessing, Mekemson and Pistrui (2008) defined entrepreneurial ecosystems as a means through which individuals link up by commitment, vision, innovation and passion for the realisation of a shared objective. According to Qian, Acs and Stough (2013), this definition draws support from the fact that industrial systems in a region can be regarded as industrial ecosystems, as it has similar characteristics as the national industrial system. Based on a similar geographic view, Vogel (2013) defined entrepreneurial ecosystems as comprising “an interactive community within a geographic region, composed of varied and interdependent actors (that is, entrepreneurs, institutions and organizations) and factors (that is, markets, regulatory framework, support setting, entrepreneurial culture), which evolves over time and whose actors and factors coexist and interact to promote new venture creation”. Mason and Brown (2014) adopted a more all-encompassing definition of entrepreneurial ecosystems, describing them as a:

*“...set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organisations (that is, firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and procedures (such as the business birth rate, numbers of high growth firms, levels of ‘blockbuster entrepreneurship’, number of serial*

*entrepreneurs, degree of sell-out mentality within firms and levels of entrepreneurial ambition) which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment.”*

Even though these definitions are neither conclusive nor universally accepted, they point towards the existence of interdependent yet sophisticated connections. Such connections are crucial for cultivating and assisting the effective operationalisation of entrepreneurial ecosystems within societies (Owoade, 2016). The literature identifies a number of models pertaining to entrepreneurial ecosystems. In recent years, a particularly influential approach has been developed by Daniel Isenberg at Babson College. He has started to articulate what he refers to as an ‘entrepreneurial ecosystem strategy for economic development’ (Isenberg, 2011). Such an approach constitutes a novel and cost-effective strategy for the development of a better entrepreneurial environment within a region (Isenberg, 2011). Furthermore, the entrepreneurial ecosystem is an approach that stimulates economic prosperity and becomes a potential requirement for the successful deployment of innovation systems, knowledge economy, national competitiveness policies or cluster strategies (Isenberg, 2011).

Nonetheless, the composite definition by Mason and Brown (2014) implicates the need for institutions in enabling formal information that is conjoining, mediating and governing performance in the local environment. The study identifies Entrepreneurial ecosystems as a combination of several blocks, first, one being actors of entrepreneurship also referred to as entrepreneurial actors. These actors could be existing or potential ones. Another aspect includes organizations like firms, venture capitalists, angel funds, and more. These aspects play an important role in the ecosystem. Institutions also play an important role, for example, universities and skill development centres aid the skilling of labour in a region. However, Mason and Brown (2014) clarify that the use of the term ‘local’ in the definition remains ambiguous to the researcher. For instance, as to whether the researcher wants to refer to the local entrepreneurial environment or to a country (that is, Oman) or a region (that is, Gulf

Arabia) and so on. In fact, Mason and Brown (2014) acknowledged that entrepreneurial ecosystems may be industry-specific or may evolve from one industry to scope across several other industries. In other words, they are geographically unbound within a regional scale. Although the definition by Mason and Brown (2014) is adopted for the purposes of this study. The study intended to use the terms country, or region replacing the term local to expand my study's scope of entrepreneurial ecosystems. Table 2 summarizes key definitions pertaining to entrepreneurial ecosystems that shed light on the changing historical perspectives of the existing literature and reported systematically.

*Table 2 Table of definitions for entrepreneurial ecosystems*

| Authors         | Definition term                                                                                                                                      | Key components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Isenberg (2011) | <ul style="list-style-type: none"> <li>- Entrepreneurial ecosystem strategy for economic development</li> <li>- Entrepreneurial ecosystem</li> </ul> | <ul style="list-style-type: none"> <li>- An approach that constitutes a novel and cost-effective strategy for the development of a better entrepreneurial environment within a region.</li> <li>- An entrepreneurial ecosystem is an approach that stimulates economic prosperity and becomes a potential requirement for the successful deployment of innovation systems, knowledge economy, national competitiveness policies or cluster strategies.</li> <li>- The domains within the entrepreneurial system are the availability of appropriate finance, a favourable culture, supportive leadership and policies, quality human capital, markets venture friendly and a variety of institutional supports.</li> </ul> |

| Authors                         | Definition term            | Key components                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vogel<br>(2013)                 | Entrepreneurial ecosystems | <ul style="list-style-type: none"> <li>- An interactive community within a geographic region, composed of varied and interdependent actors (such as entrepreneurs, institutions and organizations) and factors (such as markets, regulatory framework, support setting, entrepreneurial culture), which evolves over time and whose actors and factors live and interact to promote new venture creation.</li> </ul>                    |
| Mason<br>and Brown<br>(2014: 5) | Entrepreneurial ecosystems | <ul style="list-style-type: none"> <li>- "...set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organisations, institutions, and procedures, which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment"</li> </ul>                                                                                                    |
| Stam<br>(2015)                  | Entrepreneurial ecosystems | <ul style="list-style-type: none"> <li>- Entrepreneurial ecosystems involve networks, institutions and cultures that grow within a given region over time and it does not depend upon the global market trends.</li> <li>- Entrepreneurial ecosystems are generally considered as the source of entrepreneurial activity, or as the process through which potential entrepreneurs innovate to create business opportunities.</li> </ul> |

| Authors          | Definition term            | Key components                                                                                          |
|------------------|----------------------------|---------------------------------------------------------------------------------------------------------|
| Spigel<br>(2015) | Entrepreneurial ecosystems | Complex structures that are positively dictated by individual-level action and socioeconomic influences |

### 2.2.1 Conceptualization of entrepreneurial ecosystems

Bosma, Stam and Wennekers (2012) expanded on the differences regarding the ways in which entrepreneurship is viewed across different countries and regions based on their state of development. In the context of the study, this is highly useful as the societal acceptance and impact of entrepreneurship and the entrepreneurial ecosystem varies. It is different between highly developed economies and a country like Oman. Bosma et al. (2012) found that academics and institutions in most developed countries feel discouraged due to the rise of modern self-employment ventures and start-ups within their own populace. It is popularly stated that there are economies that negatively affect innovation while still reaping the benefits of innovations either imported or developed earlier. According to Stam (2014), the Entrepreneurial Ecosystem is a combination of three different factors including the framework, the systemic conditions and finally the impact these can have within the society and entrepreneurship or also in terms of the value creation potential. Bell-Masterson and Stangler (2015) state that the health of an entrepreneurial ecosystem of a country is generally measured using four different indicators including density (an effort to assess how many firms are in a region), diversity (along both economic and demographic dimensions), fluidity (the processes by which a resource becomes more and more efficiently deployed), and connectivity (whether and how entrepreneurs, investors and others in the market ecosystem interact).

It has been observed that the elements of the frameworks and the systemic conditions are considered a crucial aspect. Moreover, for getting accurate results, the proper functioning of an Entrepreneurial environment should be maintained. However, as concepts like *demand and culture* remain in the frameworks, the relevance of these to the Entrepreneurial Ecosystem remains limited to only certain geographical

boundaries (Stam, 2014). As a general consideration, all existing opinions and definitions about entrepreneurial ecosystems are reasonable and have a general notion stating that the entire chain regarding an entrepreneurial process begins with an idea and ends with value-creating potential (Hill et al., 2018). It has also been found that economic policies also serve as significant parameters for entrepreneurship (Ács et al., 2014). For example, labour productivity and the employment status of a country impact the ecosystem of entrepreneurship, especially in the context of an improved income and a promise of better well-being are potential catalysts in the process. Similarly, culture could be one of the reasons for a slow process of entrepreneurship, if value generation is the desired outcome.

Shwetzter, Maritz and Nguyen, (2019) has defined entrepreneurial ecosystems with a focus on key influences and driving forces. The eminent focus in the entrepreneurship literature has consequently shifted to managerial, leadership, and policy effects. There is a formidable gap regarding the influences and context of these critical factors that are identified through the grounded theory approach. Consequently, the following review expands on these contributors in the context of entrepreneurial ecosystems' development and enhancement.

### 2.3 Entrepreneurial ecosystems and comparisons to other structures

The concept of the entrepreneurial ecosystem is closely related to concepts such as clusters, industrial districts and innovation systems. All these concepts focus on the external business environment within which the entrepreneurship process takes place (Stam and Spigel, 2016). These concepts represent the forces that can contribute towards the competitiveness of the overall firm even though they are beyond the borders of a firm but within the boundaries of a region. In 1920, Marshall developed the concept of an industrial district. The industrial district emphasised the division of labour of an industry at the local level. It also strategically emphasized the interaction between various communities of people and populations of organisations that exist within the same socio-territorial entity for a successful international market (Stam and Spigel, 2016).

The cluster approach focuses mostly on the geographical constitution of interconnected firms, service providers, specialised suppliers, associated institutions and businesses in the same industry or specific fields that compete as well as cooperate amongst themselves (Stam and Spigel, 2016). Cluster theory constitutes long detached localisation economies as well as agglomeration economies. This also engenders traceable benefits by being within one environment full of additional firms within one market where collaboration and knowledge sharing could occur (Shen, Zhao and Wang, 2018). Knowledge-sharing and collaboration are more significant to entrepreneurs that gain the benefits of a business environment that are tailored to their specific needs. Such benefits may be useful, especially in situations, where they might still be unaware of what these needs might be or how they may best be accommodated” (Maskell, 2001, p. 933 in Spigel, 2017).

On the other hand, there are clear points of comparison between entrepreneurial ecosystems and clusters. Clustering enables organizations and firms to come together and helps them to complete the target. Moreover, completing target and work with a huge organization that deals with the same type of goods and services, in turn, increasing their revenue even on the occasions of market share taking a hit. Smaller companies can also collaborate with large companies that are making more profit and located within the same location. Apart from this, the companies might also deal in the same supply chain or industry. Thus, they might benefit from cooperating with each other in serving bigger clients and learning from the production techniques of each other (Rigby and Brown, 2015).

However, this does not necessarily apply to all entrepreneurial ecosystems. This is because entrepreneurs have a higher likelihood of sharing a fundamental technology like computer coding as opposed to a common market or clientele (Spigel, 2015). This makes entrepreneurial firms more likely to compete with one another in search of a larger market share, often leading to intense price battles making pricing strategies differential factors. However, there are also instances where such battles led to smaller innovations in the form of additional features to the products these firms sell. Indeed, entrepreneurs could share knowledge concerning the challenges associated

with developing innovative ventures. Moreover, the presence of numerous entrepreneurs within a region is useful in building up support structures like an investor, mentor, and advisor networks while in the case of the middle-eastern region there is a scarcity of such resources especially in the case of Oman. The benefits of entrepreneurial ecosystems are mainly related to the resources specific to the process of entrepreneurship. Examples of these resources include financing and start-up cultures as opposed to other kinds of industrial benefits identifiable in clusters that grow to firms of varying ages and sizes (Spigel, 2015).

The Regional Innovation Systems (RIS) approach pertains to the institutions and networks that link hubs that produce knowledge such as research labs and universities within an innovation firm or a region (Asheim, Grillitsch and Trippl, 2016). The linkages created by such Regional Innovation Systems (RIS) enables the creation of an environment for knowledge sharing between various firms. Thus, this will help to increase the overall innovativeness of a region. Innovation system theory and cluster theory offer important clues concerning the manner in which these resources develop and flow among firms (Li, de Zubielqui and O'Connor, 2015). However, the underlying conditions or mechanisms available to these firms might not be similar. These two developing theories render that they are incomprehensive in addressing and explaining entrepreneurial ecosystems. Partly, this could be attributed to the fact that entrepreneurial ecosystems are still prone to numerous dynamics and finding a theory that covers all the aspects related to them could be elusive for some time (Colombelli, Paolucci and Ughetto, 2019)

There is an observable harmony amongst the entrepreneurial ecosystems' concepts, namely like Regional Innovation Systems (RIS) and networks. Each of these assumes that the main part of the competitive advantage of the firms has associations with the resources found within the region as opposed to residing in isolation within the company (Asheim, Grillitsch and Trippl, 2016). These regional resources could include access to a common regional labour pool, connections with research universities nearby, or native knowledge spillovers (Nicotra, Romano, Del Giudice and Schillaci, 2018). Nonetheless, entrepreneurial firms' plays a precise role. In addition to this, the

manner in which they profit from these externalities varies between these three concepts. These insights are essential to describe the relevance of entrepreneurship and economic outcomes. Entrepreneurs are known to have critical roles as drivers of the economy. With adequate resource allocation, employment rates, productivity, innovation are known to improve the regional growth rates of all companies. Key concepts are summarised in table 3.

*Table 3* Concepts related to the entrepreneurial ecosystem approach

|                                 | Key actors             | Key concepts                                                               | Input into the Entrepreneurial Ecosystem Approach                                                              | Key Outcome                           |
|---------------------------------|------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Marshallian industrial district | SMEs                   | Labour market pooling; services; knowledge spillovers; market competition  | Talent (labour market pooling), intermediate services (specialized goods and services), knowledge (spillovers) | Regional growth (productivity)        |
| Italianate Industrial District  | SMEs, Local government | Flexible specialization, interfirm cooperation trust (social embeddedness) | Networks between entrepreneurs and enterprises                                                                 | Regional economic growth (employment) |
| Cluster                         | Innovative firms       | Factors conditions,                                                        | Talent, finance, knowledge,                                                                                    | National/ regional                    |

|                   |                                         |                                                                                                                  |                                                                                                                          |                                                         |
|-------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|                   |                                         | demand conditions related to and supporting industries, the structure of the organization, strategy and rivalry. | physical infrastructure (factor conditions), demand, support services/intermediaries (in terms of supporting industries) | competitiveness (productivity of particular industries) |
| Innovation system | Innovative firms, a national government | Networks, inter-organisational learning system.                                                                  | Knowledge, finance, formal institutions, Demand.                                                                         | Innovation                                              |

*Source: (Stam and Spigel, 2016, p. 4)*

### 2.3.1 Contextual factors of the entrepreneurial environment

From extant literature, studies on entrepreneurship environments are generally classified into three major categories (Miller, 1983). The first category explicitly covers environmental conditions for undertaking entrepreneurship in general (García and Capitán, 2016). The second category comprises descriptive studies that investigate environmental conditions at a specific region or country or even at global levels (Huggins, Prokop and Thompson, 2017). Finally, the third category covers the role of public policy in building an efficient entrepreneurial environment. This illustrates that the development of relevant policies is essential for the development of an entrepreneurial ecosystem especially in the case of emerging economies (Ács, Autio and Szerb, 2014). In addition, entrepreneurship contexts show significant novelty because they are still in the developing phase regarding boundaries. Moreover, it

changes continuously because of the dynamic nature of the process and the actors that are involved in this process (Thomas, Passaro and Quinto, 2020). The findings of international comparative research studies concerning societies are varied at different economic development levels (Stough, 2016). Sherriff and Muffatto (2015) argued that the effective management of entrepreneurial ecosystems depends on how conducive the environment of operation is for an entrepreneur. The creation of such conducive environments for entrepreneurship necessitates the examination of the state of national entrepreneurship systems. This further assists in mapping out entrepreneurial ecosystems useful to policymakers (Sherriff and Muffatto, 2015). In this study, understanding the entrepreneurial environment of the Omani entrepreneurial ecosystem is very important, especially in the mapping process and in the identification of the entrepreneurial ecosystem policies used within the Omani entrepreneurial ecosystem.

In their definition of the entrepreneurial ecosystem, Mason and Brown (2014) emphasized the entrepreneurial ecosystems that exist in the market. Moreover, this makes the entrepreneurial ecosystem more worthy and important to understand the entrepreneurial environment. (Mitra, 2013, p. 113) identified and elaborated the entrepreneurial environment as the unification elements. Likewise, unification elements play a significant role in the growth and development of entrepreneurship. In addition to this, it includes the overall socio-economic, political and cultural factors that impact the ability and willingness of individuals or organisations to participate in entrepreneurial activities. Studies in the last few decades suggest numerous theoretical underpinnings for entrepreneurship drawn from across various disciplines (Simpeh, 2011; Pilkova, Holienka and Rehak, 2014). These theories incorporate the psychological entrepreneurship theory, the anthropological entrepreneurship theory, the resource-based theory, the economic entrepreneurship theory, the sociological entrepreneurship theory, and the opportunity-based theory (Simpeh, 2011). According to Sherriff and Muffatto (2015), the analysis of these theories presented that entrepreneurship can be viewed from either the micro or the macro perspective. Further, Kuratko, Morris and Schindehutte (2015) identified and explained that these two perspectives represent three different schools of thought based on the internal

and external locus of control. External factors contributing to the locus of control include the financial/capital, the environment and the displacement schools of thought whereas the internal factors include the strategic formulation, venture opportunity and the entrepreneurial trait schools of thought (Kuratko et al., 2015)

The entrepreneurship environment can be directly related to the entrepreneurial ecosystem concept (Sherriff and Muffatto 2015). According to Kuratko et al. (2015), the external forces can trigger unfavourable or favourable outcomes. So these favours are capable of influencing individual decisions to (or not to) venture into entrepreneurship. Thus, an entrepreneurship environment is definable as the conditions or surroundings offered by economic, trace, sociocultural, political, virtual and physical infrastructure as well as the factors that affect the ability and willingness of an individual to venture into entrepreneurship (Abimbola and Agboola, 2011). Thus, management of an entrepreneurial ecosystem requires a favourable environment for the continuous development of innovative solutions to potential opportunities within a region. Pietrzak et al., (2017) in their study aimed at understanding the context within which entrepreneurial ecosystems take place, i.e., the entrepreneurial environment. It specifically considered a domain of regions, countries and organisations as opposed to only focusing on individuals. The findings of the study illustrated that the social, demographic, financial and political framework for the region is key in accessing the potential of the region for the development of an entrepreneurial ecosystem as a whole. It is understood that for such a situation to thrive, it must be accepted across all sectors. Problems of the society and the region are often associated with entrepreneurship targeting. Thus, these regions, countries, and organisations are usually holding environments with an abundance of entrepreneurial resources and opportunities that increase in variety and quantity (Kritikos, 2014).

### 2.3.2 Critical elements of entrepreneurial ecosystems

Isenberg (2010) defines the concept of the entrepreneurial ecosystem as a feature of both the individual and institutional attributes that either promotes or discards the inclination of the entrepreneurs towards to proceed with the outcome or risk in

success or failure. Bell-Masterson and Stangler (2015) highlighted that from the 1980s and 1990s, essential arguments about entrepreneurial ecosystems. These arguments diverted entrepreneurship studies away from personality-based and individualistic research to a broader perspective. Such an individualistic research perspective integrated the role of economic, cultural and social forces in the entrepreneurship process. Based on this perspective, Isenberg (2011) developed the six domains of the entrepreneurial ecosystem namely: venture-friendly markets for products (markets), enabling policies and leadership (policy), a conducive cultural setting (culture), quality human capital (human capital), availability of appropriate funding (finance), and a range of institutional and infrastructural supports (supports). The classification of the entrepreneurial ecosystem has been developed by the National Survey Experts (NES) under the Global Entrepreneurship Monitor (GEM) survey. It classifies nine entrepreneurial framework conditions (EFC), that are (Isenberg, 2011):

1. *Entrepreneurial finance*: the availability of financial resources
2. *Government policy*: effective public policies that support entrepreneurship
3. *Programs*: quality programs that assist SMEs
4. *Education*: integration of SMEs creation and management into education and training system
5. *R&D transfer*: effective national research and development
6. *Commercial and legal infrastructure*: effective laws, legislations and institutions
7. *Entry regulations*: market dynamics and market openness
8. *Physical infrastructure*: access to physical resources
9. *Cultural and social norms*: and the existence of social and cultural norms that promote entrepreneurship

Mack and Mayer (2016) further added about the experience, entrepreneurial ecosystems have naturally developed in spaces. Proper space is provided as this would be helpful in structuring the organization. The organization selects people of great knowledge and establishes the important figures of scientists and engineers, as these are beneficial for use. According to Mack and Mayer (2016), these foundations

(Organization) incorporate the resources of the skilful workers who begin businesses as well as knowledge institutions. Namely research universities, public research laboratories and companies involved in research and development labs. Feldman (2014) also explains that entrepreneurial ecosystems mainly focus on networks, institutions and cultures. Moreover, these are built up within a county over time rather than the presence of order within global markets. A study undertaken by Jones and Iredale (2014) found a significant and robust relationship between the socio-economic, cultural and political structures and processes and the entrepreneurial ecosystems' setting (place). This is mainly because these components change from one community/ country/region to another. Isenberg (2011) further identifies and explains six domains within the entrepreneurial system. Namely availability of appropriate finance, a favourable culture, supportive leadership and policies, quality human capital, markets venture friendly and a variety of institutional supports as shown in Figure 6 below.

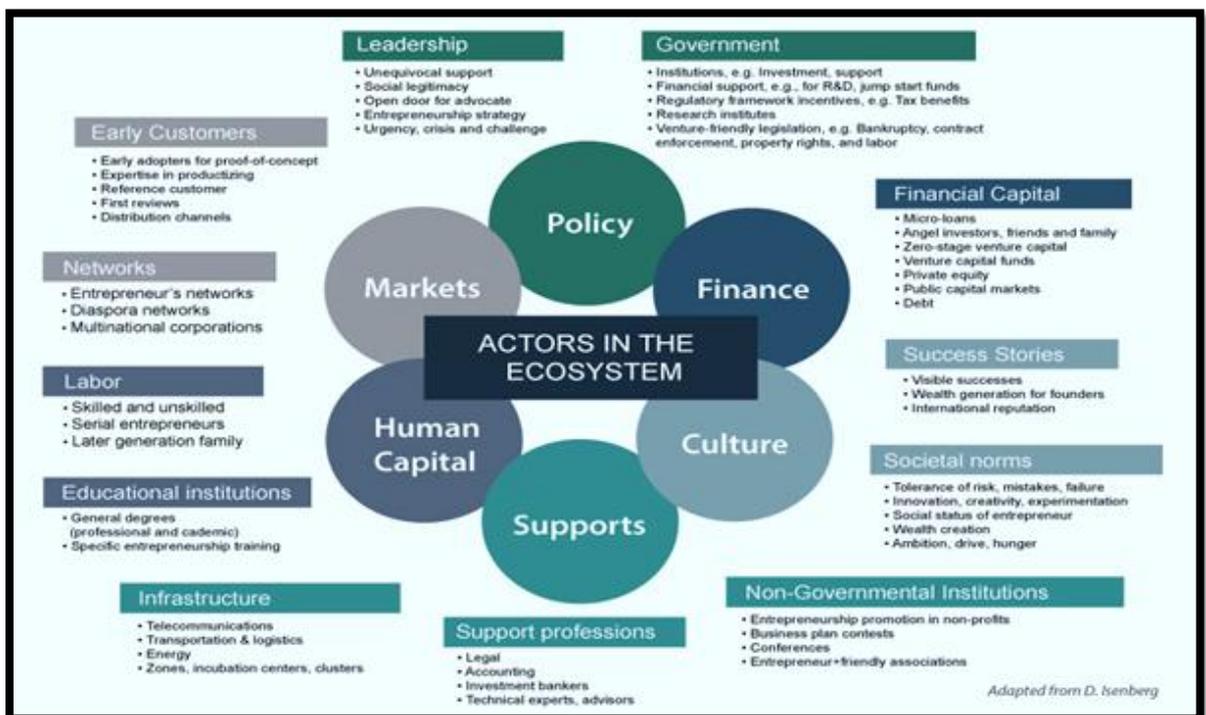


Figure 6 Domains in the entrepreneurial ecosystem (Isenberg, 2011, p. 7)

These generic domains are made up of many elements that interact in a highly complex and idiosyncratic manner. Isenberg (2011) emphasizes the role of context noting that every ecosystem arises from a distinctive set of circumstances and conditions. Isenberg (2011) also clarifies that even though entrepreneurial ecosystems are geographically bounded, they are entirely confined to a restricted geographical scale. He further gives examples of cities such as Texas, Cambridge, Austin, Boulder that were all small towns that thrived into successful cities because of the contextual entrepreneurial ecosystems that existed in these cities. Figure 7 below shows the characteristics of an effective ecosystem model.

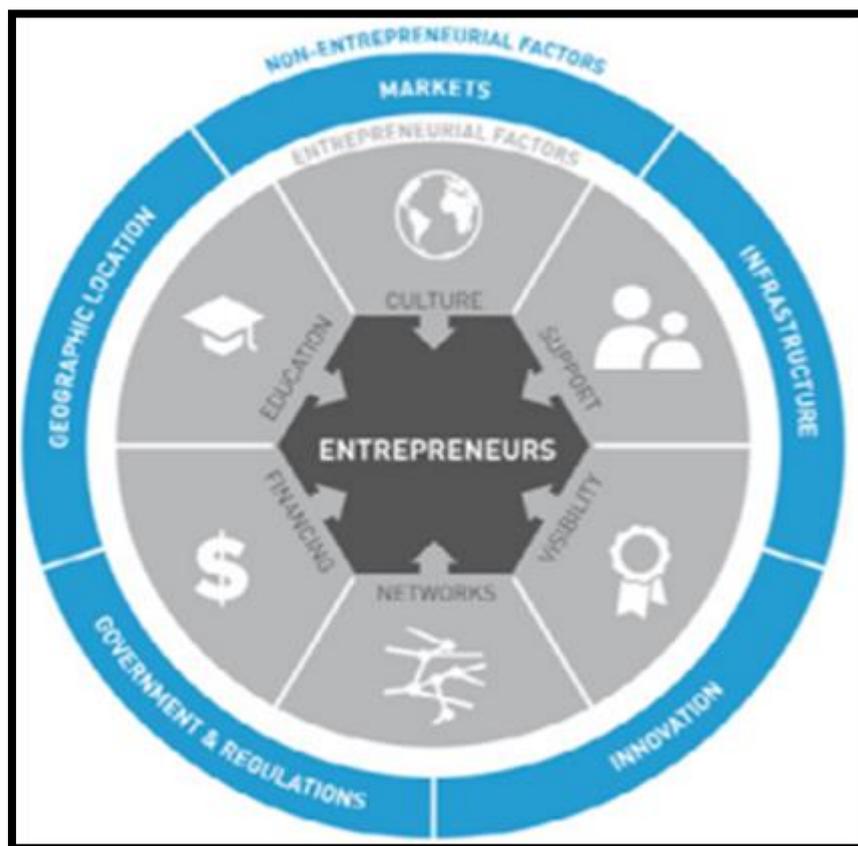


Figure 7 Entrepreneurial ecosystem elements' map

*Source: Vogel, 2013, p. 446*

Different authors and organisations list different entrepreneurial ecosystems. This outlines that the list of critical elements is considerably lengthy. For instance, Vogel (2013) observed that entrepreneurial ecosystems are similar to natural ecosystems. He accentuated that both systems wield considerable influence over entrepreneurial

activity within a given ecosystem. He argued that analogous to a natural ecosystem where there are multiple players who influence entrepreneurial activity, an entrepreneurial ecosystem also brings with it several players including firms and demographics.

Consequently, Vogel (2013) identified three overarching groups that make up an entrepreneurial ecosystem. These three overarching groups included externalities, entrepreneurship-specific, and individual-level elements. The externalities further consisted of varied elements such as the markets, regulations and governments, infrastructure, innovation and geographic location (Estrin, Mickiewicz and Stephan, 2016). These are the elements, which affect the entire entrepreneurial ecosystem of a region in general and are not limited to individuals or businesses. For instance, any business would require essential support and finance from the government in order to thrive in the market. Without this support and finance from the government, it is difficult for businesses to expand and attain stability. Likewise, such governmental schemes generally result in a better entrepreneurial ecosystem and encourage entrepreneurs to set up their own ventures.

The factors that support entrepreneurship include culture, entrepreneurial education, start-up support, entrepreneur exposure, financing, and networks (Vuorio, Puumalainen and Fellnhofer, 2018). Such factors are often available with strong connections and exposure to the entrepreneurial ecosystem. Lastly, the entrepreneurs are categorised as individual-level elements (Vogel 2013). Individual-level elements impact the soul entrepreneur and are influenced by their personal abilities.

Table 4 Different elements and sub-categories of entrepreneurial ecosystems.

| Non-Entrepreneurship-specific Level |                            |
|-------------------------------------|----------------------------|
| Government & Regulations            | Infrastructure             |
| 1. Policy framework                 | 1. Physical infrastructure |

|                                                            |                                                     |
|------------------------------------------------------------|-----------------------------------------------------|
| 2. Immigration & labour law                                | 2. Educational institutions (that is, universities) |
| 3. Property rights                                         | 3. Energy, telecom & ICT                            |
| 4. Freedom of people                                       | 4. Transport & logistics                            |
| 5. Regional economic development                           | 5. Workspace                                        |
| Geographic Location                                        | Innovation                                          |
| 1. Liveability in the area                                 | 1. Knowledge & skill creation                       |
| 2. Cost of living                                          | 2. Research & development                           |
| Markets                                                    | 3. IP                                               |
| 1. Customers (including beta users and early adopters)     | 4. Published scientific papers                      |
| 2. Competitors                                             | 5. Technology transfer                              |
| 3. Distribution channels                                   | 6. New processes and methods                        |
| 4. Suppliers                                               |                                                     |
| 5. Large corporations (as customers or strategic partners) |                                                     |
| Entrepreneurship-specific Level                            |                                                     |
| Financing                                                  | Support                                             |
| 6. Accelerators                                            | 6. Accounting & legal                               |
| 7. Business angels, FFFs, VCs                              | 7. Mentors & coaches                                |
| 8. Debt                                                    | 8. Experts & consultants                            |

|                                         |                                                              |
|-----------------------------------------|--------------------------------------------------------------|
| 9. Micro Financing                      | 9. Export support                                            |
| 10. Private equity                      | 10. Labour & talents                                         |
| 11. Loans & grants                      | 11. Information hubs                                         |
| 12. Smart capital                       | 12. Cluster / Tech Parks                                     |
| 13. Crowd-funding                       | 13. Foundations                                              |
| Culture                                 | Education                                                    |
| 6. Mindset, ambition, drive, creativity | 1. Entrepreneurship degree                                   |
| 7. Role models                          | 2. Skill training & certificates                             |
| 8. Self-promotion skills                | Networks                                                     |
| 9. Social status of an entrepreneur     | 1. Formal networks: organizations, institutions              |
| 10. Tolerance of failure & risk         | 2. Informal networks: friends, families, colleagues          |
| 11. Tolerance towards success           | 3. Entrepreneurship associations & organizations             |
| Visibility                              | 4. Group networks (that is, women entrepreneurship networks) |
| 7. Events & meet-ups                    |                                                              |
| 8. Conferences                          |                                                              |
| 9. Startup awards/labels                |                                                              |
| 10. Startup-related internet portals    |                                                              |
| 11. Media/newspapers                    |                                                              |
| Entrepreneurial Actors                  |                                                              |

| Entrepreneurs           |
|-------------------------|
| 1. Novice entrepreneurs |
| 2. Serial entrepreneurs |

World Economic Forum (WEF) (2014) acknowledged that entrepreneurial ecosystems around the world vary considerably in terms of their length and breadth. This is due to the extensive differences in external factors such as demographics and economic conditions. Consequently, the World Economic Forum (2014) discussed eight pillars as constituent components underpinning the scaling and starting of early-stage firms from an entrepreneurial perspective. The WEF report was based on an online survey administered in two phases involving more than 1,000 entrepreneurs and executive case studies. The survey included responses to standardised questions from senior executives and founders of 43 companies that were still in their early stages of entrepreneurial ecosystems (World Economic Forum, 2014). These pillars include accessible markets, finance and funding, human capital, support mentors/systems, regulatory and governance framework, training and education, major universities serving as catalysts and cultural support (Stam and Spigel, 2016). However, the World Economic Forum (2014) explicitly listed accessible markets, finance and funding, and human capital as the key pillars.

Concerning accessible markets, the World Economic Forum (2014) describes their importance by arguing that for-profit firms depend on customers that pay revenues. This is justified by the fact that for a region with a large number of customers paying higher revenues, there is a higher likelihood for entrepreneurs to make a profit. This was supported by the view that entrepreneurship also sometimes thrives by increasing and discovering newer markets. The World Economic Forum (2014) listed the domestic and foreign markets where governments, huge corporations, and SMEs assume customer roles as the elements of accessible markets. The elements of finance and funding include access to debt, family and friends, private equity, angel investors, and venture capital. These upper elements offer an advantage to start-ups and enable them to scale faster yet more sustainably. Finally, the human capital pillar comprises

technical and management talent, outsourcing availability, entrepreneurial firm experience and immigrant workforce access (World Economic Forum, 2014). These elements of human capital acknowledge the heterogeneous nature of human capital resources that could impact the extent and speed of firm growth (Balasingham, J. and Olsen, 2014; World Economic Forum, 2014). Stam and Spigel (2016) also classified the critical attributes of the entrepreneurial ecosystem into three main levels including material attributes, social attributes and cultural attributes as shown in the figure below.

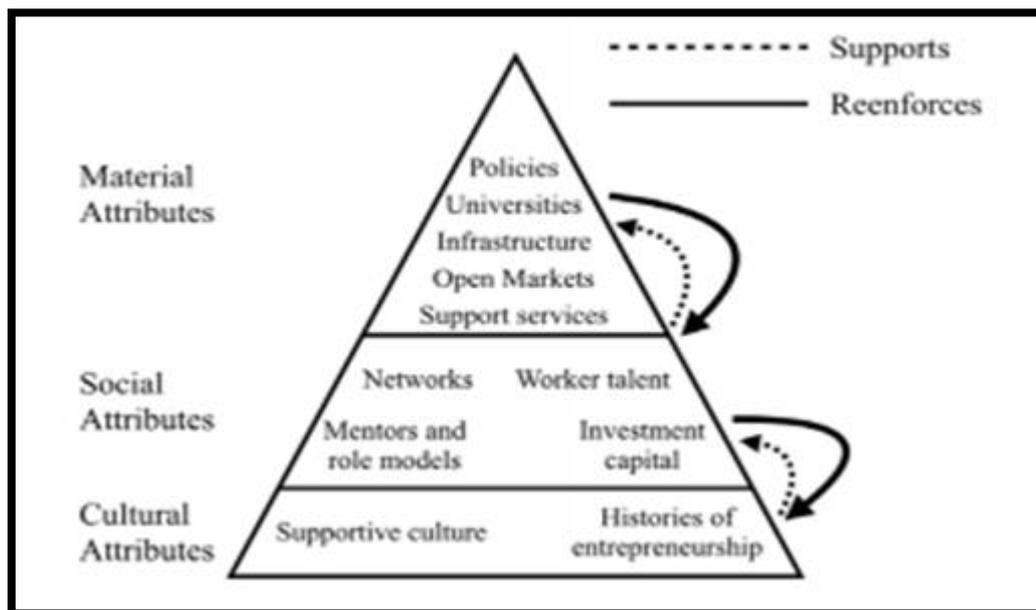


Figure 8 Elements of the entrepreneurial ecosystem

*Source: Stam and Spigel, 2016, p. 8*

The material attributes include policies, infrastructure, open markets, support services and universities (Stam and Spigel, 2016). The social attributes incorporate networks, investment capital, mentors/role models and worker talent (Spigel, 2015). The third classification is the cultural attributes and it includes supportive culture and histories of entrepreneurship (Stam and Spigel, 2016). Isenberg (2011) also identified nine key elements of entrepreneurial ecosystems, namely, government policy, culture, infrastructure and regulatory framework, markets, human capital, education &

training, universities, mentors/advisors & support systems and funding & finance as shown in the diagram below.

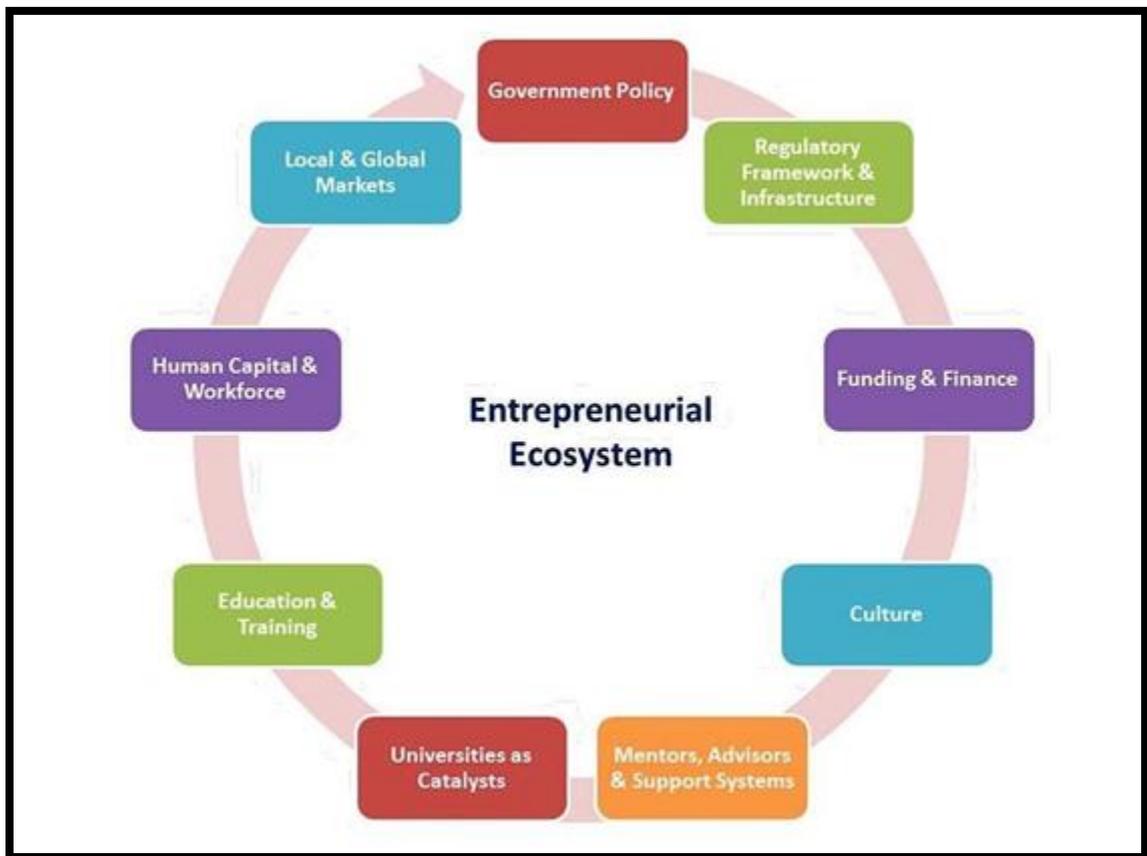


Figure 9 The nine elements of entrepreneurial ecosystem

*Source: Mazzarol, 2014, p. 9*

From the models provided by Spigel (2015), Vogel (2013) and the World Economic Forum (2014), different attributes and classifications of entrepreneurial ecosystems are presented. While there is no standard strategy for the development of entrepreneurial ecosystems, the fundamental attributes are strongly embedded across different theoretical underpinnings. It is clear from the review that these three taxonomies of classifying the elements of entrepreneurial ecosystems have similar traits. First, the role of regulations and government, markets, human capital and financing/funding features in all the models. Second, mentors, networking and cultural aspects are also emphasised in these models. Third, all the taxonomies

recognize the misplaced obsession with SMEs and start-ups in conventional ecosystems. Fourth, the key stakeholders including actors, institutions, and processes are all emphasized across these taxonomies. Fifth, all the taxonomies focus on the connectivity between various elements within the ecosystem. Finally, the contribution of large firms is downplayed across the three taxonomies. Certain taxonomies emphasize different elements contributing to the entrepreneurial ecosystems. Given the focus on the role of government policies (Vogel, 2013) and culture (Spigel, 2015) in the entrepreneurial ecosystems, these attributes are discussed further in this review. Admittedly, the role of the local entrepreneurial context is not paid too much attention in entrepreneurial ecosystem taxonomies. However, spatial boundedness does have some connotations for entrepreneurial ecosystems.

Stringfellow and Shaw (2009) identified and summarized the concept of entrepreneurial capital into three forms: Social, Economic and Personal. The study stated that the amount and the distribution of each for a person generally determine the propensity of starting a new business and the growth of the business. Economic capital can be defined as the amount of cash and assets for an individual or a company that can directly be converted into money. The second important element, social capital can be termed as the social and business networks where entrepreneurs are corporate. Entrepreneurs use it in order to obtain key information and support for their decisions in order to grow their businesses. The third aspect of personal capital comprises all the attributes that influence the entrepreneurial mindset of an individual. Personal capital primarily comprises cultural and background traits. The importance of cultural capital lies in the aspect of sharing knowledge, values and traditions through family connections and formal education.

Klapper and Parker (2011) provide outlined how access and usage to finance and capital is a major barrier for businesses to start and grow, primarily in the case of women entrepreneurs. It is a common understanding that access to finance is the primary requirement for the growth of any business. This is particularly important for entrepreneurial businesses as these are generally associated with high initial costs. In most cases, entrepreneurs don't have the personal wealth to support these. This is

primarily led by the gender wage gap between men and women in Middle Eastern countries making women less capable of taking financial burdens. This is also supplemented by the selective segregation of the labour market ensuring that women gain lesser work experience and garner fewer skills than their male counterparts (Arenius and Kovalainen, 2006). Using a theoretical gender framework and evidence, Marlow and Patton (2005) identified that self-employed women are at a disadvantage given certain barriers and impediments. Thus, the theoretical framework showcases that they have limited availability and access to formal and informal business sources compared to their male counterparts. Additionally, women face more challenges in raising capital from all sources such as venture capital and angel investment. Marlow and Patton (2005) also found that there is a lesser extent to which women take risks. Therefore, making them less likely to take credit from banks and other financial institutions.

#### 2.3.2.1 Global Entrepreneurship Index:

Entrepreneurship is a critical part of the economy because it enhances innovation, job creation, and productivity. According to the Global Entrepreneurship and Development Institute, the process of success is not existent in a vacuum but is reliant on geography. Moreover, from the context of the geography that defines their local and national contexts (Bosma and Kelley, 2019). Therefore, the institute created the Global Entrepreneurship Index (GEI) helps in measuring the health of the environment and ecosystem that entrepreneurship operates in. The annual index measures and ranks the performance of 137 countries in terms of how their ecosystem allows an enterprise to operate in a local and international context. The data for the GEI is gathered from the abilities and aspirations of the population and compared against the economic and social infrastructure.

## 2.4 Approaches to the effective management of entrepreneurial ecosystems:

### 2.4.1 Management of entrepreneurial ecosystems

Autio and Levie (2017) aimed at understanding the impact of management and policy framing on entrepreneurial ecosystems. The study strategically suggested that there

is a gap in understanding of the working of entrepreneurial ecosystems and the associated policy challenges. Therefore, a framework was developed based on insights from the ecology of the economics community governance. The framework was conducive to provide the guidelines for the management of an entrepreneurial ecosystem. Stronger engagement of stakeholders results in more effective implementations of policy initiatives and thereby, resulting in the development of environmental ecosystems. Cunningham, Menter and Wirsching (2019) examined the importance of the micro-level interactions in entrepreneurial ecosystems. The managerial aspects of entrepreneurial ecosystems often pay close attention to macro-level factors. However, in contrast to this, Cunningham et al. (2019) emphasized the importance of a micro-level principal investigator approach. Colombo, Dagnino, Lehmann and Salmador (2019) in their study, analysed the governance of the entrepreneurial ecosystem in a corporate, local, and national context. The researchers focused on how the ecosystem can be used to create technologies, products, ideas, and innovations. The study brings forth a more defined ecosystem in entrepreneurial culture to enhance the management. It outlines that this can be achieved by identifying the right stakeholders such as the entrepreneurs themselves and small firms and how they interact with others,

Isenberg (2010) suggests that many governments offer incentives to the Small Medium Enterprises in attempts to improve the economy. However, the domain of policy framing and its relation to an entrepreneurial ecosystem isn't solely limited to the government as there must be equal participation from the private sector as well through a set of deregulatory processes (Prodan, 2007). The private sector has a natural tendency to venture towards profit-oriented markets; therefore, by segmenting the markets in such a manner as to bring in more private players, the government can make a contribution towards the success of the entrepreneurship ecosystem (Feld, 2012).

Sharma (2018) provided a study with the objective of understanding how innovation is managed in the case of the micro, small and medium-sized enterprises (MSME), particularly in the Middle Eastern regions. It is widely understood that for a sustainable

growth in the economy, there needs to be a focus on innovative practices and building a positive culture for innovation to thrive. Braunerhjelm, Acs, Audretsch and Carlsson (2010) states that for growth to exist, it is driven by factors like production and the efficiency of allocation of resources across all the economic activities. Lafley and Charan (2008) argue that innovation is a key essential ingredient in bringing production into profit. It is found that even though MSMEs suffer from small investment capacities and limited R&D reach, they still are the backbone for the development of innovation primarily due to their entrepreneurial abilities. It is found that SMEs often rely on opponents and competition regarding innovations and new approaches to business (Karaev, Koh and Szamosi, 2007). Kantur(2016) studied the influential factors of industrial and firm-level on entrepreneurship.

In Middle Eastern countries, there is a significant barrier to the mushrooming of MSMEs. Djeflat (2002) identified that these challenges often result due to a lack of relevant skills on the part of the entrepreneur, improper access to markets, lack of a proactive system of culture and finally due to the extensive competition faced by larger enterprises. However, in the Middle Eastern region, most of the innovation is incremental in nature. Thus, such innovation is said to occur in a developmental fashion over the older system. It is found that innovation happens in uncertain environments and is often associated with uncertain results as well. For its proper nurturing, there needs to be an optimum mix of R&D, organizations, leadership and a fair allocation of resources.

#### 2.4.2 Ecosystems governance across MENA region and cultural contributors

Samadi (2018) highlights the effect of different factors influencing entrepreneurship, particularly in the Middle Eastern countries, highlighting the institutional factors in detail. The study emphasizes a bidirectional relationship between institutions, which facilitates the development of a positive entrepreneurial ecosystem, and entrepreneurs who have an important role in the process of institutional change. Many studies highlight the contradiction within Middle Eastern countries, though recognized as high-income countries resulting in a higher potential of growth and side by side, are also home to poor quality institutions and state corruption. Such countries

are also associated with a poor property rights status leading to the lowering of entrepreneurial avenues. (Fuentelsaz, Gonzalez, Maicas and Montero, 2015) emphasize the effect of institutional factors in entrepreneurship, particularly in an opportunity and necessity driven context.

Samadi (2018) summarised stating the different types of environments including legal and economic that individually affect entrepreneurship in society. The study comprehended the impact of terrorism in business environments and particularly entrepreneurship. It highlighted that there exists a strong correlation between security and the business environment. The findings of the study shed light on the notion of the threat imparted by terrorism has an impact on the business ecosystem, especially at an international level. It was found that due to terrorism, in some of the countries, there is an increased uncertainty related to political and economic stability leading to isolation from other parts of the world. This directly impacts the two fundamental backbones for the mushrooming of any business namely Global trade and foreign investment. Thus, the prevailing political uncertainty and terrorism-related to the Middle Eastern Region is brought with it a retarding potential for the blossoming of entrepreneurship in these regions. Bouranta, Chitiris and Paravantis (2009) also highlight the various socio-economic impacts of terrorism and terrorist actions, especially in the Middle East. Moreover, it has been developing in the countries of the Middle East. Suder (2004) states that terrorism influences business and entrepreneurship opportunities across all levels and it imposes a great number of impediments and thus increases all transaction costs. The World Terrorism Index (2017) states that the economic cost associated with terrorism has increased to 10 times in the last 14 years since 2000.

Further, Forouharfar, Rowshan and Salarzahi (2018) in their study provides a strategic model that takes into account the views pertaining to social entrepreneurship in concern to the various governments in the Middle East for the public sector. It was channelized through the findings that the Middle East is one of the most socially and culturally vulnerable parts of the world. As a consequence of this, it can be accentuated that it requires a tailor-made strategy for its uplifting, particularly in the

domain of entrepreneurship development. Adetu (2014) stated that social entrepreneurs are the primary change-makers within a society. He highlighted that social entrepreneurs shape social values based on their perceptions, observation, and actions. Thus, one strategy is to position the governments in these countries as social entrepreneurs.

Davari, Emami, Ramadani and Taherkhani (2018) identified and elaborated the eight different factors, which are driving force for the entrepreneurial ecosystem particularly in the Middle Eastern region. The factors included social aspects like the culture prevailing in these societies. A major factor, which influences entrepreneurial activities within a society, is making the various methods, which are included in the building and running of an entrepreneurial cycle socially and culturally acceptable (Yuko, 2009). The greatest example displaying the impact of culture and particularly in the historical context for entrepreneurship can be derived from regions like the Silicon Valley and Boston (Saxenian, 2018). These regions exemplify how a positive attitude and culture within the society towards entrepreneurship and risk-taking has the potential to build success stories. Features like the tolerance level within the society for risk and failure. Moreover, the presence and the spread of local success stories and the promotion of self-employment acts as a means to succeed towards the building of a positive environment towards entrepreneurship and innovation. For an overall increase in the entrepreneurship scale, there needs to be a combined increase in all of the above factors as explained by Isenberg (2011). The impact of having local success stories from eminent entrepreneurs was studied in driving the morale of youths and the acceptance of society as a whole towards entrepreneurship.

Coduras, Velilla and Ortega (2018) outlined the strengths and weaknesses of the overall entrepreneurship ecosystem in the Middle East. In order to outline the strengths and weaknesses, the study divided the entire region into four clusters based on their geographical, economic and demographic similarities. The findings of the study revealed that the internal market dynamics was a positive factor across all the clusters. Countries like Egypt and Saudi Arabia possess a relatively positive outlook of social and cultural norms towards entrepreneurship. On the contrary, it was found

that there is a significant lag in the ecosystem in this region. This lag mainly exists due to high taxes and bureaucratic complications supplemented by poor entrepreneurship education, training and physical infrastructure. Regions like the United Arab Emirates, Qatar has a positive physical infrastructure, societal norms, R&D backbone and governmental and policy support towards a positive ecosystem for entrepreneurship. Development in these countries is hindered due to incompatible tax rates, lack of proper training and stringent regulations.

Moreover, a study conducted by Sharma (2018) aimed at identifying the challenges faced in the four key MSME sectors in the Middle Eastern context. The findings derived highlighted that they faced a major challenge in terms of shortage of technical skills among the youth. This mainly resulted due to inefficient training facilities and, in turn, often led to very high costs of local innovation. Among other challenges encountered, it was found that there was a high entry barrier, complex credit systems and inefficient procurement facilities for raw equipment which affected the businesses detrimentally. Additionally, the research also outlined how the lack of electricity is responsible for the poor business environment. Moving on, Herrera, Selim, Youssef and Zaki, (2010) through their research found that only about 8% of the lending from 130 different Middle Eastern banks ends up helping MSMEs in getting credit. This is substantially lower than the 18 per cent that is observed for most middle-income countries. The amount goes up to 22 per cent for the more developed countries. Thus, one of the major setbacks for MSME is the lack of access to financial infrastructure in these countries. To add to these issues, there is a lack of proper regulations and lending facilities with inadequate financial transparency with a scarcity of available collateral for aspiring business owners in the region.

From the government's perspective, the identification of various challenges concerning the actual use and application of entrepreneurship in the field of economic growth were identified (Khan, 2013). The ineffectiveness or the unsuccessfulness of entrepreneurs throughout the Middle East and North Africa has been a topic of increased concern (Rezaei et al., 2018). The study mainly aimed at comparing and contrasting characteristics, which are generally associated with the success of new

business ventures in the context of the Middle Eastern and the Northern African regions. The study also brought forward several demographic aspects of the regions, particularly related to the Islamic religion, and how that affected the entrepreneurship environment. For example, the position of lending and credit in the Islamic financial systems. Finally, the study aimed at developing a framework for building a set of characteristics of an ecosystem leading to the success of entrepreneurship and then using that to further develop the ecosystem particularly in the Middle East and North Africa region. The primary effort was in determining the unique needs of the students across colleges and universities in this region and to enable them towards drifting in the direction of entrepreneurship (Rezaei et al., 2018).

Stevenson (2010) studies the integration and association of private sector enterprises, with young and upcoming ones along with governmental agencies in Algeria. This has led to the opening of integrated industrial development zones or clusters in certain areas with a high concentration of existing businesses and infrastructure, with the availability of skilled personnel through universities and institutions. In Jordan, there exists a national strategy of the development of MSMEs, through the establishment of bureaus distributing private credits, which are run by both private and governmental agencies. Sharma (2018) highlights the introduction of ICT oriented teachings in schools in Jordan as a major step for bringing forward highly skilled individuals. The programme involves mass level implementation across schools and aims at training up to 60000 teachers. Because of this initiative and some similar ones, there is a large inflow of about 7000 graduates annually in the country making Jordan one of the largest IT innovation hubs in the region.

Sarfaraz et al. (2018) in their study aimed at understanding the business environment as a whole for three different countries whose demographics were similar to Oman. These countries shared similarities with Oman in terms of its culture, religion and traditional values. Thus, this study proved to be an ideal ground for studies regarding entrepreneurship in Oman. Business owners in different regions and countries are often restricted by numerous regulations that their businesses have to comply with in order to manage their businesses. Some of the more important regulatory hurdles are

studied by Sarfaraz et al. (2018). The first issue encountered is the dealing of construction permits. The key issues faced in this aspect are related to the time and cost for a business to obtain all necessary approvals along with all the procedures and methods that go along for connecting basic utilities and facilities to it. Moreover, access to credit and finance is the second major issue faced by the business. It is found that in most Middle Eastern countries similar to non-Middle Eastern countries, women have lesser access to credit than men leading to significantly lesser entrepreneurial reach for them. Socio-economic factors are another important aspect of the development of a positive entrepreneurial ecosystem in the case of developing economies. Kelley et al. (2011) highlights that there exists a gender gap in the business environment in most economies of the world. It was found that the gender gap between entrepreneurs increased in some countries and decreased in others. In some countries, the economy has positively impacted entrepreneurial ecosystem development.

#### 2.4.3 Stakeholder engagement in the entrepreneurial ecosystem

In this study, the discussion about stakeholder engagement is important because it is through stakeholder engagement that all actors actively engaged in the entrepreneurial ecosystems are networked/engaged (Autio and Levie, 2017). The main assumption in the discussion about the importance of engaging stakeholders in the management of the entrepreneurial ecosystem is that through stakeholder engagement, key actors (entrepreneurs, government, media, investors, institutions, etc.) are networked or pooled together to form networks and support systems (O'Brien, Marzano and White, 2013). Therefore, without stakeholder engagement, there would be no efficiency. For instance, if the government does not coordinate with the investors or local institutions or organisations, there is a likelihood of duplicating projects. Similarly, if the government and the entrepreneurs do not have a proper communication channel, there would be a likelihood of incorrect policies. Thus, understanding how the stakeholders are engaged in the entrepreneurial ecosystem is very important as it taps on existing resources and creates networks and support systems necessary for the efficient management of entrepreneurial ecosystems (Brush, 2014).

The engagement of stakeholders, especially those engaged in entrepreneurship at the local communities, is integral to the decision-making processes regarding the social and economic environment affecting the local, national or regional entrepreneurship, also known as the entrepreneurial ecosystem (Spigel and Stam, 2015). The evaluation of the engagement of stakeholders and key players is critical across a varying range of different socio-economic and political contexts (Autio *et al.*, 2014). In order to understand the importance of involving key actors and stakeholders in the growth of the entrepreneurial ecosystem, it is critical to revisit the concept of the entrepreneurial ecosystem.

The primary objective of fostering an entrepreneurial ecosystem depends on who the stakeholder or the actor is (Biggs, Westley and Carpenter, 2010). Further, Isenberg (2014) defines the different primary goals because various stakeholders and actors may foster entrepreneurial ecosystem growth, as summarised in the table below.

Table 5 Different objectives because various stakeholders engage in fostering an entrepreneurial ecosystem

|                                                                                                   |                                                                            |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>● Stakeholder</li> </ul>                                   | The primary objective for fostering an entrepreneurial ecosystem           |
| <ul style="list-style-type: none"> <li>● Public officials</li> </ul>                              | Fiscal health (tax revenue) and job creation                               |
| <ul style="list-style-type: none"> <li>● Banks</li> </ul>                                         | More and larger profitable loan portfolio                                  |
| <ul style="list-style-type: none"> <li>● Educational institutions such as universities</li> </ul> | Generate knowledge, get endowments from donations and develop a reputation |

|                                                                                 |                                                                                       |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Entrepreneurs and investors</li> </ul> | Wealth creation                                                                       |
| <ul style="list-style-type: none"> <li>• Corporations</li> </ul>                | Product acquisition, innovation, development of the supply chain and talent retention |

*Source: (Isenberg, 2014, p.2)*

Many actors or stakeholders should provide benefit services to the entrepreneurial ecosystem, as this helps an entrepreneurial ecosystem to be self-sustaining (Isenberg and Onyemah, 2016). To have the best decision-making team and change bringing actors. This implies that for a country to have a sustainable entrepreneurial ecosystem, various actors and stakeholders must be involved in the decision-making and change process. Since the entrepreneurial ecosystem is dynamic, there is no single stakeholder or actor that is a more important driver than the rest; the entrepreneurial ecosystem is a dynamic, self-regulating network that is composed of various actors, and this varies across different entrepreneurship hotspots (Siegel and Wright, 2015). For instance, the bankers were crucial influencers of the entrepreneurial ecosystem in Boston between the 1970s and 1980s while NGOs have been key catalysts in the entrepreneurial ecosystem in emerging markets (Isenberg, 2014). This implies that it is not always that the entrepreneurs are the key catalysts or drivers of the entrepreneurial ecosystem as these changes across various entrepreneurial ecosystem environments/settings. The literature on the concept of entrepreneurial ecosystem stresses the involvement of the various stakeholders for a sustainable entrepreneurial ecosystem. This has been cited by Stam and Spigel (2016) who outlines that the recent popular literature on entrepreneurial ecosystems is directly aimed at the key actors and stakeholders of the ecosystem. Moreover, it was found this literature especially focuses on entrepreneurial policymakers and leaders rather than an academic audience.

While defining the role of various actors and stakeholders in fostering the growth of entrepreneurship, the performance of an entrepreneurial ecosystem depends not only on the internal behaviour of the SMEs but also on the quality and quantity of interactions with external stakeholders as well as the manner in which such interactions are organised. Internal behaviour includes the level of investment in innovation, the skills of the workforce, internationalisation strategies and marketing among others. External stakeholders consist of firms, public sector organisations, investors, research institutions, etc. (Mason and Brown, 2014).

Simanis and Hart (2009) defines stakeholder engagement as a transformative process that actively creates new stakeholder behaviour, habits and identities necessary for realizing a new enterprise and strategic community intent. They further accentuate that stakeholder engagement is a change process that instils values, commitment and responsibility in relevant partners and institutions (Simanis and Hart, 2009). In their study, Autio and Levie (2017) found that policy approaches focus on the deep engagement of stakeholders. The study comprehended that key players are likely to yield better targeted, informed, and more effectively implemented policy initiatives in entrepreneurial ecosystems than would reduce the existing market and structural failures. DeFillippi and Roser, (2014) outlined through their findings that it is significant for the stakeholders and key players to engage together while operating in the entrepreneurial ecosystem. As a result, stakeholder engagement as a new solution to creating innovation and generating knowledge for sustainability.

Erina, Shatrevich and Gaile-Sarkane, (2017) examined the relationship between the entrepreneurial ecosystem and stakeholders' groups. Moore quoted that a biological ecosystem is composed of all elements that cooperate with each other while an entrepreneurial ecosystem is composed of all stakeholders related to it (Erina *et al.*, 2017, p. 146). The principles of the entrepreneurial ecosystem suggest that the entrepreneurial environment (setting) and entities (stakeholders) co-exist and reciprocally co-evolve together (Erina *et al.*, 2017). This implies that the co-operation between the various stakeholders is important not only for the development of the entrepreneurial ecosystem but also for economic growth. The emphasis on the

importance of stakeholder co-operation has been theoretically demonstrated by Michael Porter's Regional Cluster Theory. Further, even the hypotheses that geographically localised networks for entrepreneurial activities are key drivers of economic growth (Porter, 2000). The regional cluttering theory has also been empirically tested by Erina *et al.*, (2017) the finding of the results was elaborated that the regional entrepreneurial ecosystem strategy. Moreover, the entrepreneurial ecosystem helps in emphasizing the mutual relationship between various stakeholders engaged in it highly contributes to the effective designing and planning of sustainable development.

The significance of stakeholder engagement in the sustainable growth entrepreneurial ecosystem has also been practically demonstrated by some real-life case studies. One such case study is Waterloo in Ontario, where the University of Waterloo's focus on knowledge-based and applied industry-focused. The research was conducted in the 1950s helped the institution to emerge as one of the world-leading centres for electrical engineering and computer science. As a result, many students and entrepreneurs were attracted to the university and the region. Several startups in the technology industry such as the maker of the Blueberry smartphone (Research in Motion) who are based in the Waterloo region. According to Stam and Spigel (2016), it is the network of entrepreneurs, mentors, government and financiers that helped the new entrepreneurs learn the informal and formal skills associated with being a high-tech entrepreneur as well as the knowledge on technologies, markets and opportunities. Stam and Spigel (2016) explain that this effective ecosystem in Waterloo was not created overnight nor was it because of the efforts of one individual or the state, but rather, it was a collective effort that helped to strengthen and reproduce the region's overall cultural emphasis towards entrepreneurship. This shows that the entrepreneurial ecosystem intuitively evokes the acknowledgement and recognition of both the public and private stakeholders of the local, national or regional economies.

Entrepreneurial competency is another important aspect for the smooth functioning and the development of a positive entrepreneurial ecosystem in a region

(Kyndt and Baert, 2015). It is expected that competency is required in order to successfully meet and tackle demands and challenges encountered in concern to running, sustaining and developing a business. Morris et al. (2011) comprehend that the amount of competency required in the case of a positive EE varies in terms of its nature, influence and application on the various value-creation stages. As a result, it can be stated that for different regions with their characteristic social, demographic and economic conditions, the type of competency required is also different. Thus, it is essential to conduct a country-to-country comparison for independently figuring out the differences in the entrepreneurial competencies in Middle Eastern countries and other regions.

The capabilities that enable and drive business are manifold. At a primary level, they can be explained using physical attributes like the personality of the owners. However, Onwuegbuzie et al. (2009) argue that these are not enough to deal with the entire set of complex challenges a business might face. Thus, there is a need to define entrepreneurial competencies in an exclusive manner, which is not limited to personal attributes. Brinckmann, Grichnik and Kapsa (2010) bring the concept of being able to employ one's knowledge, personal characteristics, a set of skills and attitudes to effectively meet the challenges and complexities of value creation while defining the concept of entrepreneurial competencies.

Bagheri et al., (2020) aimed at exploring the competencies of owners of businesses in regions of Iran and Italy. For this purpose, the study conducted a comparative study between the owners of Iran and Italy. The study strategically focused on finding out the entrepreneurial capabilities which makes an individual capable enough to successfully manage a business and overcome all complexities and challenges that may result from the same in the case of a small and medium-size enterprise. The study was done between two countries having opposing economic conditions with Iran being a developing country and Italy being a developed one. It was found that owners in Iran were more inclined towards learning and were independent, while those from Italy had better insights.

## 2.5 Government role in entrepreneurial ecosystems

In the process of developing entrepreneurial ecosystems, the role of the government cannot be ignored. Especially in the current study, the government plays a vital role for the development and implementation of the policies for the entrepreneurial ecosystem (WEF 2014; Vogel 2013; Isenberg 2012). The role of government and its policies can be referred to as intertwined. Moreover, it can be hard to discuss one without including the other. However, Isenberg (2012) portrayed that governments do not need the requisite competence to effectively intervene in the development of entrepreneurial ecosystems. In addition to this, he acknowledges that the government performs an overarching element. In regard to low and middle-income countries, the governments are at infancy stage in terms of developing entrepreneurial ecosystems. As a result, they showcase a lack of both experience and exposure (Sherriff and Muffatto 2015). Considering the significance of entrepreneurial ecosystems in promoting entrepreneurial activities to accomplish economic growth spurred by entrepreneurial engagement, Isenberg (2010) emphasizes that governments need to delegate more efforts in the development of such systems. Governments may also learn from other contexts. After all, some entrepreneurship systems may differ across different countries and yet share many similarities.

Fuerlinger, Fandl and Funke (2015) outlines that the government plays a cross-cutting role in the promotion of entrepreneurship within a given region or country. However, Minniti (2008) established that the general and fundamental question concerning if and how governments have the ability to influence entrepreneurial activity positively remains unresolved. Regalado (2012) highlighted two logics concerning the modalities of creating an entrepreneurial ecosystem, which include government and personal/people networks. The former highlights the need for specialised inputs like innovation centres and technology parks for the promotion of entrepreneurial ecosystem emergence. This logic can result in market distortion due to unnecessary public commitment and could stop the emergence of sustainable dynamics (Regalado 2013). The latter logic results in formation of companies through combined talent, capital and ideas, embedded within supportive cultures or communities. This calls the government to act as a supportive/feeder force.

Moreover, it accentuates the idea that the government must not lead single-handedly to avoid overestimating its capabilities for developing an entrepreneurial ecosystem that can sustain itself. Isenberg (2011, 2010) also underscored the need for the government to establish links to private investment markets because the market adheres to and operates under the influence of the law of natural selection. One of the major entrepreneurial ecosystem policy challenges is how the government and the entrepreneurs support the development of an entrepreneurial ecosystem that is strong and efficient (Spigel and Harrison, 2018). One of the main characteristics of an efficient and strong entrepreneurial ecosystem is the existence of culture that is localised and encourages values like innovation, networking, trust, learning and risk-taking (Argote and Miron-Spektor, 2011).

Nevertheless, such a localised culture is difficult to build without the role of the state and other key actors (Fuerlinger, Fandl and Funke, 2015). The role of the state in entrepreneurial ecosystems is not only to make and implement policies but also to cultivate the entrepreneurial resources, culture and community (Spigel and Harrison, 2018). This process of cultivating the communities, resources and culture already existing rather than creating new resources from the state to the local level (top-bottom approach) has been defined as the strategic management of place (Audretsch, 2015, p.12). However, as Audretsch (2015) explains, there are certain characteristics of culture such as risk-taking, trust and innovation that cannot be re-created but can only be developed over time through interactions, networking and knowledge advancement. This interconnection between the role of the state in creating a strong entrepreneurial culture and community makes the discussion on the role of the local culture, specifically the entrepreneurial ecosystem culture, equally important in this thesis.

Elmansori and Arthur (2014) identified and explained how the inefficiency on behalf of the government in addressing and using public services for enhancing innovation in some countries is hampering the entrepreneurial environment in those. Due to a lack of proper training centres, there is a shortage of skills in the population to manage intellectual property and innovation support services. This problem has

been studied in particular in the context of Libyan educational institutions. Another important aspect for the government to take care of is ensuring the proper availability of finance sources for individuals aspiring for innovation. It was found by Saleem (n.d) that access to finance is the greatest challenge in the Middle Eastern countries with nearly 63% of the entire population not having access to finance. Therefore, this leads to a financing gap of over \$210 billion for these countries.

## 2.6 Entrepreneurial ecosystems and policy

### 2.6.1 Historical roots of entrepreneurial ecosystem policies

In the past 60 years, there has been a clear evolution concerning the policies undertaken by the government both in the segments of the enterprise and industries in advanced countries. Moreover, in the past 20 years, there has been an augmentation of both the level of funding and the number of policy initiatives of developmental activities. These changes are summarized as a shift towards growth-oriented enterprise policies and interconnect with other policies.

In the era after the Second World War, there was significant concern regarding the handling of the extant industrial structure and existing firms (Audretsch, 2003). However, there was negligible attention directed at understanding the origin of these organizations and existing organizational structures (Balven et. al., 2018). The fundamental policy problem faced by North America and Western Europe after the Second World War was the standard of living. In addition, with the trade-off between efficiency and concentration on one side, and democracy and decentralisation on the other (Audretsch 2003). The public policy query then entailed how society could benefit from large corporations in oligopolistic environments and simultaneously evade or reduce the costs caused by an economic power concentration. Subsequently, the policy reaction was to restrain the freedom organizations enjoyed to contract. Typically, such policy constraints assumed the form of regulation, antitrust or competition policy, and public ownership (Balven et al., 2018; Audretsch 2003). During that time, there was significant attention dedicated to the apparently glaring distinctions in policy approaches to the trade-off by various countries. For example, Sweden and France resorted to government acquisition of privately owned businesses

whereas Germany and Netherlands showed predilection to emphasising regulation. Still, there were countries like the US that greatly emphasised antitrust (Mathias, Williams and Smith, 2015; Welter, 2012). Indeed, the majority of the countries are dependent upon the components of all three policy instruments. Whereas the specific instrument could differ across various countries, manifestations of the singular policy on restricting and restraining the powers wielded by large corporations were eminent (Neupert and Baughn, 2013).

In the European context, Servan-Schreiber (p.159) cautioned against the “American Challenge” and presented it as “dynamism, organization, innovation, and boldness. Further, that was characterized by the giant American corporations” (Jorde and Teece, 2003). With giant corporations being seen as the propellers for innovation and growth. Servan-Schreiber encouraged the development of big industrial units which were manageable in terms of a size capable of competing states by American giants (Teece, Jorde and Teece, 2003). Furthermore, the authors contended that the initial problem related to Europe’s industrial policy rested in the choice for between 50 and 100 firms that would probably assume global leadership in modern technology.

In the last decade, the entrepreneurial ecosystem policy has emerged as a national issue globally, with a major focus being put on the creation and implementation of a more comprehensive ecosystem for Small and Medium Enterprises (SMEs). There has been a lot of focus on the role of SMEs in boosting economic growth and attaining the inclusiveness agenda. Thus, policymakers have been focusing on a new dimension towards SMEs development as well as promoting private-public relations and end-to-end facilitations that lead to supporting economic growth through innovation and productivity. In recent years, studies conducted from various countries showed that SMEs have continued to grow at a much faster rate as compared to the large firms in countries where strong SME and entrepreneurship policies have been implemented (McCann and Ortega-Argilés, 2016) ;(Sundin, 2014); (McGuirk, Lenihan and Hart, 2015). A review to address the policy directions of thirteen countries found that there was the optimism of a greater movement of more governments towards "holistic" entrepreneurial ecosystem policy (Hechavarria and

Ingram, 2014). Evidence of such developments in entrepreneurial ecosystem policy came from the issuance of new policy documents by the Netherlands, Denmark, the UK, and Finland between 2003 and 2004. Overall, the objectives outlined in these policy documents were more strongly and deliberately expressed in terms of easing exits, promoting more entrants, fostering good conditions for startups, and entrepreneurial dynamic (Kirby, 2005); (Barca and Barca, 2018).

### 2.6.2 Entrepreneurial ecosystem policies

Entrepreneurial ecosystem policies are regarded as an essential factor of consideration while studying the management of entrepreneurial ecosystems (Mazzarol, 2014). In the current study, the review of the literature on the role of policy in the management of entrepreneurial ecosystems is important because it helps in understanding how policies are designed within the entrepreneurial ecosystems and how they work. Another motivation for the focus on the relationship between policy and entrepreneurial ecosystem is that effective policies drive economic growth and development (Shahbaz et. al., 2013); (Winkelman, Bishins and Kooshian, 2010), which makes the entrepreneurial environment more favourable for the entrepreneurial ecosystem to thrive (Auerswald, 2015). Thus, one of the main assumptions in this study is that good policy would encourage economic growth. Further, economic growth would lead to a more favourable entrepreneurial environment that is conducive for the entrepreneurial ecosystem to perform efficiently.

The term 'entrepreneurial ecosystem policy', as used in this study, refers to measuring the stimulation of increased entrepreneurial activities within a country or region (Kirby, 2005). Further, the term 'policy' is used to denote the policies developed by governments of sovereign states (Huggins and Thompson, 2015). In order to understand the emergence of entrepreneurial policy, it is critical to first understand what it constitutes. Mitra describes entrepreneurial policies as "the measures aimed at fostering a socially optimal level of venturing in new business" (Mitra, 2013). Mitra (2013) further describes the entrepreneurial policies whose targets include nascent, new and existing entrepreneurs (Mitra, 2013). Mitra's 'new venture-focused' perspective of entrepreneurship policies put emphasis on the recognition of both the

probability and the possibility of entrepreneurs that embrace both the existing, the upcoming and the new entrepreneurs (Mitra, 2013). This view, therefore, regards the new ventures developed today and equally important as those that shall be developed tomorrow. This view is in line with the Global Entrepreneurship Monitor (GEM) project that campaigns for enhanced effectiveness on the policies that support both. Especially, the opportunity-pulled and necessity-driven entrepreneurs now and in the future (Shittu, 2017).

According to Mitra (2013), it is easy for policymakers to predict entrepreneurship models, as to which models will help to forecast the directions and trends in an economy (Mitra, 2013). However, there are two scenarios when entrepreneurial ecosystem policy and decision-making can weigh up the future economic opportunities. The first scenario pertains to the nature and level of entrepreneurship that can make a difference to the economic welfare of the businesses as well as the wider community, society and economy through the production of new services, goods, jobs and organisations (Dean and McMullen, 2007); (Parker, 2009). In the second scenario, the restrictive conditions in the present limit entrepreneurial outcomes and activities. In this regard, Mitra (2013) recommends that policy decisions regarding how to best allocate the resources for optimising the future economic gain have to be made in a critical manner (Mitra, 2013).

Entrepreneurial ecosystems are complex, multidisciplinary and multidimensional (Sheriff and Muffatto, 2015); (Miles et al., 2015) ;(Frederick, O'Connor and Kuratko, 2016), which means that the process of implementing an entrepreneurial ecosystem is also multidisciplinary and multidimensional. This implies the real scope of entrepreneurial ecosystem policy, where experts can be found in a variety of industrial, monetary and fiscal policies rather than in any separately or clearly defined entrepreneurial policy. For instance, the monetary and fiscal policies provide fiscal incentives for capital allowances and start-ups for innovative firms to purchase tools and equipment through either a reduced rate of interest to borrow or loan for investment purposes or cash injections for research and development

ventures. On the other hand, industrial policies support and promote business clusters and networks in regions by attracting smart highly technologically based firms. This multidimensional nature of entrepreneurial ecosystem policy is a reflection of the multidisciplinary nature of the entrepreneurship concept itself that requires proper management and policymaking to fit the Omani context.

According to Kuratko (2016), most of the literature on entrepreneurial ecosystem policy focuses on Micro, Small and Medium Enterprises (MSMEs). Mitra (2013) also holds the same opinion and provides two reasons as to why the Small and Medium Enterprises (SMEs) and the SME policy has been well integrated into entrepreneurship. The first reason is that SMEs constitute the largest part of all enterprises, which means that the change process strongly and inevitably manifests itself in these businesses (Mitra, 2013). The second reason is because of the distinguished importance of the SMEs and their interactions with the other forms of organisations, which makes the SMEs unique units of analysis (Mitra, 2013).

On the other hand, there is the perception that many of these large enterprises tend to replace micro and small ventures. This mainly happens because the markets or scope of the micro and small firms are not scaled up as compared to those of the large enterprises. As a result, the small ventures end up failing in taking off. One of the major challenges faced by SMEs is the lack of opportunities to scale up and not being able to add new value through services and products, a factor that makes them vulnerable within the highly competitive market environment (Frederick, O'Connor and Kuratko, 2016). As a result, entrepreneurship policies that address the micro and small businesses may not be able to address some of the dynamic and novel elements that characterise entrepreneurship (Mitra, 2013).

The uniqueness of entrepreneurial ecosystem policy as being based on the perception that such policies constitute measures whose intention is to directly influence the entrepreneurial vitality level within a nation or region (Sundin, 2014); (Mitra, 2013). This is evident within policies that:

- i) Promote economic agents to conceptualise business ideas

- ii) Support the entry of new ventures through both the direct measures that target economic agents that encourage new enterprises and the indirect measures that contribute to improvements in the existing businesses
- iii) Support the growth of the already existing ventures
- iv) Facilitate the exit of enterprises (Sundin, 2014).

According to Gilbert, (Gilbert, Audretsch and McDougall, 2004), production was primarily in small-scale craft enterprises that were under family ownership in most cases before the mid-nineteenth century. The MES (Minimum Efficient Scale), which refers to the smallest output level where the minimum mean cost was obtained, was generally low and entailed only a few employees. However, large-scale production reduced small firms due to their inefficient entities towards the end of the nineteenth century (Wilson and Toms, 2012). In other words, the advent of big corporations coupled with a managerial revolution jeopardised the viability of small-scale family-owned enterprises.

In support of the Economic Development Board (EDB's) information sources, (Coduras and Autio, 2013) argued that it does not offer information concerning actual new company formation. Instead, it constitutes the most acknowledged general complement for objective assessment of the regulatory framework's status. Nonetheless, EDB does not have any limitations. For example, (Djankov et al., 2002) criticised EDB because the data is normally constrained to a standardised firm with traits such as registration status, employs 5 to 50 people in the first operation month and its sales turnover is tenfold seed capital. This implies that the conditions of the EDB framework may or may not be applicable to more than nine in ten of the new firm count within any particular country (Ács, Szerb and Autio, 2013) ;(Ács and Szerb, 2010).

In relation to overcoming these EDB limitations, OECD EIP (Entrepreneurship Indicators Program) came up with a more comprehensive framework that differentiates economic impact from framework conditions, and entrepreneurship performance (Ahmad and Hoffmann, 2011). According to (Coduras and Autio, 2013), the Executive Incentive Plan (EIP) possibly ranks highest as the most comprehensive and systematic approach for gauging entrepreneurial ecosystem policy frameworks.

EIP extends and builds on research concerning entrepreneurship policies commenced by the Government of Denmark and FORA, which is a policy consultancy (Coduras and Autio, 2013).

With regard to the policy shifts, a report noted that the entrepreneurial ecosystem policymakers have shifted their focus from the public ownership, competition and regulation policy to privatisation, deregulation and minimal emphasis on competition policy (Malecki, 2018). This new policy shift is aimed at empowering the formation and commercialisation of knowledge such as encouraging research and development, new firms startup and venture capital. Lundstrom and Stevenson (2001) also present another dimension in the shift in the entrepreneurial ecosystem policy. The EE is characterised as an emerging devolution of policies that support entrepreneurship at the local, regional and state level as well as technology policies that indirectly promote new technology-based firms. The policies that aim at promoting entrepreneurship at the regional level may be referred to as a silent policy. In their study of 10 economies, Lundstrom and Stevenson (2001) also found that some of the efforts that those governments had been focusing on in order to promote entrepreneurial ecosystem policy. These policies include initiatives such as minimising the barriers for new and small firms to access capital, promoting new startup ventures, forming new stock market listings for high technology ventures and startups, financing small research and development initiatives and encouraging more entrepreneurial ventures in the technology clusters.

(Thurik and Wennekers, 2004) elaborated on two common types of entrepreneurial ecosystem policy interventions; one of which encourages the formation of technology-based firms within a selected industry while the other offers the newly formed ventures with the organisational, financial and technological support needed for their local and international growth regardless of the sector. A more detailed classification of the types of government policy interventions that directly influence entrepreneurship was done by Verheul et al., (2001, pp. 57-59).

In their analysis, they outlined five various forms of government intervention policies.

1. The first one is the demand side of entrepreneurship, which includes the technical development, income, business legislations and competition policies by affecting the number, accessibility and the type of entrepreneurial opportunities.
2. The second type is the supply side of entrepreneurship where the policymakers focus on policies that directly influence the supply or pool of potential entrepreneurs through interventions such as regional development, immigration and individual support or financing.
3. The third type is the availability of knowledge and resources for potential as well as existing entrepreneurs (Verheul et al., 2002). This type of policy intervention is aimed at helping the upcoming entrepreneurs as well as the existing ones to overcome the knowledge and reduce the financial gaps that exist through information availability. Other interventions included in this policy include the stimulation of the venture capital market, provision of direct financial support, provision of entrepreneurship education in schools and the provision of relevant information, counselling and advice (Verheul et al., 2002).
4. The fourth type of government intervention is the shaping of entrepreneurial values in societal culture. These interventions are aimed at shaping the positive attitudes and perceptions of entrepreneurship through the introduction of entrepreneurship elements in the education system as well as the media (Verheul et al., 2002).
5. The final type is changing the risk-reward profile of entrepreneurship through the decision-making process as well as their career or job choices (Verheul et al., 2002). Some of the policies commonly used within this type of intervention include the taxation policies that affect the social security arrangements and business earnings, the labour market regulations pertaining to the hiring and firing of employees and the bankruptcy policy among others. Most of these policies are made in a manner that enables the flexibility of running a business and attracts individuals to start and continue running a venture (Verheul et al., 2002). These policies are on the macro-level and include the macro-economic policies applicable to everyone in society.

All the literature reviewed hitherto concerning entrepreneurship policy and entrepreneurial ecosystems in Oman reflects an unfortunate dearth of empirical, primary studies. The desk research performed in this study in this regard found only one proposed empirical study abstract by (William, Knight and Rutter, 2015). Therefore, the main aim of their paper was to explore the interrelationship between policy by government and education in developing entrepreneurship in Oman. Further, the study will examine higher education as a sub-capital of the Omani entrepreneurial ecosystem through interviews (Williams, Knight and Rutter, 2015). Evidently, their proposed study will not explicitly feature entrepreneurship policy and entrepreneurial ecosystems in Oman explicitly.

## 2.7 Entrepreneurial ecosystem from a leadership lens

Given the widespread concept of the entrepreneurial ecosystem, it is essential to link it to leadership roles. Entrepreneurial ecosystems have been considered to be the foundation of a new wave of the leadership system. Notably, policymakers propose different approaches to guide the development of rural areas and some urban environments. According to (Miles and Morrison, 2020) community leaders ought to make commitments to development by employing development strategies to optimize opportunities. The leaders must develop a systematic framework to review current conditions. This will allow the creation of a mutually beneficial partnership that will utilize the available opportunities while managing the risk through innovations and policy frameworks (Dodgson et al., 2011).

Despite the proposition of mutually beneficial partnerships, it is important to consider the leadership approach to commitment. The creation of entrepreneurship by governments and top-management actors may not necessarily benefit individuals equitably. There is a need to consider an approach that fully involves the individuals in the community (Dodgson et al., 2011). This is because the daily local interactions in society are the primary basis of the entrepreneurial ecosystem. As a result, a more bottom-up approach in leadership is advisable in the effort to create a significant social impact rather than high capital market returns (Miles and Morrison, 2020).

Concerning the leadership roles, it is observed that gender has an influence on the kind of entrepreneurial activity ventured into as well as the rate of bouncing back into the business in case of a business failure. (Alvarez-Rodriguez, Llasat and Estrela, 2017) conducted a study in Spain and established informal factors like cultural and social norms, perceptions of the start-up. Moreover, entrepreneurs' social image was more influential on successful entrepreneurship as compared to formal factors of intellectual property rights. They further noted that female entrepreneurship was mostly funded by women while men were more active in education entrepreneurship. On the other hand, (Simmons et al., 2019) observed that after entrepreneurial failure, the rate of re-entry into entrepreneurship was different depending on gender obtained from perception in the society mostly due to public stigma and public fear of business failure. Men faced the public stigma of business failure but their rate of re-entry after a business failure was higher as compared to the women's. Women on the other hand faced public apprehension of business failure which slowed down their decision making and made it more difficult for them to re-try their entrepreneurship business after a failure. These findings lead to deviating conclusions about the role of gender in leadership.

The concept of the entrepreneurial ecosystem has become popular over the last few decades. The popularity has resulted in the increased potential of entrepreneurship in achieving economic growth. This is because the entrepreneurial ecosystem includes the interaction of individuals at different levels as well as the environment. As a result, some models focus on the involvement of people, while others focus on governments' involvement. Models such as Koltai's model take a top-down approach to entrepreneurship, while the university-based model and the personality model focus involvement of people (Walter et al., 2018). Further, the adoption of the concept in leadership is essential in achieving localized or regional growth. As a result, the leadership should focus on social impact rather than capital returns. In essence, the adoption of the entrepreneurial ecosystem in leadership should focus on creating mutually beneficial partnerships.

### 2.7.1 Islamic Leadership Model in EE

Even though the cultures in the Middle Eastern countries are primarily guided by Islam, a significant amount of governance and power lies with the Kings, Princes, and dictators that rule them (Mayer, 2018). Welsh and Raven (2006) further states that in these countries, the term Allah is mostly used for explaining uncertainties in life. Moreover, in recent times, the traditional Islamic culture in the Middle East has been heavily influenced by the population and the migration of people from other regions. However, unlike Hindus and Jews, Islamic traditions run deep throughout the entire population, as Muslims generally view Religious jargons as universal and final truths. And consider that they need to be observed under any circumstance.

Esposito *et al.* (2016) categorizes Muslim culture into three ideological groups. These three ideological groups include traditionalists, modernists, and secularists. The traditionalists have a strict adherence towards following the interpretation of the Islamic teachings by its leaders. Modernists have a more non-orthodox view. They always tend to lookout for values and approaches that are compatible to both Islam and the modern world. Their beliefs lie upon the basic scaffold that Muslims can derive a subset of their values from the past religious texts and discard the rest, while keeping in mind ideas from modern thinkers. Tlaiss (2015) emphasises how culture is a major situational variable for understanding entrepreneurship. In the context of the Arab world, it takes the shape of a complex network of societal relations tied to kinships. Particularly in the Gulf, the countries share common societal norms and practices that mostly have common origins. These are majorly common religious origins that these countries share. Some of the linkages can also be associated with their other societal similarities and supplemented by the economic and political situation. The Arabic cultural influence, along with the widespread Islamism within the population and the leadership of these countries affect the entire economic fabric throughout the countries.

Egel and Fry (2017) states that from the historic times, leadership in global organizations have continued to adopt western style of leadership. The western style of leadership accentuates that the critical values have been undermined as these

organizations have aimed at profitability and situational management. However, the Islamic countries have remained resilient to their spiritual beliefs and have found ways to incorporate these values alongside with their cultures to their leadership styles. Some of the key identities of Islamic leadership are belief in inclusivity and fairness, respect for culture and humans as custodians of earthly resources (Jody Fry and Egel, 2017). In Islam, leadership is about not only the authority, but also a responsibility towards guiding people into righteousness, through actions and words (Dariah, Salleh and Shafiai, 2016). Notably, Arab countries abiding to the Islamic cultures are characterized by long reigns of leadership by families, which not only seek to grow their populations but also share authority with the locals. The six key leadership principles that guide ILM include Skills development, strengthening of institutions, cultural diversity, distribution of resources, strengthening relationships and proper management of resources. All these elements have a role in the entrepreneurial ecosystem and can contribute to the maximization of the ecosystem. However, the ability to analyse and select implementation approaches will support the attainment of the desired goals within an ecosystem. According to Egel and Fry (2017), most leaders in the Arab countries are maximizing these Islamic leadership models but these initiatives have mainly been witnessed in integrity related initiatives where high levels of ethics have been achieved in Islamic based initiatives. Additionally, researchers also note that the continued rule of dynasties have in some cases undermined the resources sharing initiatives as witnessed in countries such as Saudi Arabia. This has led to limited inclusivity with stakeholder feeling ignored or remaining disadvantaged in the quest to grow the economy. For effective management of the EE, it is critical that the leaders develop ways to utilize and maximize the noted six principles towards a balanced ecosystem. This will help to eliminate possible challenges like mistrust among stakeholders, poor skills development due to lack of a common policy and failure in the small to medium-sized businesses due to lack of information, capital and professional advice or mentorship.

### 2.7.2 The Role of Culture in Entrepreneurial Ecosystems

Following Spigel (2017) and Stam (2015) identified and provided the relational definition of entrepreneurial ecosystems as to the cultural aspect, the section

particularly reviews the literature on the role of culture in entrepreneurial ecosystems. Moreover, Spigel (2017) defines entrepreneurial ecosystems as a series of regional socioeconomic, cultural and political factors that contribute to the growth and development of innovative new ventures and encourage a supportive, risk-taking culture among emerging entrepreneurs and other actors. Similarly, even Stam (2015) also describes entrepreneurial ecosystems as a set of networks, institutions and cultures that grow within a given region over time. Other authors have also analysed entrepreneurial ecosystems from a cultural perspective (Audretsch and Belitski, 2017; Spigel, 2017). Isenberg (2010) The review is motivated due to the notion that previous studies have considered culture is one of the nine key indicators of entrepreneurial ecosystems. In addition, it is a key component that influences how entrepreneurial ecosystems are formed and managed (Stam, 2014). According to Spigel (2015) elaborated a conducive culture has been noted as a prerequisite for sustainable growth and development of entrepreneurial ecosystems. (Mason and Brown, 2014) hence the need to see the interplay between these two key concepts, that is, culture and entrepreneurial ecosystem management.

One of the research gaps identified was the lack of detailed analysis on the role of the unique Arabic culture in building or evaluating the entrepreneurial ecosystem policies (Coduras, Saiz-Alvarez and Ruiz, 2016; Davari and Najmabadi, 2018). The finding of the study found that most of the studies have focused on the relationship between culture and entrepreneurship (Milagrosa, 2014). Very limited research study efforts were taken on how the culture of a society affects the entrepreneurial ecosystem. Given that the focal point of an analysis is the Omani entrepreneurial ecosystem, it is important to review existing literature on how the Arabic culture affects the management of entrepreneurial ecosystems.

The Pew Research Center published that the Islam population comprised 23% (1.6 billion) of the world's population and projected that by 2030 they were expected to grow to 26.4% (2.3 billion) of the global populace (Mohamed, 2016). Lipka (2017) further observed that for many Muslims religion was interwoven in their lives. With a significant following in terms of religion as well as the observation where their religion

was entwined in their daily lives, the concept of the entrepreneurial ecosystem from an Islamic perspective was worth delving further into to garner more knowledge on this relatively new concept.

Magd and McCoy (2014) observed that the territory of Oman was extremely dependent on oil revenues and the country was keen on diversifying its revenue streams including encouraging entrepreneurship amongst its populace. Gümüşay (2015) noted that inclusion of the religion-spiritual pillar shifted the perception of an entrepreneur to also include their hearts, soul's bodies and minds. Similarly, Gumusay (2015) noted that economic entrepreneurship from an Islamic perspective was based on the interconnection between entrepreneurship (pursuit for opportunities), socio-ethical-economical (norms, values, recommendations) and religion-spiritual (linking people and their day to day lives with God with an objective to please Allah). Further, the scholar concluded that Islam was an entrepreneurial religion since it enabled and encouraged entrepreneurship activity. He also defined entrepreneurship from an Islamic perspective as an Islam-based approach toward certain business and finance practices.

Al-Abri, Rahim and Hussain (2018) conducted a study on the entrepreneur ecosystem in Oman to determine key factors impacting entrepreneurship start-up and success. They discovered that in Oman, human capital, government, support, finance and technology significantly affected entrepreneurship start-up. They also noted that their findings would be helpful to policy makers who would implement the entrepreneurial framework customised to work for Oman as well as create policies that incentivise entrepreneurial start-ups. Thaib and Pa (2014) observed that although the Islamic system of entrepreneurship was social-oriented, it did not impact profitability but one that is focused on enjoining the society to achieve holistic sustainable growth that was a mutually beneficial outcome for both the individual and the society.

Magd and McCoy (2014) recommended that educating the population on entrepreneurship helps in strengthening and building relations between education and industry. Even facilitating female entrepreneurship were key areas to focus on in

order to achieve a productive entrepreneurial ecosystem in Oman. They further singled out the need to support women in terms of childcare and networking events to enable the flourishing of women entrepreneurs. On the other hand, Al-Sadi, Belwal and Al-Badi (2011) observed that women entrepreneurship in Oman was greatly hindered by inadequate finances, collaboration knowledge, technological limitations, the pressure to achieve, inadequate access to training and training opportunities as well as inadequate time for training. The hitches to women entrepreneurship as identified by Al-Sadi, Belwal & Al-Badi (2011) serve to emphasise the recommendation by Magd and McCoy (2014) that women needed support in the form of childcare as well as setting up networking events for women to increase their participation in maximise on their productive entrepreneurial potential.

Previous studies have found a link between the social structure and the government role in entrepreneurial ecosystem policymaking. This pattern and link can be seen in the manner in which governments in various cultures carry out their decision-making processes. For instance, the majority of governments in the MENA region uses a top-bottom approach in entrepreneurial policy and decision-making processes (Maine, Soh and Dos Santos, 2015); while most of the western countries employ the bottom-up approach during the entrepreneurial policy-making process (Shearer, 2015). One of the assumptions that were drawn from such studies was that the Arabic culture of seeking the endorsement of a leader in a higher position facilitates the top-bottom approach where entrepreneurial policies and decisions are made at the top level (Shearer, 2015).

Audretsch and Belitski (2017) emphasize that culture is a significant determinant for the development of the entrepreneurial ecosystem within a country. Moreover, in general, culture has a positive correlation with entrepreneurial performance. In the context of the current study, culture comprises parameters like societal beliefs and norms, prevailing societal segregation and so forth. Stuetzer et al. (2014) highlight the two main features within the cultural domain that have the maximum impact on the entrepreneurial ecosystem. First one is the prevailing generic attitude and the second one is the historical context of how entrepreneurship has

been seen within a culture for the general force that drives the population within a country towards entrepreneurship.

Further studies showed that in the Arabic culture, seeking endorsement is also common at the individual level. Entrepreneurs use it in decision making regarding the setting up of business enterprises (Thomas et al., 2015). From these studies, one can assume that culture influences the role of government. Ultimately, it affects the policy-making process of entrepreneurial ecosystem policies. Thus, the manner in which entrepreneurial ecosystems are managed depends on the culture wherein the characteristic of endorsement by a leader was observed in the top-down approach. The authors argued that if a person in higher authority does not approve of a business enterprise, then such an enterprise is likely to be unsuccessful. Based on this notion, an analysis can help in determining how the Arabic culture and social structure shapes the role of senior executives and leaders in managing the entrepreneurial ecosystem in the Arabic context.

## 2.8 Measuring EE

Bell-Masterson and Stangler (2015) in their study aimed at measuring the success and the significance of entrepreneurial ecosystems using four different indicators. The study strategically proposes that there are indicators that are instrumental in measuring the vibrancy of the ecosystem. These four indicators comprise Density, Diversity, Fluidity, and Connectivity. The first indicator, density, refers to the extent to which innovation and entrepreneurial-based penetrate the population. The second indicator pertains to diversity. Entrepreneurship ought to be diversified in order to span every segment of the population and to bring solutions for problems in them. The concept of fluidity is also introduced to be a crucial indicator for a positive ecosystem to thrive upon. The final aspect is connectivity which is again important in order to bring better operations and sharing of knowledge, and information. Roundy and Fayard (2019) combined these four indicators. They build a comprehensive system for the evaluation of entrepreneurial ecosystems. Moreover, they connected the theoretical aspects related to how the environmental ecosystem is viewed and connected organizational ambidexterity to it.

Taich et. al., (2016), accentuates that an entrepreneurial ecosystem consists of multi-level concepts. They are of the view that such a multi-level entrepreneurial ecosystem encompasses various units of observations as the smallest (individual level), medium units (firm-level), and large units (national, regional and international level). Furthermore, the study directs that every activity which contributes to the growth in entrepreneurship is part of the entrepreneurial ecosystem. And this activity may be irrespective of the state of the organization and the level. For instance, it does not concern whether it is a venture capital organisation making an investment in a start-up business or whether it is a networking event at the local ministry of commerce. Similarly, Auerswald and Dani (2017) delineate that some of the indicators of an entrepreneurial ecosystem such as venture capital investment are directly connected to the growth of the start-up ventures. While on the other hand, other indicators such as education and talent attraction are critical in building up the capacity of entrepreneurs. Ratten, (2020) states that the entrepreneurial ecosystem contributes more to a business than stakeholders, especially in an environment where the systems are well-developed. This is because it facilitates new start-ups to grow under a few barriers.

In this regard, the measurement of EEs is both a critical and intellectual challenge. First, there has been a lot of investments made using taxpayers' money through the public financing of start-up ventures and micro, small and medium-sized companies (Nylund and Cohen, 2017). Another reason that makes the measurement of the entrepreneurial ecosystem an important research activity is motivated by the recent interest by the investors and practitioners. These investors and practitioners are keen on finding new ways of expanding entrepreneurial activity for local and regional prosperity (Autio et al., 2014). Within this process of measuring entrepreneurial ecosystems, Taich et al. (2016) inquire two main focal questions, namely:

- a. What are the entrepreneurial activity indicators and which of these indicators are the best reflection of the vibrancy of the ecosystem?

- b. What entrepreneurial ecosystem indicators are most valuable to entrepreneurs?

While answering these questions, Taich et al. (2016) differentiate between the two concepts concerning a measure and an indicator. Herein, they describe a measure as the operationalisation process wherein the databases are used for quantifying the idea discreetly. On the contrary, an indicator is referred to as a cluster of varied measures that represent a broader concept. In the context of the entrepreneurial ecosystem also, these two terms are strategically differentiated by varied scholars. In alignment with this, Stangler and Bell-Masterson (2015) defined Entrepreneurial ecosystem vibrancy through its theoretical framework. According to them, entrepreneurial ecosystem vibrancy comprises 12 measures across four indicators. On the other hand, Taich et al. (2016) classified these 12 measures as two main indicators, i.e., Opportunity & Access and Dense Dynamic Markets.

Several scholars such as (Audretsch and Thurik 2001; Ács and Audretsch 2003; Lundström and Stevenson 2005; Verheul et al 2001) have proposed different frameworks for evaluating entrepreneurship policies and determinants. Within the field of the institutional framework, there are various measures for evaluating entrepreneurial ecosystem policy. According to Coduras and Autio (2013), one of such approaches is surveys. They highlight that surveys can be issued to national experts through online or mail questionnaires to develop multiple-item scales reflecting the conditions of the entrepreneurial framework. An example of this is the National Expert Survey developed by the Global Entrepreneurship Monitor used since 1999 (GEM; Reynolds et al 2005).

Another approach is the one that mixes both subjective and objective information offered by the World Economic Forum (WEF). The WEF uses the Global Competitiveness Indexes that relate to principal contextual factors based on the development level of the country in question (Coduras and Autio 2013). Djankov et al (2002) also describe an approach that involves the comparison of the national regulatory frameworks for the entry of new businesses. This approach yields the Ease of Doing Business (EDB) index by the World Bank. The EDB outlines data on the

regulatory framework that is most relevant to registering new limited liability firms. It focuses on the highly tangible indicators within the regulatory framework. Such tangible indicators include the number of requisite procedures for registering a new business, number of days taken, and minimum requirements for capital for new limited companies as a percentage of GDP per capita and rate of creditor recovery from bankruptcy among other factors (Coduras and Autio 2013). Content et.al. (2020) observed that economic ecosystems largely influence the growth of entrepreneurial activities. Their findings are backed by observations made by Byers, Kist & Sutton (1997) in their study. The study accentuates that an economic ecosystem that is well-developed is significant in determining the success of an entrepreneur. Thus, it is instrumental in determining the overall success level of entrepreneurship.

Stam (2015) observed that policy formation pertaining to the dynamics of entrepreneurship is evolving and strategically shifting from quantity towards the quality of entrepreneurship. According to his concept, entrepreneurship is a vital factor in the creation and maintenance of an entrepreneurial ecosystem. Stam further noted that elements like network, governance, financial resources, expertise, knowledge, formal institutions, culture, physical infrastructure, the existence of support services as and when required are the underlying conditions that form an ecosystem. Informal institutions, culture, demand and physical infrastructure are classified under social framework conditions. These social framework conditions are responsible for either enabling or constraining human interaction. In contrast to this, network, governance, finance, expertise, knowledge and support services are classified as systemic conditions (Stam, 2015). When these social and systemic conditions are backed with the right mix of efficiency enhancers, results in a budding entrepreneurial ecosystem. According to Stam (2015), these conditions integrally have a significant impact on efficiency enhancers. These efficiency enhancers consist of factors like labour market efficiency, availability of technology, the complexity of the money market, human resource efficiency, affordability of the merchandise and schooling.

Audretsch & Belitski (2017) highlighted that an entrepreneurial ecosystem is strategically affected by the people's way of life, formal institutions, infrastructure, amenities, information technology and the demand for the merchandise. Based on these factors, policymakers and scholars should develop relevant policies for promoting innovativeness through entrepreneurship. Thus, it will contribute positively to the future of entrepreneurship. Furthermore, Suresh & Ramraj (2012) developed a framework of eight support systems. These eight support systems are fundamental to the existence of the entrepreneurial ecosystem. These systems consist of moral support, financial support, network support, government support, technology support, market support, social support and environmental support.

With regard to infrastructure support, Hechavarría & Ingram (2019) observed that when the environmental ecosystem has low barriers to entry, minimal legal and commercial infrastructure and a supportive culture towards entrepreneurship, it is likely to promote more women entrepreneurs. Although such an ecosystem supports both men and women, it is said to have weak government policies and programs. It can thus be said that entrepreneurial ecosystems exist as depicted by Stam (2015), Audretsch & Belitski (2017) and Suresh & Ramraj (2012). These building blocks influence the success as well as the direction of the business venture according to findings by Bernardez (2009), Economic times (2010), Hechavarría & Ingram (2019) as well as Alvarez et.al. (2011). The aspect of gender playing a role in productive entrepreneurship was also observed both from the choices and behavioural points of view as inferred by Alvarez et.al. (2011) and Simmons et. al. (2019).

Menu et al. (2015) examined measures of entrepreneurial ecosystems and established that there is no unified comprehensive measurement framework for entrepreneurial ecosystems. However, Strangler and Bell-Masterson (2015) proposed a framework, which is based on four major indicators, to measure the dynamics of entrepreneurial ecosystems. They include:

| Indicators of Entrepreneurial Ecosystem Vibrancy |
|--------------------------------------------------|
| Density                                          |
| Fluidity                                         |
| Connectivity                                     |
| Diversity                                        |

Figure 10 Indicators of the entrepreneurial ecosystem

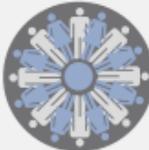
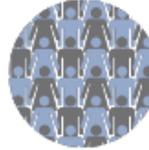
| Indicator                                                                                           | Measure                                    | Possible Sources                                  |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------|
| <br>DENSITY        | New and young firms per 1,000 people       | Census Bureau, Business Dynamics Statistics (BDS) |
|                                                                                                     | Share of employment in new and young firms | Census Bureau, BDS                                |
|                                                                                                     | Sector density, especially high tech       | National Establishment Time Series (NETS)         |
| <br>FLUIDITY     | Population flux                            | Internal Revenue Service                          |
|                                                                                                     | Labor market reallocation                  | Quarterly Workforce Indicators (QWI)              |
|                                                                                                     | High-growth firms                          | Inc. 5000 and NETS                                |
| <br>CONNECTIVITY | Program connectivity                       | Under development                                 |
|                                                                                                     | Spinoff rate                               | Possibly: CrunchBase; LinkedIn                    |
|                                                                                                     | Dealmaker networks                         | Private databases, including Capital IQ           |
| <br>DIVERSITY    | Multiple economic specializations          | Quarterly Census of Employment and Wages (QCEW)   |
|                                                                                                     | Mobility                                   | Equality of Opportunity project                   |
|                                                                                                     | Immigrants                                 | American Community Survey (ACS)                   |

Figure 11 Indicators of the entrepreneurial ecosystem and its measures

*Source: Stangler and Bel-Masterson, 2015, p. 2*

### 2.8.1 Density

According to Bell-Masterson and Strangler, (2015) density incorporates vital elements of measurement like the number of new and young firms integrated with their level of employment and distinguished by industry affiliation. Density represents and creates momentum, and also brings a sense of energy and confidence to entrepreneurs to recognise what they have achieved. The idea that the prior entrepreneur has succeeded in a particular region, acts as an indication to potential entrepreneurs that opportunities exist. Furthermore, the successful entrepreneur can be considered as a champion of entrepreneurship to the larger regional audience. Based on Stams (2018) findings, entrepreneurial vibrancy can be measured by the employment impact of new and young companies. This includes all people involved in those companies by capturing the employees and founders. Another measure is the density of young and new firms within certain high-tech sectors.

### 2.8.2 Fluidity

Fluidity is another indicator of the entrepreneurial ecosystem and it is measured using three specific components. These three specific components that make up the fluidity indicator include the number of high-growth firms, population flux and labour market reallocation. Strangler (2015) used fluidity to refer to the reallocation of people and resources. Some scholars term entrepreneurs as “Lego builders”, as entrepreneurs take available resources and integrate them into creations. Ecosystem wise, the entrepreneurial environment must be fluid to allow entrepreneurs to participate in the Lego-building process. Prior evidence suggests that population flux and movement of individuals between cities can be referred to as a measure of fluidity. Entrepreneurial vibrancy involves the coming and going of people. Thus, people are considered to be one of the main resources of entrepreneurs. Furthermore, in order to strengthen the entrepreneurial bricolage, population flux should provide mixing and remixing of people. Moreover, the pace at which people move between organisations and from one job to another is also an important indicator of an entrepreneurial ecosystem. The number of high-growth firms is the final measure of fluidity in the ecosystem. This measure accounts only for a few firms,

although responsible for disparities in job creation and innovation. A concentration of high growth companies will determine the ability of entrepreneurs to utilize resources in more productive ways and capitalize on the bricolage process.

### 2.8.3 Connectivity

An entrepreneurial ecosystem is not a collection of isolated elements, rather, it is a collection of strongly knitted elements. This is because the interactions between elements are as important as the elements themselves. Connectivity is considered significant to entrepreneurs as it helps them to solve issues, attract funding, find talents and build the relationships that translate into customers. Moreover, it also facilitates enter product innovation. Connectivity can be measured with data on dealmaker networks, program connectivity and spinoff rates. Malecki, (2018) accentuates that companies, individuals and programs are instrumental in determining entrepreneurial vibrancy. In addition to this, the link between these factors is another determinant of entrepreneurial vibrancy. Connections among programs allow the entrepreneur to evaluate the significance of various resources and the connections between organisations. In the measurement context, improvements in network analysis enable one to trail the connections between resources. Lastly, Feldman and Zoller, (2012) delineate that dealmakers also have a critical role in the vibrant entrepreneurial ecosystem.

### 2.8.4 Diversity

The fourth indicator of the entrepreneurial ecosystem is diversity. Diversity is measured using the elements of income mobility, immigration and economic diversity (Bell-Masterson and Stangler, 2015) Prior studies show that economic complexity is associated with innovation and growth at the country level. However, regions and cities also need to specialize in certain economic activities since specialization translates to economic gains. Therefore, it can be argued that regions and cities that specialize in different industries will reap more benefits compared to those regions of cities that only specialize in one or two industries. Attraction and assimilation of immigrants is also a measure of diversity in an entrepreneurial ecosystem. The degree to which cities attract and assimilate immigrants is an important mark of progress.

Finally, economic mobility is regarded as an important marker of the entrepreneurial ecosystem.

This study reviewed several models used in measuring entrepreneurial ecosystems. One of these included Stangler and Bell-Masterson (2015) theoretical framework for entrepreneurial ecosystem vibrancy which has 12 measures across the four main indicators. The four main indicators in Stangler and Bell-Masterson (2015) theoretical framework for entrepreneurial ecosystem vibrancy include density, fluidity, connectivity and diversity, which has three measures each, making the total number of measures for each indicator to 12 as shown in Figure 11.

Strangler and Bell-Masterson (2015) further add that these four indicators of entrepreneurial ecosystem vibrancy have three measures and all answer the first question of what the entrepreneurial activity indicators are and which of these indicators are the best reflection of the vibrancy of the ecosystem. The density indicator has three measures, that is, the share of employment in young and new ventures; the density of young and new ventures firms per 100 persons and the sector density in terms of high technology (Nylund and Cohen, 2017). The fluidity indicator consists of the factors like the population flux, labour market reallocation and the number and density of high-growth firms (Piazza, 2016). Connectivity indicator measures include connections between resources and programs, the spinoff rate and the dealmaker networks (Szerb, Komlósi and Páger, 2016). Lastly, the diversity indicator comprises the measures like multiple economic specialisations, the immigrant share of population and economic mobility (Alesina, Harnoss and Rapoport, 2016)

#### 2.8.5 Measuring Entrepreneurship Ecosystems Using Global Entrepreneurship and Development Index (GEDI)

Oman's avenues for attaining economic growth and development have recently shifted from carrying out crude oil government activities to other income-generating sources. This is mainly due to the reduction in oil extracting activities. As a result, it aims at diversifying to other income-generating sources, such as improving the performance of entrepreneurship. This can act as a driver for economic growth.

One of the courses through which such economic objectives can be accomplished is through the productive management of entrepreneurship environments. Nonetheless, the evaluation of existing research finds a restricted examination of entrepreneurial ecosystems and the challenges involved in managing such environments. The challenge with Oman's entrepreneurship ecosystem is that the access to factors that benefit is limited. These factors include skills and knowledge, the opportunity to enter, and access to capital. Furthermore, the majority of entrepreneurs establish businesses as a necessity for additional income and not due to the availability of opportunities. As a result of this, most start-ups are in the informal sector where opportunities for growth through formal channels are rare. This is because there exists a strong rigidity in the sector, and inadequate funding and capital. The attributes of the global entrepreneurship index are listed in table 6.

Table 6 Global Entrepreneurship Index in the Omani ecosystem.

| Global rank | Country              | Score | Global rank | Country                | Score | Global rank | Country      | Score |
|-------------|----------------------|-------|-------------|------------------------|-------|-------------|--------------|-------|
| 1           | United States        | 83.6  | 54          | Croatia                | 34.0  | 107         | Honduras     | 18.7  |
| 2           | Switzerland          | 80.4  | 55          | Barbados               | 33.6  | 108         | Guatemala    | 18.5  |
| 3           | Canada               | 79.2  | 56          | Costa Rica             | 33.3  | 109         | Kenya        | 18.4  |
| 4           | United Kingdom       | 77.8  | 57          | South Africa           | 32.9  | 110         | Ethiopia     | 18.3  |
| 5           | Australia            | 75.5  | 58          | Malaysia               | 32.7  | 111         | Suriname     | 18.1  |
| 6           | Denmark              | 74.3  | 59          | Lebanon                | 31.5  | 112         | Lao PDR      | 17.8  |
| 7           | Iceland              | 74.2  | 60          | Montenegro             | 31.2  | 113         | Cambodia     | 17.6  |
| 8           | Ireland              | 73.7  | 61          | Namibia                | 31.1  | 114         | El Salvador  | 16.7  |
| 9           | Sweden               | 73.1  | 62          | Azerbaijan             | 30.5  | 115         | Tanzania     | 16.4  |
| 10          | France               | 68.5  | 63          | Belize                 | 30.0  | 116         | Guyana       | 16.4  |
| 11          | Netherlands          | 68.1  | 64          | Kazakhstan             | 29.7  | 117         | Gambia, The  | 16.1  |
| 12          | Finland              | 67.9  | 65          | Morocco                | 29.2  | 118         | Mali         | 15.9  |
| 13          | Hong Kong            | 67.3  | 66          | Macedonia              | 29.1  | 119         | Liberia      | 15.7  |
| 14          | Austria              | 66.0  | 67          | Peru                   | 28.4  | 120         | Pakistan     | 15.6  |
| 15          | Germany              | 65.9  | 68          | India                  | 28.4  | 121         | Cameroon     | 15.4  |
| 16          | Israel               | 65.4  | 69          | Bulgaria               | 27.8  | 122         | Nicaragua    | 14.7  |
| 17          | Belgium              | 63.7  | 70          | Panama                 | 27.7  | 123         | Angola       | 14.4  |
| 18          | Taiwan               | 59.5  | 71          | Thailand               | 27.4  | 124         | Mozambique   | 14.0  |
| 19          | Chile                | 58.5  | 72          | Iran                   | 26.8  | 125         | Madagascar   | 14.0  |
| 20          | Luxembourg           | 58.2  | 73          | Ukraine                | 26.8  | 126         | Venezuela    | 13.8  |
| 21          | Norway               | 56.6  | 74          | Serbia                 | 26.4  | 127         | Myanmar      | 13.6  |
| 22          | Qatar                | 55.0  | 75          | Mexico                 | 26.4  | 128         | Benin        | 13.3  |
| 23          | Estonia              | 54.8  | 76          | Egypt                  | 25.9  | 129         | Burkina Faso | 13.2  |
| 24          | Korea                | 54.2  | 77          | Georgia                | 25.8  | 130         | Guinea       | 12.9  |
| 25          | Slovenia             | 53.8  | 78          | Russia                 | 25.2  | 131         | Uganda       | 12.9  |
| 26          | United Arab Emirates | 53.5  | 79          | Gabon                  | 25.0  | 132         | Sierra Leone | 12.3  |
| 27          | Singapore            | 52.7  | 80          | Algeria                | 24.7  | 133         | Malawi       | 12.2  |
| 28          | Japan                | 51.5  | 81          | Trinidad & Tobago      | 24.4  | 134         | Bangladesh   | 11.8  |
| 29          | Lithuania            | 51.1  | 82          | Dominican Republic     | 24.3  | 135         | Burundi      | 11.8  |
| 30          | Poland               | 50.4  | 83          | Albania                | 24.2  | 136         | Mauritania   | 10.9  |
| 31          | Portugal             | 48.8  | 84          | Philippines            | 24.1  | 137         | Chad         | 9.0   |
| 32          | Cyprus               | 48.0  | 85          | Argentina              | 24.0  |             |              |       |
| 33          | Oman                 | 46.9  | 86          | Swaziland              | 23.8  |             |              |       |
| 34          | Spain                | 45.3  | 87          | Vietnam                | 23.2  |             |              |       |
| 35          | Bahrain              | 45.1  | 88          | Armenia                | 22.8  |             |              |       |
| 36          | Slovakia             | 44.9  | 89          | Jamaica                | 22.2  |             |              |       |
| 37          | Turkey               | 44.5  | 90          | Sri Lanka              | 21.9  |             |              |       |
| 38          | Czech Republic       | 43.4  | 91          | Rwanda                 | 21.5  |             |              |       |
| 39          | Kuwait               | 42.8  | 92          | Moldova                | 21.2  |             |              |       |
| 40          | Tunisia              | 42.4  | 93          | Ghana                  | 21.0  |             |              |       |
| 41          | Puerto Rico          | 42.1  | 94          | Indonesia              | 20.7  |             |              |       |
| 42          | Italy                | 41.4  | 95          | Bosnia and Herzegovina | 20.7  |             |              |       |
| 43          | China                | 41.1  | 96          | Ecuador                | 20.5  |             |              |       |
| 44          | Latvia               | 40.5  | 97          | Bolivia                | 20.4  |             |              |       |
| 45          | Saudi Arabia         | 40.2  | 98          | Brazil                 | 20.3  |             |              |       |
| 46          | Romania              | 38.2  | 99          | Tajikistan             | 20.0  |             |              |       |
| 47          | Colombia             | 38.2  | 100         | Kyrgyz Republic        | 19.8  |             |              |       |
| 48          | Greece               | 37.1  | 101         | Nigeria                | 19.7  |             |              |       |
| 49          | Jordan               | 36.5  | 102         | Zambia                 | 19.6  |             |              |       |
| 50          | Hungary              | 36.4  | 103         | Senegal                | 19.2  |             |              |       |
| 51          | Uruguay              | 35.0  | 104         | Libya                  | 18.9  |             |              |       |
| 52          | Botswana             | 34.9  | 105         | Côte d'Ivoire          | 18.9  |             |              |       |
| 53          | Brunei Darussalam    | 34.3  | 106         | Paraguay               | 18.7  |             |              |       |

Despite these difficulties, Oman has the chance for accomplishing an effective entrepreneurship ecosystem mostly because it has low taxes, a free economy, stable government and developing sectors, for example, farming, light manufacturing, and tourism. If these resources are adequately used, the nation could accomplish

diversified economic prosperity that is independent of oil reserves. Additionally, with the country's reducing oil reserves, there is a need to develop an effective entrepreneurship environment in Oman. Several such issues must be addressed in an adequate manner for the development of a viable ecosystem that ensures both economic development and stability in the country. They include the lack of creativity and innovations, lack of information on entrepreneurship, lack of adequate capital for research and development and various underlying entrepreneurship malaise (Al-Abri, Rahim and Hussain, 2018).

Subsequently, by employing the Global Entrepreneurship and Development Index (GEDI) on a regional area, in this case, the Sultanate of Oman, it is possible to analyze the various pillars of the entrepreneurship ecosystem in the Oman market. According to the GEDI approach, a region's entrepreneurship ecosystem can be evaluated through the aid of the Global Entrepreneurship Index which comprises three main sub-indices; the attitudes sub-index, the abilities sub-index, and the aspiration sub-index. Each of these sub-indices is further divided into various pillars which include cultural support, opportunity perceptions, startup skills and risk perception for the attitudes.

These indices further comprise various sub-indexes such as competition, opportunity startup, technology absorptions and human capital for the abilities sub-index. To add more, it also comprises product innovations, risk capital, process innovations, internalizations and high growth for the aspiration sub-index (Puente et al., 2017). Oman has been intending to reduce its dependence on gas and oil to promote stabilization of the economy and achieve steady economic development. This translates to the augmentation of the share of the non-hydrocarbon sector in the GDP which can only be achieved by maximizing the diversity of the economy.

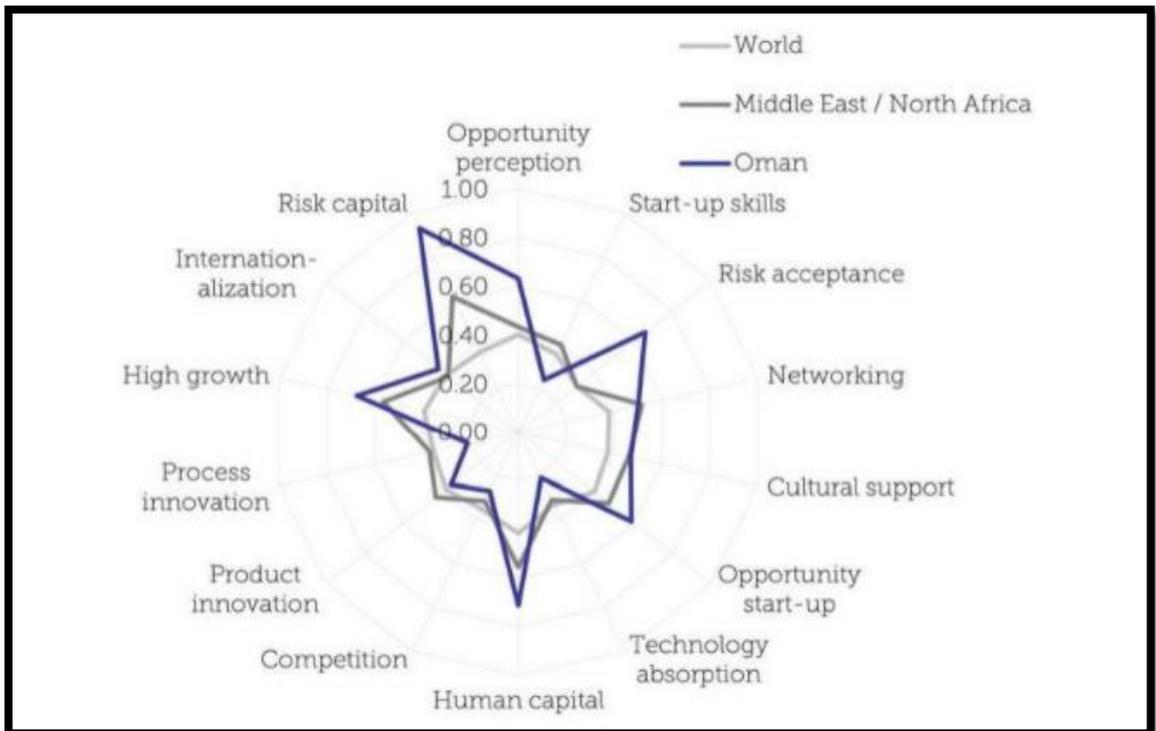


Figure 12 The entrepreneurship ecosystem in Oman: A comparison with MENA and world indices

Source: (Madbouly, 2017, p. 45).

The opportunity perceptions pillar encapsulates the potential perceptions of the opportunity of a population. In concern to this, it evaluates the state of the regulatory burden and property rights that hinder the exploitation of the various entrepreneurship opportunities available. Oman has experienced an overall increase in its opportunity perception index. It can be attributed to the increase in various elements of opportunity perception such as property rights, economic freedom and opportunity recognition. Subsequently, opportunity recognition is estimated by the level of the populace that can recognize a good opportunity to start a business in the region where they live with the value of such opportunities being dependent on the market size. The increase in the market size index in Oman therefore, the findings means that an improved opportunity perception in the Omani populace. Subsequently, freedom is essential for people to become entrepreneurs. Business freedom is a measure of the capacity to begin, operate, and close a business. It represents the overall regulations burden and government efficiency in the regulatory

process (Stam, 2018). The value of the Omani business freedom index in Oman has been on the increase in the last decade indicating a high level of economic freedom.

The property rights index is an evaluation of the capacity of people to acquire private property that is guaranteed by clear laws and which are completely implemented by the state. It gauges how much the laws of a nation secure private property rights and how much its administration implements those laws. Oman implements its obligations through treaties and various Royal Decrees on copyrights. Moreover, it also implements its neighbouring rights, patents, industrial designs, trademarks and unfair competition, geographical indications and semiconductor topographies. Thus, the level of property right index in Oman is high (Hussain, 2017).

Entrepreneurship requires skills that are procured through training and education. Consequently, training, particularly postsecondary instruction, assumes a fundamental function in educating and creating entrepreneurial skills. Furthermore, start-up skills are influenced by institutions' efforts that stimulate entrepreneurs and support them while managing their businesses. However, the effort of such institutions in Oman is still limited, resulting in a slight decline in the once increasing startup index.

On the other hand, the Oman government has put measures in place to spur entrepreneurship by offering to require students to pursue entrepreneurship courses in colleges and universities. Such actions are meant to increase awareness of the students in concern to the importance of entrepreneurship. Moreover, such awareness is also expected to result in an increase in the level of startup skills in the population in the future (Szerb et al., 2019). Similarly, the cultural support index relates to how society perceives entrepreneurs. It is in the mid-levels for the entrepreneurial ecosystem in Oman. Although not a limiting factor of entrepreneurship in the ecosystem, it can be improved through the distribution of various entrepreneurship materials, which the government also seeks to accomplish through various educational institutions such as colleges and universities.

One of the strengths of the entrepreneurial ecosystem in Oman is risk acceptance. Risk acceptance can be defined as the proportion of the population that does not let the fear of business failure that prevents them from undertaking business ventures (Szerb et al., 2019). The risk acceptance index of Oman has been on the increase, registering a fourteen per cent rise between the years 2012 and 2017 (Stam, 2018). This increase in risk acceptance in the entrepreneurial ecosystem indicates a lower level of constraints in the Oman entrepreneurial market place. This is because the entrepreneurs do not have to deal with the exchange of capital controls that hinder an organization from converting local currencies to foreign currencies and the transfer of funds to creditors that are outside of the Sultanate. Additionally, the classifications of risk for Oman are at a reduced level as there are no cases of forced Majeure.

Networking is also another vital indicator of an entrepreneurship ecosystem, the ability of an entrepreneur to combine their knowledge with their ability to associate with other people both in their regions or country and worldwide. The Oman networking index has experienced a decrease in recent years. This reduction can be attributed to the unavailability of data on the transport infrastructure of Oman. However, a recent analysis of urbanization individual data in Oman has revealed that the level of networking in the Sultanate is high as well as stable. This increase is mostly because of the significant improvements in Oman's transport infrastructure such as the establishment of new airports as well as the Omani economy airlines (Al-Abri, Rahim and Hussain, 2018).

Subsequently, the efficient governance in the Sultanate has led to high opportunity start-up index in the entrepreneurship ecosystem. Oman has strong sub-indices of governance, with the strongest being political stability. Regulatory quality, rule of law, control of corruption and a highly effective government which, in turn, has led to an increase in the number of opportunities. This further encourages the population of Oman to start more individual private businesses. Additionally, Oman ranks high in the human capital index due to the nation's high level of education and a high level of labour freedom from a regulatory perspective. It means that the

population is unlikely to deal with regulations on minimum wages, laws hindering layoffs, severance requirements and restraints on hiring hours. Such freedom encourages more people to seek out entrepreneurship opportunities (Acs, Szerb, Ortega-Argiles, Aidis, & Coduras, 2015).

On the other hand, Oman ranks low on various indices, which act as limiting factors in the entrepreneurship ecosystem. For instance, the technological absorptions in Oman are low. This means that organizations in Oman are slow in the adoption and absorptions of new technology which is a prerequisite for attaining both innovation and business growth. As innovations are significantly inhibited by the low technological absorptions. Consequently, the product innovation and process innovation indices are also found to be low. Furthermore, both innovations indices are negatively affected by the lack of adequate capital for research and development coupled by the lack of adequate engineers and scientists. The reduced technology in the entrepreneurial ecosystem of Oman means that entrepreneurs rarely develop new products and do not improve existing products to keep up with the demands in the market (Hussain, 2017).

Having identified the measures, the next stage is to answer the second question in measuring entrepreneurial ecosystems, which is, what entrepreneurial ecosystem indicators are most valuable to the entrepreneurs? According to Taich et al. (2016), it is important to consider the location of the area of the research, which in this case is Oman. This is deemed assistive for determining the local norms and culture which may affect the overall implementation of the ecological entrepreneurial system. As such, it is important to consider which entrepreneurial ecosystem indicators are most valuable to the entrepreneurs in Oman. In order to determine this, it is important to analyse what indicators entrepreneurs' value and why.

For instance, according to the research undertaken by Taich et al. (2016), entrepreneurs value density because it gives them a sense of confidence to see that others have seen it and a sense of energy. Connectivity is valued by entrepreneurs because it helps in problem-solving, identifying talents, attracting funding and developing relations that translate into ideas and clients (Lee, 2015). Diversity

encourages specialisation which leads to comparative advantage and economic gains for the society. In most instances, diversity is valued by social entrepreneurs but not all the entrepreneurs value it because they see it as competition (Auerswald, 2015). In the ecosystem of Oman, as mentioned by (Huang, Mas-Tur and Yu, 2012), most labour forces are foreigners from other countries while these workers when given entrepreneurship opportunities may pose a threat to local entrepreneurs. This is because even though they are useful to the population as they provide growth, opportunity and prosperity to the economy. Lastly, fluidity encourages the identification and allocation of available resources (Auerswald and Dani, 2017). In general, the connectivity and the density indicators can be defined as the indicators that are most valued by entrepreneurs in Oman. However, this is subject to further testing based on the data that is collected.

#### 2.8.6 Measuring Entrepreneurship Ecosystems Using Regional Entrepreneurship and Development Index (REDI)

Another set of measures of the entrepreneurial ecosystem is the Regional Entrepreneurship and Development Index (REDI index). According to Szerb et al. (2015), the REDI index is a measure of entrepreneurial ecosystem that takes into account both individual characteristics, attitudes and the regional context. Accordingly, REDI index considers not only whether people are willing to start a business but whether the conditions to do so are in place of the concerned region. Unlike Bell-Masterson and Stangler, (2015) theoretical framework of entrepreneurial ecosystem vibrancy, the REDI index has three indicators. These indicators consist of entrepreneurial abilities, aspirations and attitudes. Each one of these indicators contains individual measures that relate to the individualistic decision-making behaviours and the general organisational component that relates to the context (Piazza, 2016).

The entrepreneurial attitudes indicate the attitudes of the people within a certain region towards entrepreneurship. Additionally, it includes aspects such as how they view risks and opportunities, networking and cultural support. The measures of entrepreneurship attitudes indicator are social capital, corruption levels and market

agglomeration (Szerb et al., 2015). The second indicator, entrepreneurial abilities, is used to measure the characteristics of entrepreneurs and new venture start-ups that have a high potential of growth such as technology take-ups, human capital level and market competition levels (Parker, 2018). The measures used to gauge entrepreneurial abilities include the level of education, the level at which the businesses are sophisticated and the freedom for running a business (Szerb et al., 2015). Lastly, the entrepreneurial aspirations entail the distinctive, strategy-related nature of entrepreneurial activity such as access to finance and process and product innovation (Bulanova, Isaksen and Kolvereid, 2016). The measures of entrepreneurial aspirations include research and development (R&D), financial market development and innovation (Szerb et al., 2015). When applied within the Omani context, all these three indicators of the REDI index would be useful in measuring the entrepreneurial ecosystem of Oman; these indicators provide the overall picture of the ecological entrepreneurial system.

Overall, this section presents the initial approach that can be used to understand the current state of the Omani entrepreneurial ecosystem. The approach is quantitative in nature as it aims at using statistical data in analysing and explaining the state of the ecosystems in Oman. However, the thesis will emphasize the qualitative analyses later in the study. This will be done in order to present a more detailed view of the ecosystem based on GEM and GEDI which is a national level phenomenon. It will strategically assist in comparing as well as contrasting the Omani ecological entrepreneurial system with other EEs around the globe.

## 2.9 Research Gaps

Despite the demonstrated significance and relationship of Islam in management and entrepreneurship, Ramadani et al. (2017) note that a sacralised secular control has dominated the Islamic view and its theorisation. In this context, the sacralised secular control refers to certain communal beliefs and religious views suppressed by the country's political party or government. Many scholars have noted the role of religion and culture in entrepreneurship (Harrison and Roomi, 2018). The way in which the Arabic culture and Islamic leadership concepts affect how entrepreneurial ecosystems are managed in such distinctive cultural and religious

settings (Gümüşay, 2015) has been largely ignored in the existing scholarly works. Nonetheless, in the last decade, the concept of Islamic leadership in management and entrepreneurship has received increased interest, even though it requires more research focus. There is no single study that combines the concept of adaptive co-management to Islamic leadership and Arabic culture to manage entrepreneurial ecosystems. From this starting point, the present study aims to bridge this theoretical gap by developing a management approach for the Omani entrepreneurial ecosystem to ensure better efficiency and management of challenges within the ecosystems, based on the country's existing Arabic culture and Islamic leadership context.

Furthermore, several studies have identified and evaluated the factors that contribute to the development of an efficient entrepreneurial ecosystem for start-ups (Stam, 2015). However, there is a lack of detailed analysis that examines how the management approaches in Arab countries such as Oman affect a conducive entrepreneurial ecosystem (Tappeh and Ghorbaninia, 2015). Like other parts of the world, creating an efficient and favourable entrepreneurial environment for start-ups depends on the existing leadership and management approaches (Spigel, 2017). Galán-Muros et al. (2017) found in various studies that the approach to management and leadership in Arab countries differs from those in other parts of the world, especially Western nations. In Arab countries, the economic activities are being aligned by the government officials, and activities not encouraged by the government are discouraged by the government officials. The legal system in the Arab countries is primarily operated by the Islamic norms and facilities provided to the residents, and the country's socio-economic norms mainly make the acquisition and mergers. The GCC countries have strong government intervention where the 2.5% religious tax is mandatory to contribute to the country's GDP. As a result, the formulation of a favourable entrepreneurial ecosystem may differ in Arab countries than in western nations. Thus, the Arab countries protect their shareholders, improve the social aspects, reliability, and enforce the business's exportation and import by prohibiting price controls and business initiation in the open market. This improves the country's business environment from the past years.

Additionally, there is insufficient theoretical and empirical knowledge to support the impact that the top to bottom management and leadership approaches

adopted in most Arab countries support an effective and favourable entrepreneurial ecosystem. Findings from a study conducted by Almobaireek et al. (2017) indicate that most MENA regions prefer to use the top-to-bottom approach to formulate various policies. These findings differ from those from a study conducted, which indicated that in western countries, the preferred management approach is the bottom-to-top when developing policies and specifically, the mentorship style when dealing with entrepreneurship. In the mentorship style adopted in western countries, the start-up can access and interact with different entrepreneurial ecosystem stakeholders for guidance on how to proceed with their venturing experience. Based on these results, Ramadani et al. (2017) concluded that in western countries, start-up ventures succeed due to the management style adopted in developing the entrepreneurial ecosystem. The difference in performance arises from the support that the bottom-top approach provides to the entrepreneurs compared to the top-bottom one (Davis and Winn 2017). I believe it is essential to analyse the factors involved to determine the leadership style. This can help examine the role of management in creating a conducive and effective entrepreneurial ecosystem in Arab nations that is not under the current study's scope.

There is limited research about the analysis of adaptive co-management in an Islamic leadership and Arabic culture context as performed by Laplaza and Tanaya (2017) in the Indonesian context. The Adaptive co-management Model concept has been used in various fields of study, specifically in environmental and tourism studies but rarely applied in the study of entrepreneurial ecosystems. Fabricius & Currie (2015) define adaptive co-management as a management system that evolved from the blending of two systems: a) Adaptive management and b) co-management. Adaptive co-management is achieved when blending these two systems through learning, participation, and simultaneously and cyclically (Butler et al., 2015). The system provides a paradigm where management is multi-party and can be negotiated to enable both parties to learn from each other and foster innovations. The management system is based on information sharing, sharing authority, sharing decision-making, and proper communication between the two or more parties involved. It is important to comprehend how adaptive co-management and the Islamic

leadership model can be effectively applied in the management of entrepreneurial ecosystems within the Arabic culture.

The analysis of Adaptive Co-Management (ACM) and the impact of Islamic leadership perspective and Arabic culture is also important due to their interrelation. Fabricius and Currie (2015) note that one of the key cornerstones for adaptive co-management is an enabling environment through rules and norms (institutional arrangements), policies, leadership, and legislation. This means that it is essential to comprehend the culture and the leadership style of an entrepreneurial ecosystem before applying the ACM. Harrison and Roomi (2018) point out that trusting each other and sharing ideas are core values in having a successful ACM. Similarly, the concept of leadership in Islam is based on trust and cooperation between the leaders and their followers; it represents a psychological and religious contract within which each party will try their best to protect others' interests (Ramadani et al., 2017). Trust and goodwill are also some of the core values within the Arabic culture (Houjeir and Brennan, 2017).

Thus, the current study aims at bridging these research gaps in focus. For this purpose of the study is directed towards highlighting the leadership style that must be practised for attaining the ultimate goal of sustainable entrepreneurial ecosystem in Oman. The study specifically outlines how Islamic leadership and Adaptive Co-Management system can address the issues and challenges faced by all the stakeholders of the entrepreneurial ecosystem in Oman.

## 2.10 Chapter Summary

To gain a better understanding of the ecosystem, the historical perspectives and definitions were studied tracing back to the mid-20th century. Concepts related to the entrepreneurial ecosystem approach included labour marketing pooling, flexible specialization, innovation systems and so forth were enlisted, analyzed, and further discussed. Findings comparing entrepreneurial and traditional ecosystems in the grand scheme of events were tabulated. Management of the entrepreneurial ecosystems was built onto existing policy frameworks to understand all associated policy challenges to applicability. A special focus was placed across the MENA region (Middle Eastern countries, particularly Oman), with contributors targeting

governmental involvements. The policy changes in the past 60 years were summarized noting their shifts towards growth-oriented enterprise policies and interconnections with other policies. An overlay of leadership, particularly Islamic leadership models, were critically tied into cultures in the Middle East. To measure entrepreneurial ecosystems, four indicators namely the concept of density, diversity, fluidity, and connectivity were studied. Overall, this section presents the initial approach that can be used to understand the current state of the Omani entrepreneurial ecosystem.

## Chapter 3: Theoretical framework

### 3.1 Introduction

Based on the research gaps identified pertaining to insufficient theoretical and empirical knowledge to support the impact that the top to bottom management and leadership approaches adopted in most Arab countries support an effective and favourable entrepreneurial ecosystem and in terms of how entrepreneurial ecosystems work, the current research framework aims at exploring how the entrepreneurial ecosystem in Oman can be effectively managed (Autio and Levie, 2017). It is essential to note in this regard, that the prevailing work of literature highlighted that there is a limited focus of the prior literature concerning policy-related challenges faced by entrepreneurs in Oman for the effective management of the entrepreneurial ecosystems (Dissanayake *et al.*, 2017; Stam, 2015; Kawamorita Kesim *et al.*, 2016; Galán-Muros *et al.*, 2017). Thus, based on this research gap, the current study strategically aims at exploring the challenges impacting the effective management of entrepreneurial ecosystems in Oman. In addition to this, the study also aims at examining the approaches that can be used for bringing effectiveness in the management of the ecosystem. Thus, the second major goal of the current study is to shed pertinent light on the importance of the adoption of Adaptive co-management (Neneh, 2018). In order to overcome the research gaps identified in the literature review module, the current study will aim at fulfilling this gap through its empirical data. The study will contribute to the knowledge of entrepreneurial ecosystems and the theoretical framework developed. In this context, the study will analyse the impact on culture and refer to the complex socio-economic structures and implementation of Islamic leadership in entrepreneurial ecosystems.

More specifically, the current chapter will be focusing on how the Adaptive Co-Management (ACM) theory and the Islamic Leadership Model can be utilized to eradicate the issues faced by the stakeholders in the entrepreneurial ecosystem and business environment in Oman. Therefore, there is a strong need to develop a proper theoretical framework for addressing the research gaps identified in the previous section. Moreover, this framework will act as a base for achieving the research objectives. The Islamic leadership model further extends the discussion on the role of

culture and religion, on the management of entrepreneurial ecosystems (Ramadani et al., 2017). It is also reviewed as an alternative approach to the management of entrepreneurial ecosystems, especially where the entrepreneurial ecosystem is a subset within an Islamic society. Therefore, adaptive co-management is used to shed light on the dynamics and governance systems that can be effectively used in the management of entrepreneurial ecosystems (Fabricius and Currie, 2015). In alignment with the Islamic leadership model, the ACM is also considered as an alternative approach to the management of EEs (Autio and Levie, 2015). These two theories were chosen due to their relevance in explaining how constantly changing and dynamic entrepreneurial ecosystems can be effectively managed. Further, it will also help to overcome and close the research gap by addressing and explaining different aspects and factors that impact the culture and management in the entrepreneurial ecosystem in the country.

### 3.2 Leadership in the Management of Entrepreneurial Ecosystem in Oman

Leadership plays a pivotal role in the entrepreneurship ecosystem. Moreover, Leadership is a significant factor that helps in guiding the employees in the right direction. It even allows employees to make them engage in the work and to get an effective outcome. In each and every way, leadership is a fresh topic and has become the need of new business. Moreover, this helps in understanding the policies and rules developed by the government. This helps to improve the business and make the employees work together in the organisation.

Additionally, leaders need to consider the social factors and cultural background of the employees to motivate them and help them adjust to the organisation. Therefore, this creates various opportunities for the businesses and creates a business-friendly environment to create balance in the entrepreneurial ecosystem. The leaders possessing the leadership quality will surely provide proper direction to the entrepreneurial ecosystem in the country. Likewise, where the leaders take responsibilities to get the opportunities and are proactive are able to optimize risks in entrepreneurship.

### 3.3 Islamic Leadership Model

Islamic entrepreneurship is an important concept to analyse, especially in the MENA region. This is because the majority of the population (95%) in the MENA regions comprising 20 countries are Muslims (World Bank, 2018). Interestingly, some of these countries account for the lowest while others for the highest per capita GDP. For instance, Somalia has the lowest GDP of \$600 while Qatar has the highest GDP of \$102,700. Both of these countries are Muslim-dominated countries (Almobaireek, Alshumaimeri and Manolova, 2017). Given these demographics, the increasing interaction between business, culture and religion in the modern world, a lot of researchers are focusing on Islamic entrepreneurship as an interesting phenomenon with relevance to contemporary economies (Ramadani et al., 2015; Dana, 2010).

In the current research framework, the Islamic leadership model is used to show the connection between entrepreneurial ecosystem policies and culture. Islamic perception of entrepreneurship is applied as a framework for understanding the entrepreneurial ecosystems policies in Arab countries. This is specifically done to comprehend the role and importance of community engagement. Additionally, it will help in accentuating how contributions are made when formulating policies relating to the management of EE (Itani et al., 2011). In many cases, it is observed that there is a prevalence of conflicts of interest among stakeholders involved in policy development. Such conflict of interest affects the management of the entrepreneurial ecosystem in a country in a detrimental fashion. Nonetheless, such conflict may rise over time resulting in arguments between stakeholders and management. This will further affect businesses from taking decisions to progress with projects (Isenberg 2011). In order to avoid related conflicts, the management needs to be wiser while making policies for the benefit of the business and create a positive environment for entrepreneurship (Glavan (2007).

In most countries in the Arabian Gulf region, various cultural beliefs and personal interests impact the ability of political leaders. Moreover, it affects while making the relevant policies with the intent of ensuring that the entrepreneurial ecosystem is suitable for the creation of new businesses and the improvement of

existing businesses (Khalil and Olafsen 2010). However, if the Islamic principles are applied inclusively then these inadequacies in making policies can be overcome. Moreover, the right policies can be created as this will enable potential entrepreneurs to perform their entrepreneurial duties in an effective manner (Bruton, Ahlstrom and Li 2010).

In the formulation of policies pertaining to entrepreneurial ecosystems, leaders should not be allowed to make decisions based on their positions and hierarchical ranks (Mohammed et al., 2011). Other stakeholders of the study must be allowed to participate and must actively put forth their views. Rather, the contributions to the policies should be made by various stakeholders such as entrepreneurs and a number of professionals who understand the entrepreneurial environment. In addition to this, by a number of leaders whose contributions are all incorporated into the new entrepreneurial policies (Day and Harrison 2007). In other words, policies should not be based on the decisions made by a few leaders without the consideration of the views of other leaders and stakeholders in the entrepreneurial environment. But during the practice, it is very often observed that the exact opposite occurs whereby policies are built, reviewed and are approved by a few selected people. – these are usually people within the ecosystem which is a matter of concern for building a sustainable entrepreneurial ecosystem (Dubina, et al., 2017).

The Islamic leadership model can prompt the detailing of arrangements influencing business ventures, and also the right choices in order to establish an appropriate environment for the business activity in Oman (Pinillos and Reyes, 2011). The Islamic leadership model is important in creating entrepreneurial policies because it can provide the leaders with the leverage of being inclusive in the decisions, they make pertaining to entrepreneurial ecosystems (Stel 2013). Political leaders will be able to generate more options when formulating policies that are used to enterprises in Arab countries. If the Islamic Leadership model is applied appropriately, it will enhance the overall inclusion of the stakeholders. This is because it encourages the inclusion of all parties and stakeholders in decision-making processes. In accordance with this notion, Kayed and Hassan (2010) argued that Islamic entrepreneurship is

based on the inclusion of all the relevant parties into the decision-making and policy-making, an approach which can benefit the overall entrepreneurial ecosystem of the Sultanate of Oman. However, in participatory leadership approaches, leaders prioritise communication and conversation among the employees and management in the organisation. Moreover, they share knowledge and information, idea generation and distribution in order to encourage and participate in the decision-making process and make the right decisions for the organisations.

Ramadani et. al., (2017) identified and stated that Islam as a religion emphasises more on the undertaking of business activities mainly of the greater value or good to society. Ramadani et al. (2017) further argued that several restrictions and directions were provided on how a Muslim entrepreneur should run a business. They mainly aimed at minimising the number of business transactions or activities that harm society. Moreover, Islam is a religion that provides guidelines not only for spiritual matters but also for other matters, including like how a leader and entrepreneur who practices Islam should conduct business (Fozia, Rehmana and Farooq 2016). Gumusay (2015) argues that Islam gives a perspective to business-related streams such as economics, finance and entrepreneurship. Leadership is also another key concept in business, and specifically, in entrepreneurship. Fozia, Rehmana and Farooq (2016) define leadership as a process of influencing and supporting others to enthusiastically work towards achieving an objective. Leadership is a significant success factor in entrepreneurship and organisations.

Various studies have studied the concept of Islamic leadership. Fozia, Rehmana and Farooq (2016) identified and outlined that from an Islamic perspective, leadership is the process of influencing others to achieve goals and objectives ethically. The concept of leadership in Islam effectively serves as a catalyst for leaders to influence the behaviours and attitudes of their followers to achieve organizational objectives (Ali, 2009).

### 3.3.1 Premises of Islamic Leadership

Gumusay (2015) mainly aimed at studying the leadership point from an Islamic perspective. In addition to this, he stated that leadership is a process of coaching and

inspiring voluntary followers to achieve clear, defined and concrete visions and goals. In this regard, successful leaders should be visionary and also be able to see beyond the assumed boundaries as well as come up with solutions that cannot be visualized by many. According to Gumusay (2015), Islam is a religion that encourages entrepreneurial activity. Similar arguments were developed by Hamid and Saari (2011) explaining that the environmental, social, economic and ethical provisions of the Islamic Law influence, shape, and promote entrepreneurship. In their book, Ramadani et al. (2017) argued that Islamic entrepreneurship, coupled with continuous support from government policymakers and other stakeholders is likely to encourage business growth. However, the effectiveness of the Islamic entrepreneurship would mainly depend on whether appropriate policies and strategies are put in place. This points towards the need for collaboration between different stakeholders and key players for effectiveness using an Islamic entrepreneurial ecosystem.

Davis (2013) identified and explained the existence of halal (permitted) and haram (forbidden) services and products. Moreover, that is what distinguishes Islamic entrepreneurship from the other religious forms of entrepreneurship. This implies that business activities within the Islamic context are based on ethical and social responsibilities. Similarly, Ramadani et al. (2015) argued that Islamic entrepreneurship is guided by Taqwa, which is closely related to the principles of mushtabeh (doubted), haram (forbidden) and halal (permitted). In this sense, Islamic entrepreneurship encourages Muslim entrepreneurs to engage in halal businesses, avoid haram activities and reduce mushtabeh dealings. Chowdhury (2008) argues that those that start a business that is guided by Islamic principles are expected to comply with fair trading and equality requirements. Chowdhury (2008) further adds that Islamic entrepreneurship should involve goals (such as prosperity, survival, growth, peace and harmony) and inputs (such as moral values, ethics, ideas, and thoughts).

Kayed and Hassan (2010) elaborated that the Islamic view of entrepreneurship focuses on being socially acceptable and having an ethical foundation. They added that it is this morally-based view of Islam towards entrepreneurship that forbids entrepreneurs from engaging in 'greedy' activities such as charging interests (Kayed

and Hassan 2010). In this regard, Islam is seen as a driver of entrepreneurship because of its emphasis on positive cultural interaction and ethics. In this manner, Islamic values act as a motivation for entrepreneurs to positively contribute to society. Hoque et al., (2014) identified and found that the manner in which Muslims undertake entrepreneurship varies depending on their locations (abroad or home country) although there are many Muslims that tend to disregard the Islamic teachings and values when setting up their enterprises (Hoque et al., 2014).

Acheampong (2017) carried out a study that mainly focused on identifying whether the motivations of Muslim entrepreneurs differ from the motivations of other entrepreneurs from various other faiths in Ghana. This study mainly identified employment and profit as the two main motivational factors as these factors encourage people towards entrepreneurship.

Moreover, the study found that more people (regardless of religion) are engaged in entrepreneurship, as this helps them in gaining profit rather than self-employment. The study used the Muslim and non-Muslim covariates, and found that non-Muslims engaged in entrepreneurship more for profit. In addition to this, in the recent times, it is mainly observed that self-employment roles motives other muslim entrepreneurs, which are not existing in the market.s which are mainly because of the differences in the set of values between Muslims and non-Muslims (Acheampong, 2017). From the point of view of the Muslim entrepreneurs, they have the integrity to prosperity and they look after the business as a part of worshipping God. Acheampong (2017) further explains that Muslim entrepreneurs, apart from potential financial gains for themselves, also strive for the overall societal betterment, which can further help towards the creation of an entrepreneurial ecosystem. Further, the Islamic leadership model can be divided into two different types:

- a. Personalism- based Islamic leadership model
- b. Idealism-based Islamic leadership model.

Therefore, the leaders face various issues in the leadership model. The idealism in social characteristics helps in sharing the values and beliefs by weak people,

expectations are high and the widespread understanding of values is achieved. However, the personalism-based Islamic leadership model, people have empathy and influence but lacks a focus on institutionalism than the people adopting idealism Islamic leadership model.

Other similar studies were conducted, where the Islamic perspective of entrepreneurship as compared to the western perspective and way of undertaking entrepreneurship have been carried out. For example, Kayed and Hassan (2013) identified and explored whether Islamic entrepreneurship is a viable alternative to the Western style of entrepreneurship for dealing with prevailing challenges of economic underdevelopment and unemployment that several Arab countries are prone to. Using Saudi Arabia as the case study, the study found that Islamic entrepreneurship had enabled Muslim entrepreneurs in Saudi to earn halal profits, created self-employment opportunities for individuals, wealth for the nation (ummah) and promoted economic growth and development in the country. The study, however, found that Saudi Arabia, just like other Islamic countries, lacks an independent authority or institution that is committed to promoting Islamic entrepreneurship or the well-being of SMEs (Kayed and Hassan 2013).

Islamic laws and teachings require Muslim entrepreneurs to refrain from taking part in certain financial activities such as usury, speculation and gambling (Hassan and Mollah, 2018). Some non-Muslim entrepreneurs may choose to refrain from certain business opportunities due to moral or religious laws. But the difference between the non-Muslims and the Muslim entrepreneurs is that these limitations are less restrictive and voluntary as compared to those provided by the Shari'ah laws (Milani and Ahmadi, 2018). In contrast to the views of Hassan et al. (2018) and Milani et al. (2018), there are studies that identified various Muslim entrepreneurs are indulging in unethical business activities. This is mainly because in real life the rules and regulations imposed by the Shari'ah are sometimes ignored by individuals for personal gains.

Islamic principles state that the limitations imposed on Muslim entrepreneurs do away with the inherently unjust and immoral economic activities, and these

limitations enhance the social value of the economy (Hassan and Hippler 2014). This is because Islamic teachings put a lot of emphasis on the economic activities that enhance societal goals as a whole, and the limitations imposed on the Muslim entrepreneurs are meant to protect the society from harm (Rohe, 2018). Hassan and Hippler (2014) outlined that Islam is a religion that puts much emphasis on both prayer and earning a standard of living, in order for Muslims to be able to support themselves as well as their family and society at large. In this regard, the principles of the Qur'an and Sharia laws require every Muslim to make a living as per Islamic teachings. They further added that Islamic laws impose humane goals on entrepreneurs that make it inappropriate to use some measures of entrepreneurial success used by Western entrepreneurship as they are unsuitable.

Hassan and Hippler (2014) also highlighted that Islam emphasises the significance of undertaking business activities that promote and prioritise the goals of society as a whole rather than individualistic goals that can harm society. Different types of leadership models influence the market condition, policies, culture and support the entrepreneurial ecosystem in the country. However, there are leaders with different opinions and cultures that create differences and increase conflict which leads to missing out on the business objectives in Oman.

Fozia, Rehmana and Farooq (2017) explained that entrepreneurship from an Islamic perspective is based on three pillars as these are interconnected and shape each other. Moreover, the definition of the entrepreneurship pillar is completely based on the pursuit of opportunities from the Islamic perspective. The ethical and socio-economic pillar focus on the interaction between people. Lastly there is focus on the religious-spiritual pillar that links the people to Allah and that ultimately relates to the objects created by the people to please Allah (Fozia et. al., 2017).

Various Islamic writings (hadith) identified and showed that Islam has a positive attitude towards entrepreneurship as well as towards ownership rights (Fozia et al., 2017). Moreover, Prophet Muhammad (PBUH) was asked to describe the best type of earning for a Muslim, and his response was: "A man's work with his hands and every (lawful) business transaction.". In his article, Smart (2012) acknowledged the

distinctiveness of the Islamic code of business ethics and the positive contributions that “trust” can lead to organizational competence and cost-effectiveness in economic activities. While studying the Islamic perspective of entrepreneurship, ethics take precedence over economic aspects as a consequence of the cultural and societal factors that influence entrepreneurial ecosystems.

If implemented in its true spirit, the Islamic perspective does not allow any type of benefit (financial or non-financial) to surpass the importance of ethical values and norms. While in a capitalist economy, the important decisions on investment opportunities and production targets are set as per the owners’ understanding of the profit. On the other hand, the prices are set based on market competition (Smart and Smart, 2012).

### 3.3.2 Collectivism versus individualism

Ramadan et al., (2017) outlined that in a capitalist market economy, decision-making and investments are determined by every owner of wealth, property or production ability in financial and capital markets, whereas the prices and the distribution of goods and services are mainly determined by competition in the goods and services market. The Islamic perspective of entrepreneurship incorporates Islamic ethics and moral values as applied in business undertakings and in the economy in general (Ramadan *et al.*, 2017). With regards to this, Islamic leadership proposes certain financial and entrepreneurial partnerships such as *mushārah* and *muḍārah* (Lita, Hasanah and Barlinti, 2018). *Muḍārah* is a legally abiding contract under Islamic law where two partners engage in profit-sharing. Here, one partner offers the capital and the other offers the labour in terms of management or entrepreneurial skills (Abalkhil, 2018).

*Mushārah* is different from *muḍārah* in the sense that parties are engaged in a legal, contractual agreement that jointly establish the enterprise or venture together. Further, they also contribute together in terms of entrepreneurial or management labour skills as well as capital. In both *mushārah* and *muḍārah*, profits made are shared amongst the parties in the proportion that was agreed while the losses are shared on the parties that provided the capital based on the proportion

of the funding that they made (Lita *et al.*, 2018). This means that entrepreneurs who engage in mushārahah and muḍārahah agreements only provide the labour and not capital and are not subject to incur any monetary losses. Rather, they are subject to lose only the effort and time invested (Sadiq, 2018). This might be difficult for the women entrepreneurs in the country under Islamic leadership as the women are part of a predominantly male-dominated society. Thus, it can be understood that for a favourable business environment in the country, it is essential to develop a viable entrepreneurial ecosystem.

Qur'an, the base for Islamic perspectives of entrepreneurship, clearly states that "...final ownership lies with Allah" (Qur'ān, 24: 33) and that human beings are the "caliphs, trustees or vice-regents" (Qur'ān, 2:30; 57:7). This implies that the immediate ownership of the venture is not with the entrepreneurs. Also, Islamic teachings prohibit the practice of wealth hoarding (Qur'ān, 3:180; 9:34). In this regard, Rameli *et al.* (2014) state that numerous indicative characteristics of entrepreneurs, such as khiyār entrepreneurs, ḥalāl entrepreneurs, Shari'ah entrepreneurs, bai' entrepreneurs, and so forth, can be assessed based on the generic business functions such as marketing, production, human resources and finance. Kayed and Hassan (2010) further add that the Islamic principles direct that Allah created humans and made them custodians on earth and its resources. As a result of this, humans are required to use these resources in a prudent manner for the benefit of future generations. Thus, humans have the responsibility to conduct businesses that are beneficial to themselves, others and to society at large. Hence, any business activity that can be potentially harmful to even a single member of an Islamic community is discouraged and prohibited.

The Islamic leadership model regards knowledge seeking and sharing as the basic scaffold for all Muslims to follow (Sheikh and Bhatti, 2017). In Islam, knowledge is classified into wisdom, scientific and spiritual knowledge. And all Muslims are encouraged to search for knowledge in order to improve the wellbeing of society (Sheikh and Bhatti, 2017). Also, Islamic teachings encourage Muslims to seek knowledge and to share it with others (Chittick, 2010). In the management of

entrepreneurial ecosystems, knowledge-seeking and sharing are considered an important component. One of the ways through which entrepreneurs can expand their knowledge of the existing policies and procedures is through awareness creation and information access. Hence, it can be stated that the key players within the ecosystem must have access to important information concerning the market, new technologies, financial services, entrepreneur ideas and other information (Dubina, et al., 2017).

Islamic principles also encourage collectivism over individualism. This implies that the concepts of individualism and collectivism play a major role in running a business within an Islamic context (Triandis, 2018). The concepts of individualism and collectivism are significant in this study because such concepts are present in a cultural dimension. Subsequently, their emphasis on a culturally-focused theoretical framing clearly supports the effort to shape a theoretical framework that can be used to demonstrate the role of social structure and cultural norms in the management of the entrepreneurial ecosystem.

Hofstede (2019) defined individualism as the inclination towards a social framework that is loosely-knit. As a result, individuals within such a framework prefer or are expected to only focus on taking care of themselves and their closest families. On the other hand, Hofstede (2019) defined collectivism as a social framework that is tightly-knit. Hence, in accordance with this, individuals within such a framework expect their relatives or members of a certain group to take care of them in exchange of their loyalty. The concept of individualism/collectivism has been widely studied under the cultural dimension of entrepreneurship. On the one hand, individualists are independent and autonomous from their in-group. This makes them focus more on their personal goals, personal achievements and self-interest. On the other hand, collectivists focus more on building relationships and rely on conflict resolution methods to resolve the conflicts within the in-group. This makes their personal goals subordinate to that of the collective group that they belong to (Carvalho 2015).

The effect of the individualism/collectivism dimension has been widely studied by various scholars as individualism is more affiliated to individuals having different

views and opinions, values shared in the entrepreneurship platform. Individualism focuses on features such as independence, individuals' goals and achievements and autonomy. According to Carvalho (2015), collectivists are more likely to come up with ideas that will not ruin the relationships with the group members or break the group's status quo or harmony. On the other hand, individualists are only concerned about their personal interests, and as such, are more likely to propose highly-risk ideas that would also have a strong impact on society. In this context, Carvalho (2015) argued that the individualist culture was the most suitable environment for entrepreneurship, as the entrepreneurs could take their decisions in the business. Moreover, from idea generation to the execution of the entrepreneurial planning to the business is more evident to have growth in the business in future.

According to Pinillos and Reyes (2011), the relationship between the individualism/collectivism dimension and entrepreneurship is moderated by the economic development of a country. They further explain that within the developing economies' environment, collectivists are more likely to come up with ventures in order to get affiliation and achievement. While on the other hand, individualists in developed economies are more likely to engage in creating new ventures that meet their personal goals. According to Pinillos and Reyes (2011), both the individualists and collectivists all "contribute to firm creation" (p.33). Thus, necessity-driven entrepreneurs are likely to pursue a collectivist orientation, especially when there is a need for close relationships that can open access to support networks and access to funding. In the case of Oman, where the majority are necessity-driven entrepreneurs, a collectivism dimension is anticipated to be present.

### 3.3.3 Impact of Islamic Leadership on Culture for Entrepreneurial Leadership

When reviewed within the entrepreneurship policy dimension, economies with a collectivist orientation are more likely to have policies. Especially the policies that support networking and linkages or enhance access to resources such as funds and knowledge (Galanou, and Farrag, 2015). On the other hand, individualist economies are more likely to focus on innovation and technology-related policies that encourage entrepreneurs to come up with more creative ideas.

According to Fozia et al. (2016), the concept of leadership in Islam is based on trust between the leaders and their followers. It represents a psychological and religious contract upon which each party will try their best to protect the other's interests. Similarly, Slamet, et al., (2020) argue that leadership in the Islamic view must be perceived through moral and ethical dimensions. They quote the Quran whereby it is stated that: "You are the best of peoples, evolved for mankind, enjoining what is right, forbidding what is wrong, and believing in Allah..." (Qur'an 3:110). This has also been emphasized by Ali (2009) who notes that leadership in Islamic perspective is based on doing good deeds for the sake of Allah, the Muslim community and for the humanity/entire community (ummah) through the propagation of all that is good. According to Slamet et al., (2020), the Qur'an and Prophet Muhammad offer the Islamic leadership model that all Muslim leaders should follow, and this includes the following five traits: Humility, Social Responsibility, Piety, Self-Development, and Mutual Consultation. House et al. (2013) in their book on "Strategic Leadership Across Cultures: GLOBE Study of CEO Leadership Behavior" stated that individuals believe that the top management teams and upper-level executives are responsible for a specific direction of an organisation. However, it should be noted that all of them are rather influenced by their own cultures and values they shared from the beginning and expectations. Thus, this is a factor that determines the overall direction of the adoption of Islamic leadership.

A review of existing literature describes that the Islamic leadership model has been employed in various entrepreneurship and management studies (Egel and Fry, 2017; Samier, 2017). Nevertheless, analysing the previous studies, which have focused on the role of Islamic insights on entrepreneurial leadership (Leitch and Harrison, 2018), several of them have been focused on the key lessons regarding how Islamic leadership is applied in entrepreneurial leadership and management has been important for the present study.

The current study is mainly focusing on Islamic management models, Islam is regarded as a unique concept that is characterised by diversity, happiness, civility and prosperity ((Harrison and Roomi, 2018). Furthermore, Islam requires Muslims to

commit themselves to community development, to build organisations and to surrender their authority as per the teachings of the Hadith and the Quran (Ali, 2011). In their surrender, the leaders or managers should possess the three most important attributes of responsibility, humility and accountability (Kamri, Ramlan and Ibrahim, 2014).

Despite the demonstrated significance and interrelation of Islam in management and entrepreneurship, Ramadani et al. (2017) note that the Islamic (theory) view and its theorization has been dominated by the social context in the Islamic leadership in EE. This indicates that the role of religion in entrepreneurship has been largely ignored in existing scholarly works. However, in the last decade, the concept of Islamic leadership in management and entrepreneurship has received an increasing focus, even though it requires more research focus. Especially, the impact of ecological entrepreneurship within an Islamic leadership context should be a point of focus by the researchers. Davis and Winn (2017) through their study outlined that there are conceptual differences between leadership and management. Figure 13 highlights these conceptual differences between leadership and management.

## The Different between Leadership and Management

|                               | Leadership<br>Coping with change                                                                                                   | Management<br>Coping with complexity                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| What are we setting out todo? | <b>1.Set Direction</b><br>Develop a vision and strategies to achieve that vision; setting high but reasonable standards            | <b>1.Plan and Budget</b><br>Develop detailed steps and timetables and allocate resources                                            |
| How do we deliver results?    | <b>2.Align People</b><br>Communicating direction to influence creation of teams and coalitions that understand vision and strategy | <b>2.Organise and Staffing</b><br>Establish a structure to achieve the plan; delegate authority and provide policies and procedures |
| What do we make it happen?    | <b>3. Motivate, Mentor, Inspire</b><br>Energizing people to develop and overcome barriers to change                                | <b>3. Control and problem Solving</b><br>Monitor and organize                                                                       |
| What are the outcomes?        | <b>4. Produce Change</b><br>Often to a dramatic degree, such as cultivating new services and new approaches                        | <b>4.Produce Predictability and Order</b><br>Consistently achieve budgets and targets                                               |

Figure 13 The difference between leadership and management.

Davis and Winn (2017) identified and listed the most common theories used to explain leadership as shown in Figure 14. These included the traits theory developed by DuBois, et al., (2015) namely behavioural theories, contingency theories, power and influence theories. Davis and Winn (2017) noted that while these theories play a significant role in describing what leadership is, they fall short on explaining the role of religion in leadership. Davis and Winn (2017) argue that the early Islamic leaders relied upon the Islamic teachings and values, and these practices and principles by the earlier generations are key in examining and guiding the modern leadership in the Islamic business world. Moreover, Islamic leadership focuses more on culture and the societal norms in the entrepreneurship ecosystem. Liden et al., (2014) found that personal attributes can influence the behaviours and can also form the fundamental principles and assumptions the leaders have about the culture and the values in them.



In this manner, Islam plays a major role in encouraging positive cultural interactions with individual beliefs in entrepreneurship. Simultaneously, Islamic ethics motivates entrepreneurs to facilitate and create a positive attitude towards social and economic development (Ramadani et al, 2017).

Almobaireek, Alshumaimeri and Manolova (2017) reviewed the process of new venture creation in an Islamic context and developed the following framework presented in Figure 15 (Pg 17) below. This framework assists the current study in developing an in-depth understanding of the grounded theory on the impact of Islamic leadership in entrepreneurial ecosystems. Almobaireek, Alshumaimeri and Manolova (2017) identified and outlined that the process of recognising, creating and exploiting opportunities is multifaceted and complex. The framework above shows that religion plays a significant role in encouraging entrepreneurship within the Arabic culture. It includes the spiritual enhancements that arise from cultural heritage and Islamic values. In this regard, religion (in this context, Islam) encourages creativity, innovation and the ability to maintain business ventures.

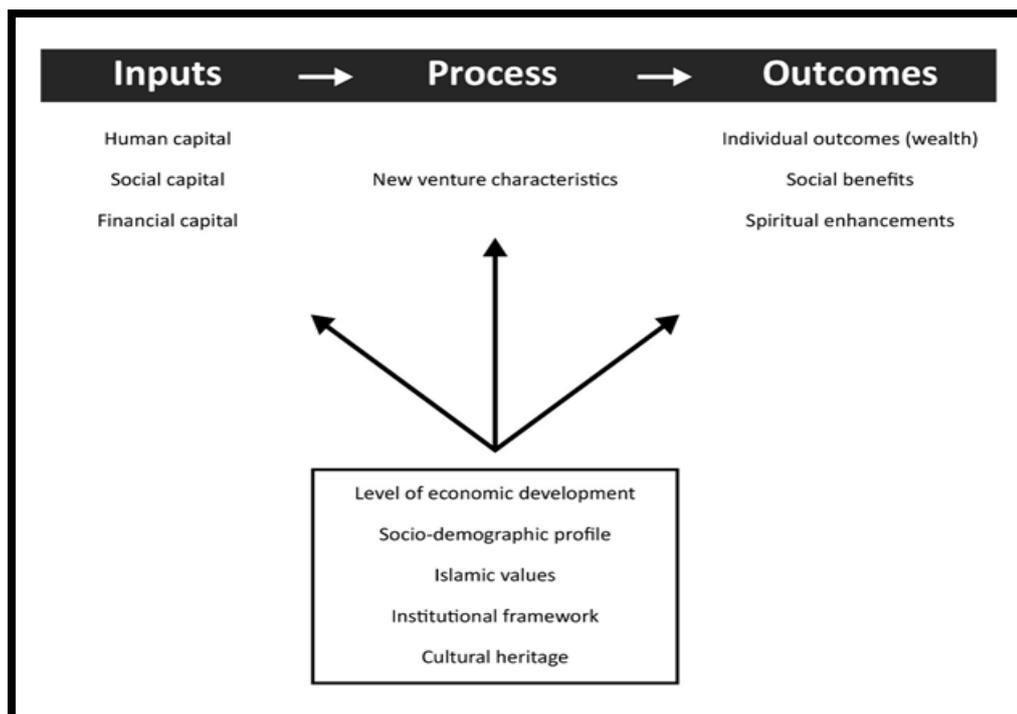


Figure 15 Process of new venture creation in an Islamic context

(Almobaireek, Alshumaimeri and Manolova, 2017, p. 58)

The framework also shows that integrating Islamic values within entrepreneurial behaviour enhances social capital, and this validates the social capital theory of religion (Almobaireek, et al., 2017).

### 3.4 Adaptive co-management in entrepreneurial ecosystems

The term Adaptive Co-Management (ACM) was first coined in 1997 by the Centre for International Forestry Research (CIFOR). CIFOR mainly aimed at highlighting the social context of the adaptive co-management model but has ever since developed to include the enrichment of co-management literature is more of an origin. Therefore, needed earlier on resilience thinking and complexity science. It is in this regard that Plummer et al., (2017) define ACM as a combination of both the collaborative and adaptive narratives in resource management to create a distinct approach.

The concept of ACM is useful in an entrepreneurial ecosystem because it helps in supporting the development of the understanding of how vertical and horizontal links are forged for shared learning-by-doing between various actors, over a medium-to-long period of time. Therefore, if applied in the current study, ACM would help in creating an understanding of how networking and other activities that entrepreneurs engage in amongst themselves or with other stakeholders contribute to knowledge creation and learning over time. Scholars have used the adaptive co-management model in various studies. For instance, the adaptive co-management has been used to explore the link between national and local institutions in maintaining 'polycentric governance', specifically on how policy choices made at both the national and local levels impact the characteristics of the emerging social networks of the local institutions and local users (Laplaza, Tanaya and Suwardji, 2017). The study of Laplaza et al (2017) also found that adaptive co-management policy made the efforts of both the national and local institutions adaptive in an interactive manner and that the social networks were conjointly and effectively managed while the no adaptive policy made national and local policies constant over time and ineffective (Laplaza et al., 2017).

The current research framework incorporates the Adaptive Co-Management (ACM) model to understand the role of the state and the effect of different policies on the local entrepreneurial ecosystem in Oman. Moreover, it is also conducive for understanding the impact on the business environment (Spigel, 2017). The main assumption is that entrepreneurial ecosystems are composed of localised social networks that operate at different policy levels (Li, de Zubieta and O'Connor, 2015; Malecki, 2011). The settings of the adaptive co-management model are required for the research focusing on the structure and function of the study in the context of the entrepreneurial ecosystem. Therefore, this approach is appropriate for the study in this context to support the analysis of the sustainability and ecological resilience in different services. Plummer et al. (2012) describe adaptive co-management (ACM) as an emerging approach of governance for complex socio-ecological systems. Adaptive co-management is in essence an approach to ecosystem governance, as a partnership between the state or regulating authority, scientific and media institutions, resource users and "other civil society groups" (Adger 2005). It links both the experimental and experiential learning functions of ACM to the horizontal and vertical function of co-management. Olsson et al. (2010) have also defined ACM as an approach that has the ability "to deal with the ecosystem dynamics and governance systems". Adaptive co-management is not only the answer to all management challenges (Plummer 2009), but it seems to be very useful and easy in dealing with complex situations (Carlsson and Berkes 2005). Moreover, it even helps during the decentralization of management in a desirable manner (Bulkeley and Betsill 2005). Even if there is any need to legitimize decision making (Carlsson and Berkes 2005) also in conflict resolution (Pomeroy and Berkes 1997, Singleton 1998), and problem solving (Carlsson and Berkes 2005). Adaptive co-management helps in eliminating the problems and enables the users to develop the solution.

Hasselman, et al., (2017) defined ACM as the long-term management structure that allows key actors to share various management responsibilities within a given system of natural resources, and learn from their actions. Further, Hasselman, et al., (2017) defined ACM as the process of testing and revising ecological knowledge and institutional arrangements in a continuous, self-organised and dynamic way of

learning by action. Lindström, et al., (2018) defined ACM as community-based, flexible systems of managing resources that are tailor-made to specific situations and places. Moreover, ACM has been identified as supported through cooperation and networking among various organisations at various levels.

There are various reasons to adopt adaptive co-management in this thesis: First and foremost, ACM puts emphasis on learning-by-doing, relationships and the capacity of the communities and resource users (Hasselman, 2017). In order to have an effective and well-functioning entrepreneurial ecosystem, it is essential to have learning and entrepreneurial knowledge channels as well as collaboration and networking among critical stakeholders such as mentors, investors, government agencies and entrepreneurs (Dubina, et al., 2017). Another reason why the ACM model is significant is that it creates both vertical and horizontal institutional links and establishes bridges between the national and local level and is concerned with the capacity of resource users and communities (Berkes et al., 2007). This makes ACM more applicable in the management of entrepreneurial ecosystems as it offers a conceptual framework on how various levels of policy-making affect the ways in which entrepreneurial ecosystems are managed (Schultz 2009). Through the ACM model, the importance of different entrepreneurial ecosystem policy-making strategies is explored. More importantly, ACM can be tailored to specific entrepreneurial ecosystems because it focuses on specific situations or contexts (Berkes, 2009; Armitage et al., 2009; Plummer and Hashimoto, 2011). ACM has the ability to address the challenges of fit by comparing the various levels of social institutions and entrepreneurial ecosystems (Galaz et al., 2008) create adaptive capacity (Armitage 2007), as well as to become an agent of governance that is authentic and suitable to handle uncertainty (Fennell et al., 2008).

The adaptive co-management model was also chosen for this study because it promotes features needed for the effective management of entrepreneurial ecosystems. Some of these features of the ACM model include the promotion for a shared goal, responsibility, vision and problem identification that offers a common focal area among all actors and interested parties. Additionally, it allows for a high

degree of interaction, collaboration and dialogue among actors at various levels. Further, it facilitates a degree of autonomy among different actors at different levels. Finally, it also promotes knowledge sharing and learning (Armitage, Berkes and Douleday, 2007). Environmental policy has received an overwhelming amount of attention focused on co-management and the management policies in the businesses in Oman. Thus, adaptive co-management captures the idea that rights and responsibilities should be shared among the entrepreneurs who are claimed to the environment or the use of natural resources in the business.

Various key themes of ACM with relevance for the present study include complex systems thinking, adaptive capacity and resilience, learning, knowledge and social capital, institutional design, conditions of success and failure, partnerships and power-sharing, and policy implications (Berkes, & Ross, (2016). The emerging themes of adaptive co-management are as shown in Figure 16, (Pg 21) and they could all play a part towards the interpretation of data as this emerges through the application of a version of grounded theory, for the present study.

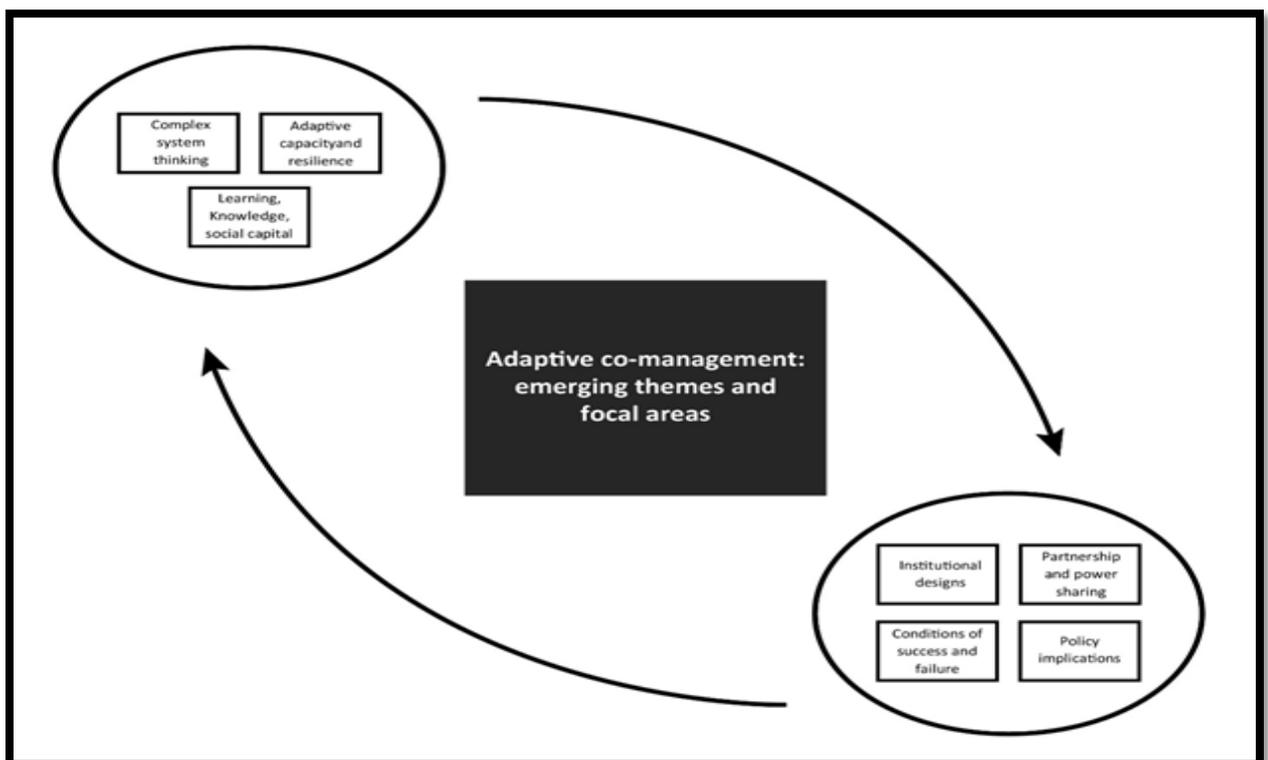


Figure 16 Key themes in adaptive co-management  
(Armitage, Berkes and Douleday, 2007, p.6).

#### 3.4.1 Complex systems thinking

The emerging theme of complex systems thinking gives a way of analysing, defining, interpreting and cognitively constructing socio-cultural systems that are closely connected, such as entrepreneurial ecosystems (Folke et al., 2010). Complex system thinking focuses on the non-linear, dynamic connections among linked ecological and social domains and solving these complex systems (Berkes, 2016). Complex systems thinking enables the actors to understand how to manage social interactions, and it focuses on the processes of networking, creating relationships and providing feedback (Plummer and Fennell, 2009). Complex systems thinking also emphasises the role of institutional flexibility and diversity to accommodate both the social and cultural systems (Ojewumi, et al., 2019). Complex systems thinking is applicable in the analysis of how entrepreneurial ecosystems are managed. This is because connections, networks and feedback are an important part of enhancing efficiency in the entrepreneurial ecosystems (Beugelsdijk, et al., 2017). In the case of Oman, this thinking is especially important in understanding the current ecological environment for entrepreneurs and what techniques they apply for the resolution of their entrepreneurial challenges.

#### 3.4.2 Adaptive capacity and resilience

The adaptive capacity and resilience theme focuses on the manner in which managers mediate in a diverse social-cultural system (Thonicke et al., 2020). This theme puts more emphasis on the ability to maintain systems resilient to disturbance or uncertainty (Armitage, Berkes and Doubleday, 2010). It is important for adaptive capacity to be present, because it links the needs of social actors and learning to the connection to innovative solutions in complex socio-ecological contexts (Farhad, Gual and Ruiz-Ballesteros, 2017). In the context of Oman, this is essential because the adaptive capability will allow for a controlled change in the entrepreneurial ecosystem.

Institutional design is adopted within the adaptive co-management model to assess the impact of Islamic leadership on culture and management in Oman and influence the entrepreneurial ecosystem, and it is an important aspect of the decision-

making process. Moreover, it is an effective tool for implementing ACM across different socio-ecological systems (Erickson, 2015). Institutional design analyses can expose ways of enhancing restoration outputs without the need for new funds, which makes it significantly during periods of economic contraction (Roni et al., 2010). Some of the trends related to institutional design for adaptive co-management include devolution and decentralisation of governance strategies. These trends are concerned with sustainability and efficiency (Soderberg and Sandstrom, 2015).

### 3.4.3 Partnerships and power-sharing

The partnerships and power-sharing themes deal with the procedure in which alternative governance approaches and processes of policy and decision making are devolved from the national to the local level. They concern the specific procedures adopted that make all levels of governance have shared power in the allocation and utilisation of local resources (Hasselman, 2017). Under this theme, issues such as the unequal knowledge valuation, cultural distinctions, economic and ecological forces of globalisation and the conventional role of the state and the bureaucracies in management are addressed (Plummer, 2013). The common belief is that dealing with such issues increases partnerships among key players and enhances power-sharing (Butler et al., 2015). The above three mechanisms are responsible for the attainment of success or failure of the ACM in the entrepreneur ecosystem, sharing of knowledge, sharing of social capital, policy implications, and institutional designs.

### 3.4.4 Adaptive co-management: aspects of success vs failure with relevance to the entrepreneurial ecosystems

While the context is significant, ACM tends to put more focus on the measurement and monitoring circumstances from which ACM may emerge (Plummer, 2017). This theme focuses on identifying the common set of procedural and structural fundamentals for success as well as the causes for failure (Berker., 2016).

### 3.4.5 Learning, knowledge use, and social capital

The process of learning, using the knowledge and accumulation of social capital, is a significant and innovative approach to governance (Armitage et al., 2017).

This theme focuses on the collective efforts focused on systematic learning and the use of the acquired knowledge to understand the entrepreneurial ecosystem in Oman (Farhad, Gual and Ruiz-Ballesteros, 2017).

#### 3.4.6 Policy implications

The policy implication's theme ensures that the assessments made under ACM are relevant and applicable to the policymakers. The main assumption made under the policy implications theme is that the ACM's legal and economic requirements should be easy to identify and implement if ACM is to be adopted as a governance approach (Crowe, Foley and Collier, 2016). In this regard, the process of identifying constraints and opportunities includes the analysis of the sufficiency of existing policy instruments. These instruments refer to fiscal incentives and legislation as well as developing the recommendations towards the creation of enabling policy ecosystems (Berkes and Ross, 2016).

In their synthesis, Berkes et al. (2016) identified the differences and similarities between the core components of ACM with the aim of establishing links, capacity building, spatial scope and temporal scope. Thus, ACM can be said to be an approach that concentrates on learning-by-doing, occurs over the medium-to-long term timeframes through cycles of learning and adaptation, and focuses on the capacity, relationships and requirements of managers. Plummer et al. (2012) add that ACM creates vertical institutional links, is likely to yield snapshots with short-to-medium timeframes, links the local and the government level(s), and puts emphasis on the communities and resource users' capacity.

What makes ACM more applicable in studying the entrepreneurial ecosystem is its multi-scale in spatial scope as well as its focus on including and improving the capacity of all actors with a stake for better management of available resources. Stangler and Bell-Masterson (2015) adopted a theoretical framework for entrepreneurial ecosystem, which supported them to elucidate that the connectivity indicator focuses on the connections between resources and programs, the spinoff rate and the dealmaker networks. In contrast to this, the fluidity indicator was identified as encouraging the identification and allocation of available resources. In

this regard, ACM can be said to be applicable in an entrepreneurial ecosystem because it encourages connectivity amongst the actors and the allocation of resources. In order to create an ACM within the Oman culture, it is critical to look at the specific factors that promote or hinder the adoption of ACM, some of which have been listed by Plummer (2012). One of the factors is the co-management process whereby a strong co-management process would promote.

It should be noted that for the sake of this study, I adopted the frameworks presented in this chapter in two different ways, i.e.: The Islamic Leadership Model mainly emerged from the interaction with data. The adoption of Adaptive Co-Management (ACM) for this study was developed from conversations that emerged in a specialized Newton Fund supported workshop on entrepreneurial ecosystems at Ege University via a collaboration with the University of Strathclyde. A total of 50 researchers and experts attended the said workshop, and my participation on this event contributed to the development of the thesis theoretical framework through further elaboration of key concepts and theories presented, as a concrete part of his doctoral/ECR development.

### 3.5 Chapter Summary

This chapter has identified the several models used in explaining how an entrepreneurial ecosystem is managed, that is, the Islamic leadership model and the Adaptive co-management concept. The Islamic leadership model has further extended the discussion on the role of culture and religion with regards to the management of entrepreneurial ecosystems (Ramadani et al., 2017). Lastly, the Adaptive Co-Management model has been used to shed light on the dynamics and different governance systems and levels that can be effectively used in the management of entrepreneurial ecosystems (Plummer et al., 2012; Fabricius and Currie, 2015; Olsson et al., 2010). Important related factors include the willingness to accept beliefs, practices and ideas of one another; having plans that have renewal timelines for feedback, learning and modification; regular monitoring and communication; valid community and technological knowledge; and the willingness by all the parties to trust and share with the authorities. These factors imply that working together, trusting

each other and sharing ideas are core values in having a successful ACM. In this regard, an ACM within the Arab culture would be possible if the policymakers create systems that encourage entrepreneurs to create new business ideas. Moreover, startups would benefit from linkages with other stakeholders such as investors, suppliers and clients and then building up trust amongst themselves and sharing ideas which eventually would contribute to the entrepreneurship process. Once these connections and networks have been developed, further feedback, learning and modification channels that support effective communication and monitoring can be put in place to ensure the networks in place are ongoing and effective. Over time, the entrepreneurial ecosystem would grow stronger and gain higher resilience, which is the main goal of having an ACM in place.

## Chapter 4: The context of the study

### 4.1 Introduction

This chapter focuses on the specific aspects of the entrepreneurial ecosystem in the MENA region. The entrepreneurial Ecosystem can be referred to as the entire system of independent actors that supports the creation and the growth of new business opportunities. As a result, it is observed that it supports entrepreneur culture and ethics (Acs, Stam, Audretsch, and Connor, 2017). Many entrepreneurs start their new ventures that could be either a small business, start-up, or new investment opportunities for large firms. Metrics such as connectivity, growth, talent, financing are included in the entrepreneur community. The entrepreneurial Ecosystem has become an important element of economic development and it should be considered as one of the key metaphors for economic development. The objective of the Entrepreneurial Ecosystem is to create job opportunities for the people. Moreover, it is to support people by offering them an excellent financial investment or through funding. This will help to strengthen the entrepreneurial ecosystem and will boost the education system as well

Roundy, Bradshaw and Brockman (2016) describe entrepreneurial ecosystems as a dynamic framework that is both regional and contextual. Hence, there is a need to identify the various socioeconomic and socioecological factors of the entrepreneurial ecosystem in the MENA (Middle East/North Africa) region. To achieve this, the current chapter discusses the existing socio-ecological, political and socioeconomic factors that have an impact on the entrepreneurial ecosystem in the MENA region with an emphasis on the Sultanate of Oman. The socio-ecological factors of the Entrepreneurial Ecosystem concerned with the cultural, education, values, family background, society, and attitude. These factors have an impact on the ecosystem and support the growth as well as the creation of the same. According to Stam, and van de Ven, (2019), the social-ecological dimension is concerned with the particular attention of social, institutional and cultural factors that play a significant role in people's lives. It also builds the overall work environment. This ecological framework focuses on the role of the Entrepreneur in bringing change in society and addressing the social problem through the activities. The roles are identified as the

leadership capabilities, commitment, motivation and supporting the community positively.

Given that Oman is the focus of the current research framework, this analysis compares Oman's entrepreneurial ecosystem with other countries within the MENA region. The aim of the study is identifying the specific socio-economic, political and socio-ecological similarities and differences. Moreover, the chapter is divided into four sections. The first section presents the conceptual overview of the MENA region's entrepreneurial ecosystems. It further discusses the factors that should be included in the design of an entrepreneurial ecosystem. This would encourage entrepreneurial activities within the country and the specific stages of implementation that these aspects could entail or applied in the specific MENA region. The second section is an overview of Oman's entrepreneurial ecosystem compared to other countries within the MENA region. The third section presents all nine components of Oman's entrepreneurial ecosystem. The fourth section reviews the main themes of Oman's entrepreneurial ecosystem using the Global Entrepreneurship Index, which captures the attitudes, abilities and aspirations of Omani entrepreneurs and key stakeholders.

#### 4.2 Overview of the MENA entrepreneurial ecosystem

The entrepreneurial ecosystem among the MENA countries has developed significantly in the last decade, and this has attracted both local and international key investors in the region (Nazeer, 2017). Given the declining oil revenues in the Gulf region (Tétrault, 2016; Mohammed, 2017). Most governments in the MENA region are focusing on the development of a sustainable entrepreneurial ecosystem. This ecosystem can help entrepreneurs and startup companies scale up their ventures and ace the product and service (Miniaoui and Schilirò, 2017; Mishrif and Al Balushi, 2017).

The UAE (United Arab Emirates) is considered the leading entrepreneurial hub in the MENA region. Moreover, the UAE country consists of more than 50% of where most of the startup ventures are funded (Johnsen, 2017; Rezaei, Hill and Liu, 2018). The level of international investment in the region is also quite high as compared to other countries. For example, Amazon acquired Souq.com, the leading UAE online retailer for \$800 billion dollars in 2017 (Lynch and Haskins, 2018). Similarly, Kuwait features a

fast-growing food delivery platform called Talabat, this company was acquired by a Germany-based company called Delivery Hero for \$100 million in 2015. Since then, Talabat has extended to all other GCC countries as well as to Jordan (Jaz, AlSabah and Sarfraz, 2018). This expansion of Talabat has some inherited disadvantages which are related to the socio-economic, political and socioecological factors of a particular region such as Kuwait, Saudi Arabia, Bahrain. Thus, the expansion of business ventures is also dependent upon the management and leadership of the entrepreneurial ecosystem.

According to OECD (2016), the report on *Eurostat categorisation of entrepreneurial ecosystem categories featured* six key factors that predict entrepreneurial success in the Middle East and North Africa (MENA) region. This is crucial for the present study because these identified factors will be considered in the analysis of the entrepreneurial ecosystem. There are some features in terms of data and structure that could be applied to the analysis and predict the success of the entrepreneurial ecosystem in the MENA region. These six categories include regulatory framework, market conditions, financial accessibility, knowledge creation and transfer, entrepreneurial capabilities and culture (Raible, 2016). The categories and subcategories of an entrepreneurial ecosystem outlined by the OECD (2016) report are presented in Figure 17.



(Faghih and Zali, 2018). For instance, most countries in the MENA region do not impose income taxes, while countries like Jordan have made a rule of voluntary contributions of 5-10% of income (Belkhir, Maghyereh and Awartani, 2016). Also, actions such as writing a cheque without enough money in the bank to back-up are considered capital offences, something that is influenced by the culture. However, many studies have noted that the regulatory framework in the MENA region is very weak and implementation of those does not support the growth of the entrepreneurial ecosystem (Khader, Seferian and Jamali, 2016; Faghih and Zali, 2018; Johnston and Humphries, 2016). For instance, lenders in the MENA region are not protected by bankruptcy while the security of the property rights in the MENA region is regarded as very low (Belkhir, Maghyereh and Awartani, 2016).

Some components of the market conditions contribute to conducive entrepreneurial ecosystems in the MENA region, while others are not implemented effectively. For instance, competition and access to the domestic market exist within the MENA region even though some industries are capital-intensive in nature. This is because there is a monopolistic competition, which limits new ventures (Polemis, 2015). However, most entrepreneurs in the MENA region do not have access to foreign markets. This notion has been identified by most studies to result in inadequate innovative products (Arshi, 2012). There is also a lack of enabling environments that promote creativity (Sharma, 2018). The degree of public involvement and transparency in public procurement varies in various MENA countries. Transparency in public procurement is a very important aspect of the entrepreneurial ecosystem of the MENA region because it accounts for 15-20% of the GDP (World Bank, 2016). While there is some transparency in the tendering processes within the MENA region, there is a need to strengthen public procurement as well as increase public involvement (Biygautane, Hodge and Gerber, 2018). Transparent systems are considered as crucial in catalysing the private sector and promoting economic growth because they open up business opportunities for entrepreneurs and improve the local environment for business by increasing investment and competitiveness (Schillo, Persaud and Jin 2016).

Financial inclusion is regarded as a very significant factor in the growth of entrepreneurial ecosystems because it increases competitiveness, creates employment, raises income and reduces poverty (Lyons and Contreras, 2017; Fan and Zhang, 2017). Access to finance is also another factor that varies across different countries in the MENA region. For instance, bank loans access is rated very low in this region as compared to other regions in the world (OECD, 2009).

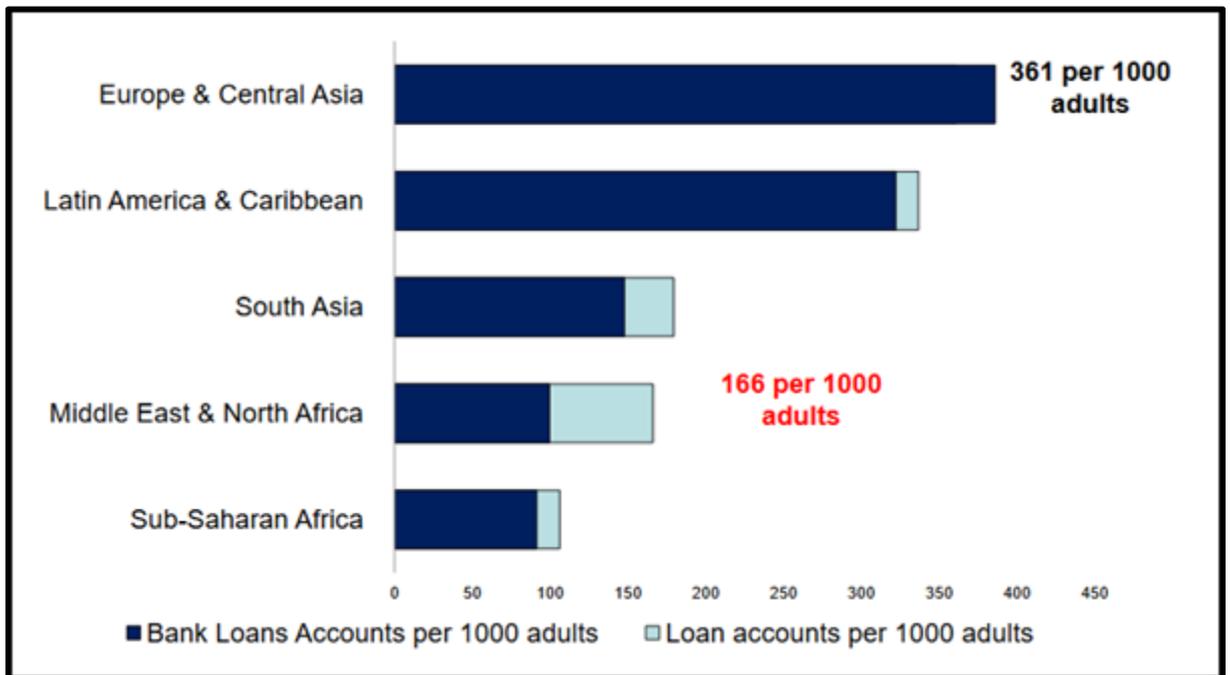


Figure 18 Financial access in various regions in the world (OECD, 2009).

One of the main restraints to access to finance in the MENA region is the sociocultural structure in the region. For instance, Middle Easterners do not trust doing business with strangers, and if they should do business with a stranger, they prefer them to be recommended by a trusted relative or friend (Faghih and Zali, 2018). This culture extends to banks where access to bank loans is very low in the region (Wayne, 2013). This cites the need to emphasize more on the domestic and regional banks that dedicate both specialists and capital to support the growth goals of SMEs (Naqvi, 2011).

The OECD (2016) report has outlined four subcategories of the culture, these cultures play a significant role in developing the entrepreneurial ecosystem of the MENA region. The societal attitude towards risk and entrepreneurship is deeply

intertwined in the popular Arabic culture in the region (Zeffane, 2017; Mehtap *et al.*, 2017). People residing in these areas mainly prefer Government jobs although there is self-employment/entrepreneurship within the Arabic culture because the government jobs are regarded as more secure, while entrepreneurship is regarded as risky (Al-Balushi and Anderson, 2017). The mindset for entrepreneurship in the MENA region is still very negative. As a result, there is a need to impart entrepreneurship education and role models to change the existing cultural perceptions and mind-sets towards entrepreneurship (Sarfraz *et al.*, 2018; Jabeen *et al.*, 2017).

The analysis of the specific categories of the entrepreneurial ecosystem such as the regulatory framework, market conditions, financial accessibility, knowledge creation and transfer, affect both entrepreneurial capabilities and culture. As outlined by Raible, (2016), the MENA region shows that there is still more needed to be done in order to establish a better entrepreneurial ecosystem. As a result, there is a need to develop such an entrepreneurial ecosystem that would ensure better efficiency and management of challenges within the ecosystems in the region (Faghih and Zali, 2018). Some aspects of the cultural and socioeconomic structure of the MENA region enable a better entrepreneurial ecosystem while others act as deterrents to the success of the entrepreneurial ecosystems in the region. The entrepreneurial ecosystem of the MENA region has a high potential for growth and development (Johnsen, 2017), which can be utilised to promote entrepreneurship in the region (Coduras, de la Vega and Salman, 2018).

#### 4.3 Overview of Omani entrepreneurial ecosystem compared to other developing countries

As a gas and oil-producing country, Oman is one of the wealthiest countries in the region. However, with the fluctuations in the world's gas and oil prices, Oman's reliance keeps a note especially on gas and oil extraction activities which make its economy vulnerable to economic instability (Oman Economic Review, 2016). As a result, there has been an urgent need to reduce Oman's over-reliance on gas and oil resources and diversify the economy for future sustainable development (Schwab, 2016). According to the World Bank report (2016), the Omani government has been

putting more focus on the development of private sector investments as an instrument in GDP. Moreover, they are particularly working on the strategies, arrangements and execution programs that will help them to promote Small and Medium Enterprises (SME) on both the microeconomics and macroeconomic levels (The World Bank, 2016). In their report, the Supreme Council for Planning (2016) acknowledges that the first step to inspiring entrepreneurship in Oman is by mapping and gauging the existing entrepreneurial ecosystem in the country. This process would help in identifying the likely challenges and the possible solutions that can be used to tackle particular obstacles.

The entrepreneurial ecosystem cannot be isolated from the political, structural and cultural factors because they “cannot exist in a vacuum” (Naqvi, 2011, p12). According to Isenberg (2011), finding talent, overcoming bureaucracy and raising capital are the three leading challenges for all active entrepreneurs. Further, it was observed by the scholar and they added that whether it be a developed country or an underdeveloped country, entrepreneurial ecosystems enable the countries to meet their environmental needs. Moreover, it helps in eliminating the environment related problems. However, the challenges faced by the entrepreneurs in Oman are very wider from the MENA region. They are beyond these three challenges. While entrepreneurs in developed countries may have favourable conditions such as government and other actors’ support, research (Mason and Brown, 2013; Samuel and Sarprasatha, 2016; Khan, 2016) has identified and showed that the entrepreneurial ecosystem in emerging economies still lacks synergies that help to support the growth of entrepreneurial activities. In emerging entrepreneurial ecosystems in countries like Jordan, Oman, Saudi Arabia, Egypt and the wider MENA region, the challenges are even greater because of regulatory and legislative challenges (Wayne, 2013). For an emerging entrepreneurial ecosystem growing entrepreneurial enterprises are often viewed as pivotal sources of innovation, productivity growth and employment, small and medium-sized enterprises account for most of the jobs in emerging economies.

The primary goal of entrepreneurial ecosystems is to attract and facilitate individuals to become entrepreneurs or engage in sustainable entrepreneurship activities (Stam and Spigel, 2016). Without the appropriate mechanisms and synergies between the key actors and stakeholders, these aimed goals are unattainable. In Oman, the role of entrepreneurs as key actors of economic development and even as the agents of new wealth making is gaining precedence. However, Eddin and Thomas (2017) suggested that in Oman, the entrepreneurial ecosystems are not favourable for entrepreneurship as there is a lack of strategies on management and also there is a shortage of efficient leaders of the government (Eddin and Thomas, 2017). Thus, the current section identifies and compares the various components of Oman's entrepreneurial ecosystem to that of the Middle East and North Africa (MENA) region. MENA regions such as entrepreneurship education; knowledge and best practice; capital and markets equity; markets and debt; shift in culture; community creation, partnership and connection; mentoring framework, role modelling and success stories; and government, leadership, programs and universal stakeholders (Al-Abri, Rahim, and Hussain, 2018).

#### 4.3.1 Entrepreneurship education

With regard to the entrepreneurship education and relevant academic component of MENA's ecosystem, Naqvi (2011) notes that the rise of academic-driven universities like MIT, American University in Cairo, the American University of Beirut, etc in the MENA has made it possible to create the content and pathways for future success stories. Naqvi (2011) explained that it is possible for a region or country to create entrepreneurial vibrancy even without having a single university rated among the top-500 universities. Naqvi (2011) further suggested that this has been the case because of the growth of an entrepreneurial ecosystem that is based, not only on a single component but on the fundamental characteristics and hardiness of the population. This leads to business endeavours and entrepreneurial behaviour which implies that with the existing universities and institutions of research and knowledge in the region, the MENA region has the potential to use those resources to enhance its entrepreneurial ecosystem. Compared to the larger MENA region, Oman's Sultan

Qaboos University is one of the institutions of higher learning rated among top-10 in the MENA region, and top 460 on the World University ranking.

#### 4.3.2 Technology, knowledge, and best practice

While there are upcoming universities and institutions of higher learning in the MENA region that act as good sources of knowledge and best practice, the basics for knowledge sharing, continuous learning, exploring behaviours and best practices are not highly emphasised as compared to those in developed countries (Naqvi, 2011).

The MENA region has the potential to utilise various online platforms for creating fame for the industry. Moreover, various platforms like social media, open-source content and community portals help entrepreneurs to encourage further entrepreneurship opportunities. Studies have predicted that the MENA e-commerce market faces intense growth as its population gradually gets online (Yaseen, Dingley and Adams, 2016; Alwari and Sabry, 2009). Moreover, this would be a good opportunity for knowledge sharing as well as business growth. Further, statistics outline that social media penetration has become more than double to 44% in the past five years (Al-Balushi, and Anderson, 2017). Over the years, Oman has been considered as the rising country where technology is playing a significant role. People are increasingly purchasing merchandise from a locally based business completely on social media (Samuel and Sarprasatha, 2015). Statistics highlighted that 79% of the Oman business and entrepreneurs are using at least one of the social media platforms like Twitter, Facebook, YouTube or corporate blogs.

#### 4.3.3 Capital and markets equity, Markets and debt

The importance of unlocking capital from investors, venture capital and private equity of firms cannot be ignored in an entrepreneurial ecosystem. For a region or country to have a sustainable entrepreneurial ecosystem, there is a strong need to have a vibrant pool of equity capital. As a consequence of this, the role of debt and banks cannot be ignored. This is because the evolution and maturity of capital markets in a region or country require effective coordination between all the financial institutions and systems. In the MENA region, the capital markets are still in their development stage. Thus, the lack of access to capital and markets is one of the major

challenges that entrepreneurs in the region face on a daily basis (Wayne, 2013). One dimension where MENA stakeholders should emphasize their efforts is on the domestic and regional banks that dedicate both specialists and capital to support the growth goals of SMEs (Naqvi, 2011). Naqvi, (2011) also points out the role of holding companies and cash-rich family enterprises in generating entrepreneurship-focused vehicles within their corporate structures to participate and seed businesses, which may ultimately act as a catalyst of growth to their core businesses.

In the MENA region, corporations such as logistics provider Aramex have already begun to provide such synergies through the venture funding of e-commerce-led enterprises. At the same time, Aramex acts as both the physical incubator and a service provider in distribution, logistics and customer fulfilment for startups. In 2016, the first venture capital companies, Oman Venture Capital Company (Ethmar) and Innovation Development Oman Holding SAOC (IDO) were established in Oman to increase the access to capital for startups, mid venture and early ventures. Also, in 2016, the Oman Investment Fund (OIF) launched a technology-focused venture capital fund whose goal is to invest in emerging tech enterprises in Oman and the wider MENA region. According to Eudelle and Shrestha (2017), Oman has a high potential for attracting venture capital companies to invest in the country but the requirement of 30% of Oman firm ownership, among other factors, is perceived as one of the major challenges hindering foreign investments.

#### 4.3.4 Shift in culture

Entrepreneurial activities are considered as an important part of economic growth; and it is observed that there has been a link has been established between improving the cultural values within the individual, government, and world in creating value for the customers. This would also ensure that the factor such as human capital, market, politics, finance, and culture has fostered the growth process and raised the entrepreneurial spirit. The opportunities, perception, skills, risks, growth, process innovations are acting as the pillars of the entrepreneurial activities and the cultures enhance the behaviour and attitude of the individual. According to Naqvi (2011), the key factors of culture such as the family and society structure society's deference towards age;, society's perception of innovation and creativity, freedom of speech and

expression. and cultural openness play an important role in shaping the entrepreneurial ecosystem.

In this present study, the four key reference frameworks and parameters are used to understand the concepts. Cultures are considered as society's attitude towards risk, society's attitude towards entrepreneurship. Society's desire for business ownership and society's entrepreneurship education/mindset plays a pivotal role (Hechavarría, and Ingram, 2019). The cultural difference among the nations creates values. Behaviour ethics play an important role in shaping individual action. Moreover, motivation and appropriate behaviour make the possibility of attracting new ventures. The MENA region has good networking based on culture; this makes it easier for entrepreneurs to overcome some of the challenges that they faced. Challenges such as access to financial information, resources, capital, advice, mentorship and new business opportunities are mainly stated by the entrepreneurs (Coduras, de la Vega and Salman, 2018). The strong networking among the MENA region is very helpful in shaping. Moreover, the entrepreneurial ecosystem promotes new business ventures and startups; this will consequently help in building an ecological entrepreneurial environment.

#### 4.3.5 Community creation, partnership and connection:

Community creation, partnership/alliance and connection are also important in an entrepreneurial ecosystem because they create linkages for like-minded people to come together and share. In the MENA region, some countries such as Yemen, Libya, Syria and Iran have societies that have been largely and relatively 'disconnected' from the larger MENA region as well globally due to the political environment in these countries (Feldman, & Gidley, 2018). Political factors such as bureaucracy, corruption level, freedom and press, tariffs, trade control, laws and regulation impact the activities of the entrepreneurial ecosystem. These factors create differences in opportunities in business and economic growth. Due to this disconnect, it is difficult for entrepreneurs in these countries to make appropriate alliances and connect with regional and global entrepreneurs. In Oman, concepts such as Caribou Chats and Startup Grind have been used as channels of inspiring and creating a connection between Omani entrepreneurs and the international marketplace. However, as social

media and internet access flourish across Oman, a highly ambivalent and complex relationship has been built between the government and the media. This complex relationship encourages Oman autocracies to use social media and internet penetration as a means of economic development. Moreover, it helps them to maintain control over the spread of information and social media simultaneously (Jarvis et al., 2013). This partial freedom to information has been a hindrance to the development of an efficient entrepreneurial system.

#### 4.3.6 Importance of Mentorship

The role of the mentoring framework in entrepreneurial ecosystems is very important, even though it is often neglected. Mentors play a significant role in developing the entrepreneurial ecosystem because they provide entrepreneurs with personal experiences, wider insight, knowledge and motivation that inspire them and their businesses (St-Jean and Audet, 2012). According to Sindi (2015), there is a lack of human capacity development in the Middle East and Northern African region. This problem can be resolved through mentorship. Mentorship is important in an entrepreneurial ecosystem because the guidance of the mentor increases the chances of identifying the application of knowledge and skill through business development. Moreover, it has the capability of playing a vital role in finding the success of emerging as an entrepreneur (Stam, and van de Ven, 2019).

There are already existing mentorship programmes in the MENA region mainly funded by organisations such as the World Bank and USAID. There are also some other mentorship programs that are initiated by investors such as Oasis500, Wamda and Flat6Labs; and online mentorship programmes such as Cherie Blair Foundation and MicroMentor, among others. Oman has various mentorship programmes that support entrepreneurs in different areas of the country. One of such programmes is undertaken by Riyada - the Public Authority for SME Development. It was established to support SMEs by providing training programs and mentoring programs for entrepreneurs. Another initiative is the Wadi Accelerator that offers access to mentors, user acquisition, training sessions on building a startup, and growth hacking, among others. Despite the existing programmes, there is a need for more holistic mentorship programmes in Oman and the MENA region at large. This will help to guide

and support entrepreneurs and will eventually result in an increase in new business ventures in the Sultanate of Oman.

#### 4.3.7 Role modelling

Success stories and role models are important in an entrepreneurial ecosystem because they not only inspire entrepreneurs but also contribute to knowledge sharing and paradigm-shifting (Cavallo, Ghezzi, and Balocco, 2019). Role modelling is a part of the trait theory that was introduced by sociologist Robert K. Merton. It refers to a person whose success, strategy or behaviour can be emulated by others (Scherer *et al.*, 1989). Role modelling is a powerful learning tool for passing on knowledge, values and skills (Cruess *et al.*, 2008). It has been applied in entrepreneurship for influencing others to start a business (Bosma *et al.*, 2012). Mostly, role models have success stories to tell. Success stories are defined as a story of a person who makes a great achievement, especially under unfavourable conditions (Oxford Dictionary).

According to Naqvi (2011), successful entrepreneurs are often people that prefer to work independently. These people are capable of thinking and staying outside the box, which makes them real drivers of their successes. It is also equally important to recognise the role of knowledge platforms in creating new success models and identifying newer role models. Globally, entrepreneurs such as Mark Zuckerberg, Bill Gates, Diane Hendricks and Reid Hoffman, among others, have been an inspiration and informative. In the MENA region, leading entrepreneurs such as Naguib Sawiris of Orascom, Ronaldo Mouchawar of Souq.com, Khazen Baz of Nabbesh.com and Fadi Ghandour of Aramex among others, are good examples for aspirants in the MENA region. In Oman, some successful entrepreneurs such as Hind Bahwan of Bahwan Tours and Bahwan Cyber Tek and Qais al Khonji of Qais United Enterprises Trading and Genesis International are good role models. The above-mentioned started their ventures in a highly volatile environment and created their empire by continuously improving their products and services.

#### 4.3.8 Government, leadership, programs and universal stakeholders

The government plays a vital role in the growth of entrepreneurial ecosystems by providing the infrastructure as well as creating a suitable jurisdictional, regulatory and legal environment that promotes entrepreneurship. According to the Report of the World Bank the conduct of business tracks and measures changes in regulations influencing 11 areas in the life cycle of business, is one measure of the government's performance in entrepreneurship (World Bank, 2017). Moreover, the MENA regional average rank is 116 with a score of 56.36. Oman is ranked third in the region and 66<sup>th</sup> in the world ranking with a score of 67.73 followed by Bahrain (63<sup>th</sup> in the world with a ranking of 68.44). In 2019, Oman has been ranked 39<sup>th</sup> with a score of 43.60 which is reduced from the previous year to 46.60 in 2018 (Global entrepreneur Index, 2019). Above Oman is the United Arab Emirates (26<sup>th</sup> in the world ranking with a score of 76.89).

According to the World Bank report (2017), starting a business in Oman has become easier as the government has removed the requirement to pay the minimum capital within three months of incorporation. Additionally, the government has also streamlined the registration of employees. Also, Oman has undertaken many reforms which resulted in a reduction in time for border and documentary compliance when the government introduced a new online single window or one-stop service that allows for fast electronic clearance of goods (World Bank, 2017). Oman has also enacted some new income tax and employment laws, enhanced access to credit information by guaranteeing the rights of the borrowers to inspect their personal data. This was supported by launching the Bank Credit and Statistical Bureau System, whose role is to collect historical credit information on performing and non-performing loans for individuals and firms (World Bank, 2017).

Acs *et. al.* (2018) examined the entrepreneurial ecosystem of the Sultanate of Oman as compared to that of the world and the MENA region. Further, people utilized the 2017 World Bank's report on ease of doing business for this comparison. The figure below depicts the results acquired in concern to this comparison. The results for Oman as shown in Figure 19 were compiled using the dataset of Qatar for the year 2016, the

assumption made by Madbouly *et. al.* (2018) does not depict the actual condition of the entrepreneurial ecosystem of the sultanate of Oman. Thus, there is a research gap for empirically finding the global Entrepreneurship Index of Oman.

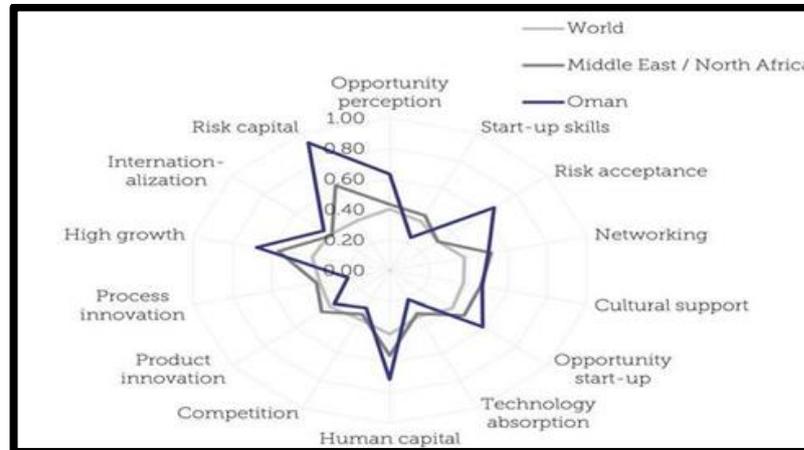


Figure 19 Omani entrepreneurial ecosystem compared with world and MENA indices (Madbouly, 2017, p. 45).

According to Figure 16, the entrepreneurial ecosystem indices such as risk capital, opportunity perception, risk acceptance and opportunity startup of Qatar are more than the average indices of the Middle East and North Africa. However, indices like startup skills, technology absorption, competition, product innovation, and process innovation are less than the indices of the Middle East and the rest of the World. This present study becomes important for Oman as this country has strengthened the entrepreneurial ecosystem and supports small businesses according to the entrepreneurial index. This includes both the skilled workforce and the accessible market opportunities. It is to be noted that the Omani government is keen to develop with the dynamic labour market in providing the job opportunities. The entrepreneurial ecosystem needs the technology and the appropriate amount of funding and finance which could be a suitable technological innovation.

The government, private investors and NGOs have been actively involved in initiating a number of innovative programs that encourage entrepreneurship in Oman (Samuel and Sarprasatha, 2015). There has also been an increase in leadership development programs that target both entrepreneurs and stakeholders in Oman.

One such programme is AMIDEAST, which is a community leadership program whose aim is to promote entrepreneurship awareness among girls nearing completion of high school, among other roles. AMIDEAST program is run by the U.S. It is a non-profit organization that works to strengthen mutual understanding and cooperation between Americans and the peoples of the Middle East.

#### 4.4 Mapping of the components of Oman’s entrepreneurial ecosystem

The sultanate of Oman definition of small and medium enterprises is given in Figure 20.

| Company Size | Number of Employees | Annual Turnover (R.O.) |
|--------------|---------------------|------------------------|
| Micro        | 1 to 4              | Less than 25,000       |
| Small        | 5 to 9              | 25,000 to 250,000      |
| Medium       | 10 to 99            | 250,000 to 1.5 Million |

*Ministry of Commerce and Industry*

Figure 20 Sultanate of Oman definition of SME

*(Ministry of Commerce and Industry of Sultanate of Oman, 2018)*

Silatech (2017) surveyed the entrepreneurial ecosystem of Oman and presented the relationship between the various entities and organizations. There are six key areas that are education, finance, media, entrepreneurship support organizations, corporations and government institutions. Further, the finance aspect is divided into three main sections: seed funding, venture capital and MSME financing. The new model holds its importance as problems exist with the lack of entrepreneurship in the microenvironment and most entrepreneurship domains or groups don’t focus on the opportunities existing in the market. Thus, the present model the current study helps in highlighting the fact that the stable entrepreneurial ecosystem is achievable in Oman, with the help of improvement in employment opportunities and making sure that the market is ready to foster the innovative and suitability concept.

The organizations involved in seed funding include the National Bank of Oman (Tijarati Banking segment), Oman Development Bank and SMEs Development fund. Those involved in the venture capital include Iskan Oman Investment. In the MSME financing, some notable names included Al Raffd Fund, Sharakah, Bank Muscat, Muscat Finance, Grofin and National Finance Company.

The second factor was education, which was further divided into universities and training. The identified universities included Sultan Qaboos University, Sohar University, University of Nizwa AND Dhofar University. Those mentioned under training included programs and organizations such as UNESCO-UNEVOC, Know About Business (KAB), Worldskills International, The SME Development Fund (Al Namaa), Injaz Oman, Vocational Training Centers, Colleges of Technology, AMIDEAST and Information Technology Authority's SAS program. The government factor was divided into regulation and policy. Education and training are said to be important components of entrepreneurship because they signified the range of the approaches that should be taken in order to identify the weakness. The education system in Oman is also undertaking innovative methods for attracting youths and unemployed people to start a new venture. Moreover, the government is spending a decent amount of funding on these factors. Though a lot of the supportive measures towards entrepreneurship have been taken failures and risks still exist throughout the country. Under the policy, PASMED/Riyada, Council of Oman, Supreme Council for Planning and National Center for Statistics and Information were mentioned. The organizations involved in regulation that was mentioned included Partnership for Development Authority (PFD), The Tender Board, Ministry of Oil and Gas, Central Bank of Oman, Oman Chamber of Commerce and Industry, Ministry of Commerce and Industry, Riyada, The Omani Authority for Partnership for Development, Riyada and the Public Authority for Crafts Industries (PACI). The media was also divided into two: Blogs and Mainstream. The mainstream media organisations involved in entrepreneurship in Oman included Time of Oman, Ruwad, Oman Observer, Times of Oman and Muscat Daily. The Oman Entrepreneur blog was the only blog noted under blogs.

The corporations were divided into two main categories: sponsorships and entrepreneurship initiatives. The entrepreneurship initiatives included Oxy Middle East, Towell Group, British Petroleum, Khazzan Growth Finance Program, Zubair SEC, CISCO Entrepreneur Institute of Oman, Petroleum Development Oman, Oman Oil Group, Intilaaqah Enterprise Fund (Shell Group) and The Cell Incubator of the Oman India Fertilizer Company. The sponsorships included Omantel and Namaa Electricity Holding Company.

Lastly, the support organizations were divided into three: accelerators, incubators and policy & research. Under incubators, programs and organisations mentioned included the National Business Center (NBC), Information Technology Authority's SAS program and The Lounge Oman. The accelerators include Startup Oman, Oman Orix, Ithraa, i360 ICT Accelerator, Oman Venture Capital and Riyada. The policy and research organizations and policy includes Silatech, RAND Corporation, The Research Council (TRC), UNFPA-GCC Office and the United Nations Conference on Trade Development (UNCTAD)..

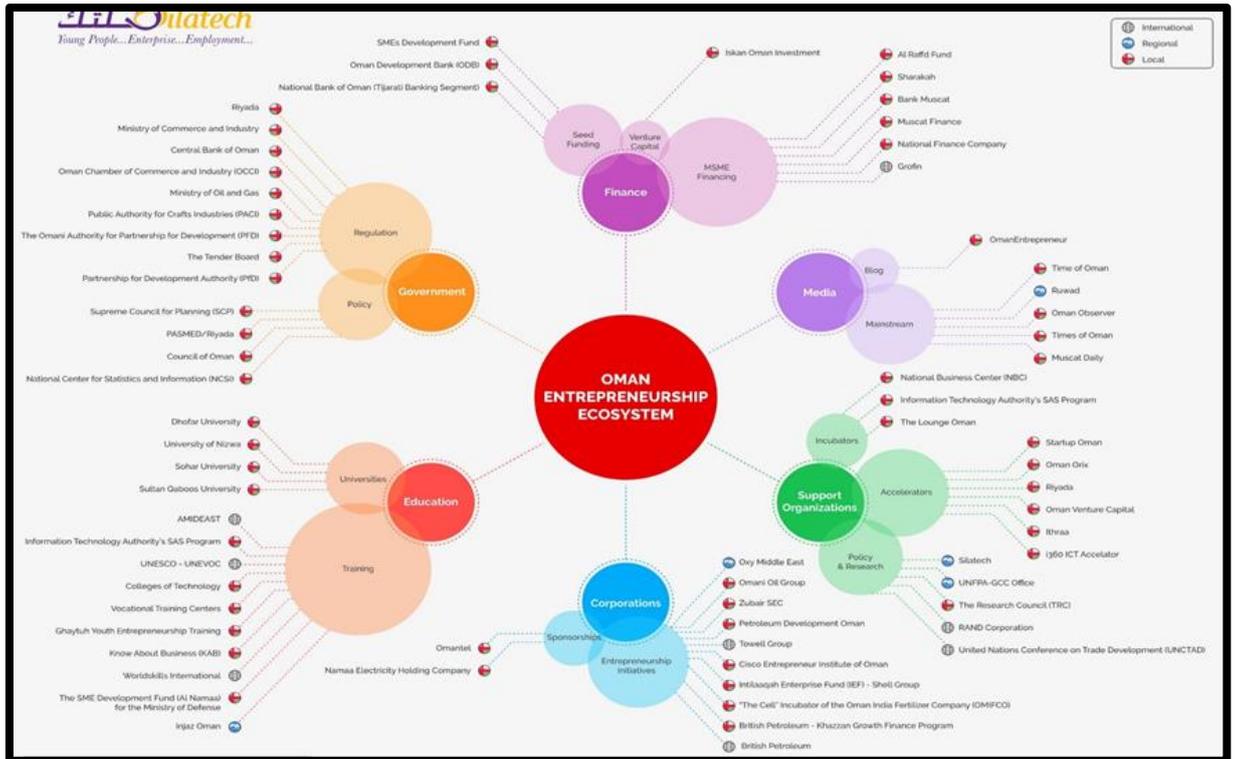


Figure 21 The Research Council (TRC), UNFPA-GCC Office and the United Nations Conference on Trade Development (UNCTAD).

*Oman Entrepreneurial ecosystem map.*

To identify the stakeholders’ engagement in the Omani entrepreneurial ecosystem, the current study is carried out with the help of the qualitative survey that grouped stakeholders under the nine (9) entrepreneurial frameworks using GEM Entrepreneurial Framework Conditions (EFCs). This given model, therefore, highlights the key institutions, key players and initiatives that take part in each framework. It is important to note that stakeholders are not limited to the ones mentioned in the below table. The learning from the previous mapping and knowledge has been considered an essential part. This contributes to the present section and the approach contributes to building the framework of the entrepreneurial ecosystem.

4.5 Main themes on Oman entrepreneurship ecosystem

Using the Global Entrepreneurship Index, Madbouly (2017) identified the key areas of weaknesses and strengths in the entrepreneurial ecosystem of Oman, as shown in the table below. The ecosystem classification is performed using the GEI and

the overall Global Entrepreneurship and Development Index (GEI) for Oman (using Qatar as a proxy variable for the year 2016) improved from 0.37 out of 1 in 2012 to 0.44 out of 1 in 2016, which shows that the entrepreneurial ecosystem in Oman has been improving in the past five years (Acs, Szerb and Autio, 2016).

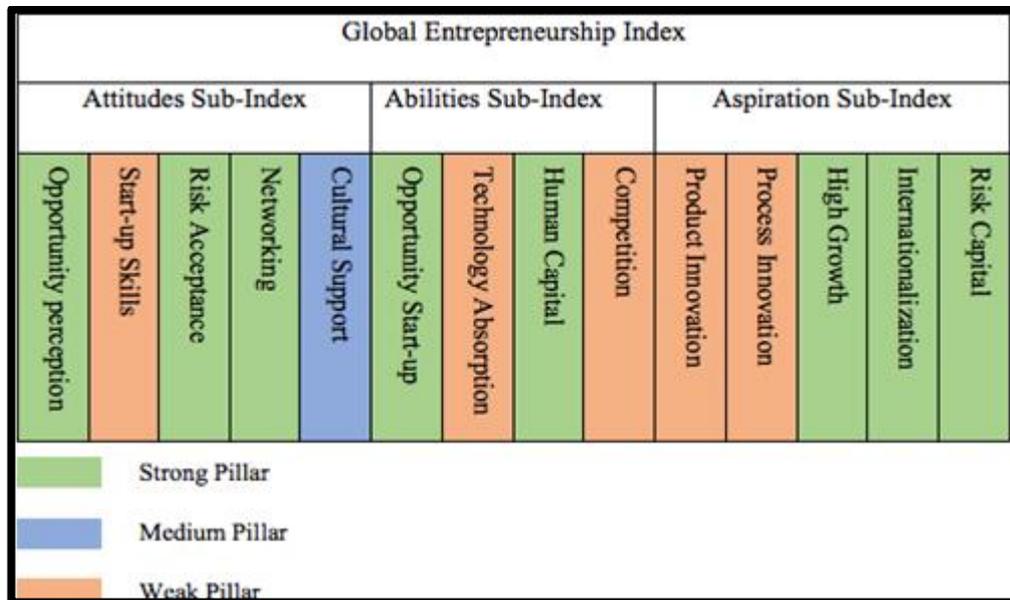


Figure 22 Strengths and weaknesses in Omani entrepreneurial ecosystem

(Madbouly, 2017, p.67)

The overall Global Entrepreneurship and Development Index is more inclusive and world-wide unlike other indexes such as OECD which has 34 member countries around the world. As a result, in comparison and contrast with the world, GEDI is a better source of comparison. The high levels and enhancements in opportunity recognition, business freedom, market size and implementation of favourable laws and regulation led to an improvement in the Oman opportunity perception index. It has increased from 0.46 in 2012 to 0.70 in 2015 before dropping to 0.63 in 2016 (Madbouly, 2017). The opportunity perception index in Oman is higher than the average MENA and world level (Miner, 2017). From the results, the finding of the data elucidated that on an average, Omani people have high potential of tapping various business opportunities with suitable culture and environment. Thus, these findings become the advantage for creating an entrepreneurial ecosystem. Oman's domestic market size increased from 3.2 (75<sup>th</sup> ranking) in 2011 to 3.8 out of 7 (68<sup>th</sup> ranking) in

2016 while the business freedom index expanded from 69.4 in 2011 to 70.1 out of 100 in 2015 (Acs, Szerb and Lloyd, 2017). While on the other hand, the GEI report based on the data of Qatar shows weak startup skills which is misleading if we actually see the increase in domestic market capitalisation. The property rights index was 50 between 2011 and 2014 and then improved to 55 in 2015 and 2016.

Similarly, the risk acceptance index in Oman rose from 0.39 in 2012 to 0.66 in 2017, which was found higher than the average index for the MENA region and world average (Acs, 2017). While it is observed that the actual market data suggests otherwise. The risk acceptance index is measured based on the convertibility and transfer of risk (exchange controls that prevent an individual or a firm from converting domestic currency into foreign currency or making transfers to creditors out of the country. The OECD report on risk classification regards Oman as a country with lower country risk, and this country risk is related to risk acceptance.

The networking index of the Oman entrepreneurial ecosystem saw tremendous growth from 0.39 in 2012 to 0.94 in 2015, after which it decreased to 0.65 in 2016 and further to 0.50 in 2017. Despite the growth and decline curve, the average networking index in Oman for the last five years has grown. The culture support index (Malecki, 2018) can be determined by how society views entrepreneurs in terms of career choice and status, and the corruption level (Kreiser *et al.*, 2010; Thai and Turkina, 2014). Countries with corruption culture are likely to discourage entrepreneurship because corruption acts as a hindrance to opportunities and limits development (Vaduva, 2016; Chowdhury, Desai and Audretsch, 2017). The culture index remained 0.57 after which it dropped to 0.55 in 2014 and further to 0.40 in 2015 after which it rose to 0.50 in 2016 before dropping again to 0.47 in 2017. The culture index of Oman is closer than the average MENA region but higher than the average world index. Transparency International's corruption perception index ranks Oman 64<sup>th</sup> globally and 5<sup>th</sup> in the MENA region (Transparency International, 2017).

Startup skills consist of business formation, operation and management skills mainly acquired through education and training (Madbouly, 2017). The startup skills, measured based on a country's number of education enrolments and the quality of

the education system, were one of the weak pillars of the Oman entrepreneurial ecosystem. The startup skills index in Oman has been unstable over the last five years. In 2012 and 2013, the index was 0.28 which then improved to 0.4 in 2014 before dropping to 0.2 in 2015 and further to 0.19 in 2016 and then rising again to 0.24 in 2017 (Olutuase, Brijlal, Yan, and Ologundudu, 2018), When compared globally and regionally, the startup skills index for Oman is lower than the average MENA and world index. This is reflected in the table below which shows the quality of education indicators of Oman.

Table 7 Quality of education indicators of Oman

| Year | Tertiary education enrollment rate (gross) |      | Quality of the education system |      | Quality of math and science education |      |
|------|--------------------------------------------|------|---------------------------------|------|---------------------------------------|------|
|      | Indicator value                            | Rank | Indicator value (out of 7)      | Rank | Indicator value (out of 7)            | Rank |
| 2015 | 28.6%                                      | 87   | 3.6                             | 80   | 3.7                                   | 89   |
| 2014 | 28.1%                                      | 82   | 3.1                             | 106  | 3.3                                   | 102  |
| 2013 | 28.1%                                      | 83   | 3.5                             | 81   | 3.6                                   | 95   |
| 2012 | 28.7%                                      | 80   | 4.0                             | 53   | 3.9                                   | 87   |
| 2011 | 24.5%                                      | 83   | 3.9                             | 60   | 3.7                                   | 86   |

(Madbouly, 2017, p.49)

Also, impacting the startup skills index are the efforts of institutions that stimulate and support entrepreneurs. Such institutions in Oman include Al-Raffd Fund, which is a financial institution that was founded in 2013. This financial institution mainly aimed at supporting, encouraging and promoting the growth and development of entrepreneurs. In terms of the Oman entrepreneurial abilities, opportunity startup and human capital have improved while technology absorption and competition indexes have declined. The improvement in the opportunity startup from 0.48 in 2016 to 0.59 in 2017. This has been strengthened in the governance mechanisms for making better governance, bringing political stability, improving the regulatory quality, improving in the rule of law, better control of corruption and enhanced government effectiveness (Al-Mataani, Wainwright and Demirel, 2017).

Oman opportunity startup index is higher than the average global and regional (MENA). The human capital index in Oman has also risen from 0.62 in 2012 to 0.71 in 2017. It also reached highs of 0.76 in 2014 and in 2016 with a fluctuation to 0.64 in 2015. As, 2017, mentioned that the GEDI indices were found using the proxy variable which might be the reason for these fluctuations as the Human Capital index of Qatar can be altogether different from the actual Human Capital index of Oman. The Sultanate has been ranked 3<sup>rd</sup> in the world in the 2018 Entrepreneurship index which is the measure of the health of the Entrepreneur opportunities prevailing in the country. According to Saberi, and Hamdan, (2019), 3% globally from the last year index in 2017. This finding accentuates that the greatest strength in the region prevails due to the provision of capital to the new business opportunities. The GEDI index has improved by three per cent. The key contributing factor to this improvement is the labour laws reforms- specifically laws preventing layoffs, regulations on minimum wage, reduction of working hours per week and other related labour and taxation laws that have been enacted over the years (Sazegar *et al.*, 2018). Another contributing factor to the improvement in human capital is the improvements made in the education and training sector (Al Shezawi, Khan and Rahman, 2018). This is because a country's human capital is a reflection of its education sector.

The decline in the technology absorption index was observed from 2015 where the index sharply decreased from 0.72 to 0.25 in 2016 and then to 0.21 in 2017 (Acs, 2017). The technology index rose to a value of 0.29 in the year 2018 (Acs *et al.*, 2018). These statistics imply that Oman's entrepreneurial ecosystem does not allow for the diffusion nor absorbs new technologies. The index of technology absorption in Oman is below the average regional and global level. This absorption can be attributed to the low availability of the latest technologies, low firm-level technology absorption and ineffective FDI-technology transfer.

The competition index, which measures the market or business products' uniqueness and how effective anti-monopoly management is. Further, it was also found to be a weak component of the Oman entrepreneurial ecosystem. The statistics presented that the competition index rose from 0.23 in 2012 to 0.61 in 2015 after

which it fell to 0.49 in 2016, 0.27 in 2017 and 0.25 in 2018 (Acs *et al.*, 2018). The competition index of Oman is lower than the regional and average world level (Acs *et al.*, 2018). This is reflected in Oman's effectiveness in regulating the anti-monopoly policy and the market dominance indexes, which has declined over the last five years (Sleiman *et al.*, 2017). A look into Oman's market structure highlights that the market is controlled by a small group of firms (monopoly), which causes a decline in Oman's market dominance (Agarwal, 2017). On the other hand, process innovation measures the level of research and development (R&D), quality of scientific institutions and the availability of engineers and scientists (Audretsch *et al.*, 2014). The product innovation index of Oman increased from 0.45 in 2012 to 0.63 in 2014 and then fell to 0.35 in 2017 (Acs, Szerb and Autio, 2016) while in 2018 it was increased to 0.56 in 2018 (Acs *et al.*, 2018). This was a result of the decline in the technological transfer to Oman specifically in the year 2014-17 while in 2017-18 the product innovation index increased because of an increase in the local production (Acs *et al.*, 2018). In 2019, Oman has ranked 39 with a score of 43.60 which has been reduced from 46.90 in 2018 and the same as 43.60 in 2016. The process innovation index of Oman has been unstable over the last five years. It fell from 0.06 to 0.01 in 2013 then rose to 0.31 in 2014 before falling to 0.20 in 2015 and rising to 0.24 in 2016 before falling again to 0.21 in 2017 (Acs, Szerb and Autio, 2016); for the year 2018, this index was reported to be 0.27 (Acs *et al.*, 2018). This instability in the process innovation index is associated with the decline in the government's expenditure on R&D as well as the lower availability of engineers and scientists in the country (Badran, 2018). The product innovation and process innovation indexes of Oman were both lower than the regional and world averages.

In 2018, the high growth index increased to 0.89 which is a positive sign for Oman (Acs *et al.*, 2018). Despite these fluctuations, the high growth index for Oman is still ranked as higher than the average regional, and world levels (Ennis, 2015). Moreover, the fluctuation in the index was mainly because of the use of proxy data in the year 2013 and 2016 which led to misleading fluctuations in the indices. This implies that entrepreneurs of Oman have been pursuing distinctive strategies that involve innovative means and differentiated positioning of service and product delivery.

The internationalisation index in Oman grew from 0.44 in 2012 to 0.58 in 2015, but then it declined to 0.42 in 2017 (Madbouly, 2018). This decline can be identified as the reduction in the implementation strategies and retention of the talents in finding the opportunities throughout. Nevertheless, Oman's internationalisation index is still higher than the regional and global average index. This is mainly because the country's exports have been rising (Acs, 2017). The Economic Complexity Index ranks Oman as the 57<sup>th</sup> largest exporting economy globally and the 68<sup>th</sup> most complex economy (World Bank, 2017). The leading exports are Crude Petroleum (\$31.3B), Petroleum Gas (\$5.77B), Refined Petroleum (\$2.72B), Cyclic Hydrocarbons (\$1.21B) and Nitrogenous Fertilizers (\$745M) while the main imports are Cars (\$4.34B), Refined Petroleum (\$1.63B), Delivery Trucks (\$950M), Iron Ore (\$932M) and Vehicle Parts (\$555M) (Madbouly, 2017). China, South Korea, other Asian countries, Japan and UAE are Oman's top five export frontiers while UAE, Japan, China, the U.S. and India are the top import points (Ross, 2017).

The Risk Capital Index, which combines the institutional depth of capital market and informal investments, has improved from 0.69 to 0.93 between 2012 and 2017 in Oman (Acs, Szerb and Lloyd, 2017). In the year 2018, the risk capital index slightly decreased to 0.90 which is a sign of stability in the risk capital index for Oman (Acs *et al.*, 2018). This improvement is a resulting effect of the increase in the proportion of informal investors in the population age 18-64; growth in the liquidity and size of the stock market; and the increase in the level of credit and debt market activity (Ibrahim, Devesh and Ubaidullah, 2017).

#### 4.6 Chapter Summary

This chapter has emphasised the role of key actors and stakeholders in enhancing the growth of the entrepreneurial ecosystem. It is evident that the various actors and stakeholders should be involved in the decision-making for bringing change in the country to have a sustainable entrepreneurial ecosystem, other contributors as identified by Pankov, Velamuri and Schneckenberg (2019) are formal and informal network, physical infrastructure and culture. This is because there is no single stakeholder or actor that is a more important driver than the rest because the

entrepreneurial ecosystem is a dynamic, self-regulating network that is composed of various actors. Moreover, these stakeholders or actors vary across different entrepreneurship hotspots. The chapter not only focused on the stakeholders of the Omani entrepreneurial ecosystem, but it also compared Oman with other developing countries (specifically the MENA region). The findings show that Oman is doing well in some components of entrepreneurship and failing in others. The study found that Oman entrepreneurial ecosystem has strong Opportunity Perception, Networking, Human Capital, Opportunity Startup, Internationalization, High Growth, Risk Acceptance, and Risk Capital and weaknesses in Startup Skills, Process Innovation, Absorption, Product Innovation and Competition. This present study has been based on the qualitative interpretivist approach aiming to identify unexplored areas in the previous research. The study also sees opportunities to expand the existing business opportunities in the market and that way through the excellence of the structure, quality of the process and adequate funding. The indices also highlight the opportunities in findings that financing is the most challenging component in pushing and developing entrepreneurial opportunities. Cultural support was found to be a medium level pillar in the Omani entrepreneurial ecosystem. The weaknesses identified in the Omani entrepreneurial ecosystem incorporated the actual need for stakeholders and key actors. Introducing and enhancing student's awareness towards entrepreneurship requires joint efforts. Moreover, it becomes very time consuming, entrepreneurs need to turn students' minds and must attract them towards the business. In recent times, the mind of the students can be attracted with the help of technology. In addition to this, highlighting entrepreneurs' opportunities on the social media platforms will help students in grabbing the opportunity. Likewise, the Oman population can be attracted with the help of the renowned platforms. Consequently, to attract Omani students for developing their entrepreneur skills, the government of Oman must spend a lot on:

1. Improving technology
2. Training entrepreneurs and helping them to build more entrepreneurial skills
3. Developing entrepreneurs coaching centers

#### 4. Developing research and development centers

Furthermore, even by increasing the enrolment and availability of engineers and scientists. In the next chapter, the theoretical framework is the meaning and concepts. It is actually developed based on the literature review performed in chapter 2. The conceptual and the theoretical framework has been helpful in identifying the factors related to the entrepreneur opportunities and the potential for new employment opportunities. It also identifies the research gap pertaining to the challenges faced while supporting new opportunities to have the encouragement and growth factors. Lastly, it sheds light on the factors that are conducive to improving the level of technology readiness for Oman ventures and reducing the high market monopoly and dominance in Oman. The next chapter is the research methodology chapter which highlights how research was developed in a certain direction by giving insights into data collection and the data analysis method in order to achieve the research objectives and help to find the answers to the research questions.

## Chapter 5: Research Methodology

### 5.1 Introduction

This chapter outlines the detailed research methodologies and design used in exploring how the entrepreneurial ecosystem is managed in Oman. The methodology in this study is designed to ensure that it aligns with the overall objectives of this research. The research study has been conducted to explore the entrepreneurial ecosystem in Oman and evaluates how the entrepreneurial ecosystem is managed to maintain a healthy environment for the entrepreneurs in the country. Therefore, the current study will identify the challenges faced by entrepreneurs in the country due to policy change and structural reform. It will also focus on understanding the impact of Islamic Leadership on the entrepreneurial ecosystem. In Oman, culture is different and diverse in terms of Islamic sectarianism, languages, and environmental diversity, which has created multiple social environments, but without one being dispensed with the other. As a result, the attitude and understanding amongst different national contexts will tend to vary. For the study, a version of Grounded theory has been adopted as a means for analysing for the qualitative data collected from the interviewees. This facilitated in-depth exploration of narratives within the entrepreneurial ecosystem in Oman. In the current study, the inductive reasoning approach was chosen as it aims at proposing a model that could be subsequently adopted by various entrepreneurial ecosystems pertaining to the Arabic culture. The study also builds a conceptual framework that explores Islamic leadership and Adaptive Co-Management as suitable alternatives to the effective management of an entrepreneurial ecosystem in Arabic culture. As prior studies utilised a quantitative research approach, they were limited in terms of the variables previously explored by other researchers. As a result, in order to discover new information, the current research strategically makes use of a qualitative research approach. Moreover, to gain a direction for the queries to be made with the entrepreneurs, the National Experts Survey (NES) methodology sponsored by Global Entrepreneurship Monitor (GEM) was referred to with detail. GEM is considered as the comprehensive socio-economic approach and even acts as the degree of involvement between the country for

entrepreneurial activity. Moreover, the model helps in understanding the different types and phases of entrepreneurship, as this will benefit other entrepreneurs. This majorly differentiates GEM measuring method from other data sets that measure new business registrations. The respondents were identified This helped in developing the most relevant queries for the interview. Additionally, it was conducive to generate useful understanding on the most interesting areas of the entrepreneurship ecosystem.

## 5.2 Research 'Onion'

The current study uses the research onion, as shown in Figure 23, as a reference figure for selecting the relevant components of the research methodology. In this regard, the study will first review the philosophies used for the research framework. This will be followed by a reasoning approach, research approach, type of the study, time period of the study, and data collection as well as the data analysis approach. Therefore, to conduct the qualitative research method in the study a version of grounded theory has been employed in order to analyse the impact of Islamic leadership on culture in the entrepreneurial ecosystem of the sultanate of Oman. Moreover, semi-structured interviews were conducted for the research study to investigate the views of the entrepreneurs and professionals living in Oman to understand the challenges they have faced during business and to understand how favourable the business environment is for their business.

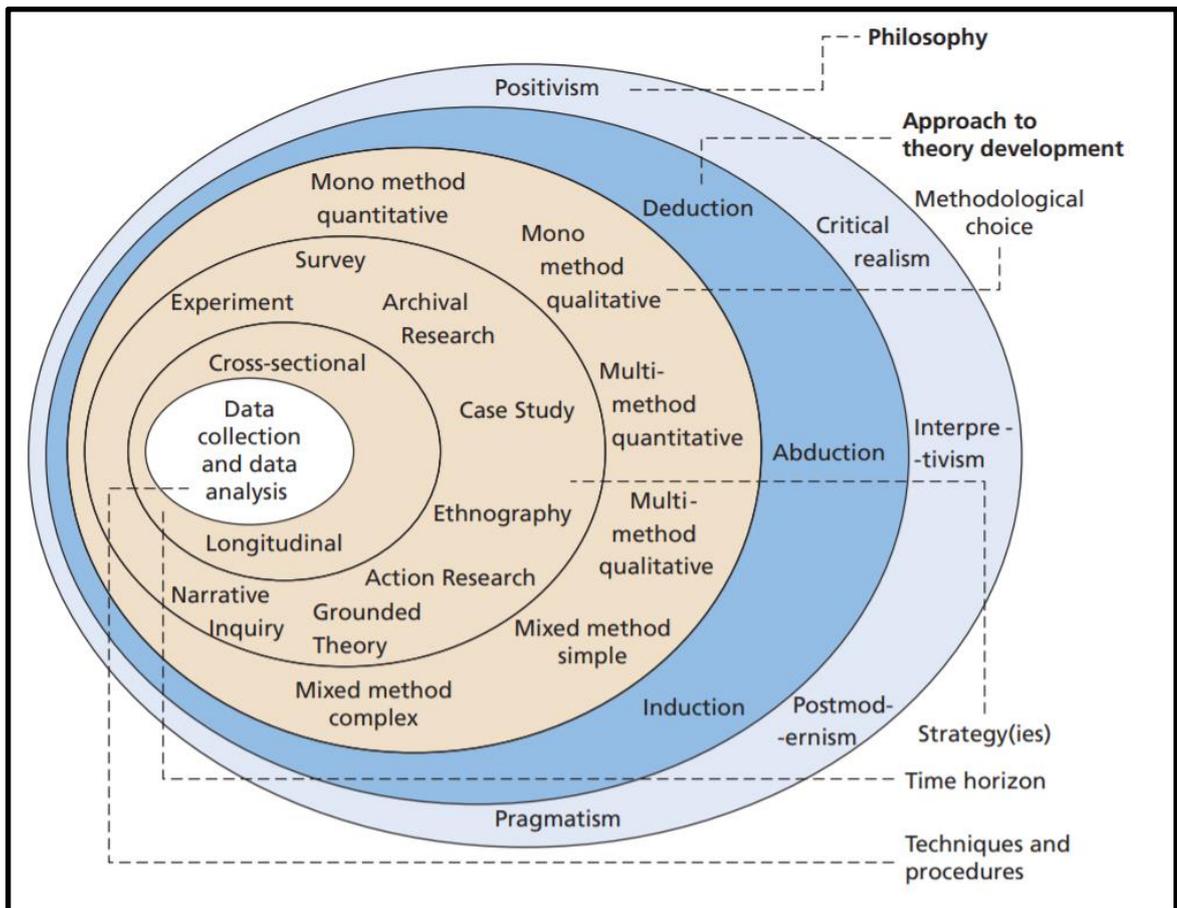


Figure 23 Research Onion

Source: Saunders et. al., (2015)) (p. 130)

### 5.3 Philosophical Paradigms

Research paradigms depend on certain beliefs and factors. They outline knowledge and individuals' beliefs that play a significant role in conducting the research study. As a result, the beliefs, perceptions, and attitudes need to be structured to design the study and to accomplish the study objectives. Knowledge generation in entrepreneurial ecosystem research requires diversity, pluralism and inclusivity, especially in choosing the appropriate research paradigms, approaches and perspectives (Leitch, Hill and Harrison, 2010). Lindsay-Dennis (2015) identified and defined each research paradigm individually; the choice of the research philosophy is mainly determined by the core assumptions pertaining to the nature of reality (ontology), acceptable knowledge (epistemology), researcher's stance and role of values (axiology) and the model of the research process (methodology). Selection of

the correct research paradigm is an essential process as it helped to reflect upon the wider philosophical and epistemological outcomes of their perspectives (Kivunja and Kuyini, 2017). Levers (2013) argues that choosing a research paradigm is crucial for the study, as it shapes the beliefs about the nature of reality.

Moreover, choosing a research paradigm is key to ensuring a strong research design, and consequently, the success of a research project. Research paradigms are also important because they 'act as the disciplinary matrices that identify the methods, characteristics and practices that create the conduct and nature of research' (Orman, 2016, p.48). However, Bryman (2015) urged researchers to cautiously select a system of world view or ideas that would generate the most appropriate knowledge. While there are a variety of philosophical paradigms, positivism, post-positivism, interpretivism, and pragmatism there are four most common paradigms within the entrepreneurial ecosystem research (Kivunja and Kuyini, 2017). These four philosophical approaches are based on various fundamental beliefs. The differences of these differences are highlighted through the table below.

Table 8 The fundamental beliefs of research paradigms

| Fundamental Beliefs                                             | Interpretivism (Constructivism)                                                                                                                                                                                                                               |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ontology: the position on the nature of reality                 | Socially constructed were multiple factors available in the study that are entrepreneurial ecosystem and Islamic leadership in Oman. In this context, the impact of Islamic leadership can be identified on Oman's culture for the entrepreneurial ecosystem. |
| Epistemology: the view on what constitutes acceptable knowledge | Subjective and social phenomena focus on the details of the situation in Oman and Islamic leadership on management and culture in EE. Therefore, this would cover all the aspects of performing this research study.                                          |

|                                                                      |                                                                                                                                                                                                       |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Axiology: the role of values in research and the researcher's stance | Value-bond and emic<br>Research is a valued bond where the researcher will determine what to analyse and what not. EE has various aspects that the researchers could miss out on any important factor |
| Research Methodology: the model behind the research process          | Qualitative (Grounded theory, Islamic leadership Model, shareholder's theory)                                                                                                                         |

*Source: Saunders et al. (2012), p.137; Wahyuni, (2012), p.70*

According to Chilisa and Kawulich (2012), a research paradigm can be referred to as a collective process that comprises different philosophical positions like positivism, post-positivism, constructivism, and more. These paradigms are concerned with the varied assumptions pertaining to the existing reality. Many researchers over the years have developed and accentuated new paradigms that predict and interpret reality in their own unique way.

### 5.3.1 Positivism Research Paradigm

Positivism as a research philosophy is majorly utilised in studies where quantitative data is collected, and is examined with the help of statistical analysis. The positivist approach is achieved with the help of experiments, observations, collection and analysis of data which is based on quantitative estimation. These components assist in deducing the relationship between the variables and collecting the information, and testing the hypotheses on this basis. The researchers who adopt positivism will follow a statistical approach for the analysis of the data (Yanow& Schwartz-Shea, 2015). Propagators of positivist research philosophy are of the view that to adjourn a technical fact, human actions and behaviours should also be scientifically tested (Prasad, 2017; Park, Konge, and Artino Jr, 2020). The post-positivism and positivism paradigms mainly perceive and interpret knowledge as well as reality through the natural sciences lens onto social sciences. Thus, they both

perceive social reality as objective and external in nature (Ponterotto, 2010; Saunders et al., 2012). The major difference between the positivism and post-positivism paradigm is that positivists use a sample from the population to make generalisations that are law-like through value-free research (Neuman and Robson, 2011). While on the other hand, the propagators of post-positivists such as Wahyuni (2012) argue that knowledge exists as a result of social conditioning and that social reality can only be understood if it is framed in a specific context of dynamic cultures or relevant laws. The researcher's role is perceived as independent in these two paradigms because he/she is separated from the study and mainly takes an outsider's perspective (Peterson, 2014). In this study, my role is intertwined to the research topic and context of inquiry and thus, this study moves away from the positivism and post-positivism axiology. Positivism and post-positivism are based on the use of scientific knowledge to generate valid and acceptable knowledge and mainly use a deductive approach where they statistically test theory from pre-formulated hypotheses. This study diverts from positivism and post-positivist epistemology because this study does not attempt to test any existing hypotheses. This study rather tries to develop a model that the Omani entrepreneurial ecosystem can adopt in light of the global Entrepreneurship Ecosystem.

### 5.3.2 Interpretivism Research Paradigm

Interpretivism is one of the most commonly used research paradigms within entrepreneurship and entrepreneurial ecosystem research (Edoho, 2016). The interpretivist paradigm is considered as the extreme opposite of the post-positivist paradigm due to its strong constructivist stance that views knowledge as subjective in nature. Moreover, reality is socially constructed by people's perceptions and social actors (Mack, 2010). Interpretivism purports that valid and acceptable knowledge consists of social phenomena, subjective meanings and motivating actions. According to Wahyuni (2012), interpretivism acknowledges that people's assumptions, backgrounds and experiences play a major role in the on-going formulation of social reality that is assumed to exist *"in their broader social context through social interaction"*. Due to the subjective nature of these human experiences and

perspectives, interpretivism views social reality as always changing and possessing a variety of perspectives (Saunders et al., 2012). Interpretivism uses this argument to reject post-positivism, objectivism and reality by stating that the social world can only be understood from various subjective meanings. Moreover, it also accentuates that experiences people attach to reality are instrumental in shaping the truth. Additionally, it views reality as subjective, and argues that there is no single truth (Edoho, 2016). According to epistemological assumptions, the interpretivist paradigm aligns with the objectives of the study, which is concerned with the development of knowledge on how the entrepreneurial ecosystem of Omani can be effectively managed. The outcome of this research endeavor, will be a comprehensive framework for the management of the Entrepreneurship Ecosystem in the Omani context. Here, my role is considered part of the research and cannot be separated from the study, as the participants of the study are considered to form part of the reality of the study phenomenon (Thanh and Thanh, 2015). Interpretivism argues that the researcher must interact with the social world and with the study participants to understand reality (Stingone et al., 2017). In this study, I interacted with the entrepreneurs and key players that were actively engaged in the entrepreneurial ecosystem of Oman. From these interactions, I was able to generate knowledge that is useful in conceptualising a framework on how entrepreneurial ecosystems are managed in Oman. Interpretivism as a philosophy is more suitably aligned with qualitative research that involves acquiring data from smaller samples (Irshaidat, 2019) and purports qualitative data provides in-depth and detailed descriptions of social constructs. In addition to this, it even highlights narrative forms of analysis that help in describing the highly specific and detailed accounts of a given social phenomenon (Panhwar et al., 2015). The parameters of testing data make interpretivism quite distinctive from positivism in nature. Propagators of interpretivism philosophy focus on uncovering the deep views or real connotations of social phenomena using the participants as sources of knowledge.

In contrast, positivist researchers rely on the power of replication where the study is repeated several times using different subjects and situations. Further, the findings are analysed for patterns to reach generalizable conclusions (Collis and

Hussey, 2013). This explains why both I and the participants' values and experiences are essential in the collection and analysis of the data within the interpretivism paradigm.

### 5.3.3 Pragmatism Research Paradigm

Bryman (2015) defines the pragmatism paradigm as the middle-ground and contemporary approach that frees itself from the frames of the paradigm war and philosophical debates. Pragmatism as a paradigm focuses on establishing the themes and bonds that connect the qualitative and quantitative research, making it a powerful paradigm because it blends together the benefits of qualitative and quantitative methods (Ryan, 2018). Researchers start with the research question within the pragmatism paradigm rather than 'questioning the epistemology and ontology of the study' (Wahyuni, 2012, p.71). Although this is a powerful position, this study's goal is not just limited to answer the different research questions but also aims to explore how the Omani entrepreneurial ecosystem policies are formulated for ensuring sustainable entrepreneurship activities within the Omani context. Building from within epistemological debates, knowledge is acceptable when it is generated from both subjective meanings and observable phenomena. Thus, acknowledging the pragmatism paradigm allows to consider knowledge generated from both observable phenomena and subjective meanings, even though the current study has adopted the interpretivist paradigm.

### 5.3.4 Rationale for Choosing Interpretivism as Philosophy

Peterson (2014) provides a criteria list that researchers can follow when selecting the appropriate paradigm for their study. While selecting an appropriate research paradigm, the researcher must consider the following attributes:

1. assumptions about ontology, epistemology, axiology and methodology
2. the experience and training of the researcher
3. the psychological attributes of the researcher
4. the nature of the issue under investigation
5. the specific target population of the study

The current study has chosen interpretivism as the underlying philosophical approach. There are various reasons which motivated me to select interpretivist philosophy. With regard to the ontology perspective of the research, the study has multiple outcomes since the entrepreneurial ecosystem is experienced differently by different people (Ryan, 2018). For instance, how an expert policymaker perceives and understands entrepreneurship is not the same way an entrepreneur would experience or perceive it. The views and perception of entrepreneurship and entrepreneurial ecosystems are also varied within and across various groupings and individuals (Roundy, 2017). Thanh and Thanh (2015) built upon Berger and Luckmann's anti-essentialist account of social life. They argued that human beings together create and sustain all social phenomena through social practices. They see three fundamental processes that are utilised to capture this information, namely: externalisation, objectivation and internalisation. Therefore, to capture these multiple realities, an interpretivist philosophy that views ontology as subjective and having multiple realities is the most suitable one (Scotland 2012). Based on this philosophy, the nature of reality is socially constructed, subjective and may change over time.

According to Al-Abri et al. (2018), an entrepreneurial ecosystem is a social phenomenon that was first constructed. Secondly, it was analysed through meaningful actions and human interactions. This is because entrepreneurial ecosystems are a result of human activity, which makes them a social phenomenon that can be subjected to social conditioning. Therefore, it would be more convenient for the study to make inquiries to the respondents regarding their views about the entrepreneurial ecosystem in the natural setting (market, business centre, workplace, incubation centres, etc.) while interacting with others around them. This is because people live their lives within a social environment, which makes their behaviours and actions interconnected. Al-Abri et al. (2018) define that the construction of the framework depends on various factors such as legal, political and economic. These constructs can be dealt with socially by abiding by the rules, responsibilities and other social norms. In this regard, interpretivism can be used to holistically help us comprehend how people act in a certain manner in given situations, and consequently, garner a better understanding of their behaviour Al-Abri, et al., (2018); Amineh and Asl (2015), this

study uses the social constructivism approach to bring out some socio-economic and socio-ecological aspects of the entrepreneurial ecosystem. As a result, the current study will make use of the interpretivist approach for exploring how effective the entrepreneurial ecosystems of Oman are managed.

From an interpretivist viewpoint, the individuals who are actively involved in entrepreneurial ecosystems are assumed to have knowledge which has been socially constructed. They acquire this knowledge from their experience as either entrepreneurs or professionals working with entrepreneurs over time. As such, entrepreneurial ecosystems can be seen as products of social activity that can be understood by studying how people perceive such activity based on their shared meanings and interactions that are relatively local or regional (Thompson, Purdy and Ventresca, 2018). Entrepreneurial ecosystems consist of various social, cultural and material attributes that are beneficial to entrepreneurs and the relationships between material, cultural and social attributes that shape the ecosystem (Spigel, 2015). In this regard, entrepreneurs are most likely to have socially constructed knowledge about the efficient management of entrepreneurial ecosystems based on their shared interactions. There might be other key benefits that will help to get information from the entrepreneurial ecosystems. Lastly, such a relationship between entrepreneurial ecosystems and actors/entrepreneurs makes it more suited to analyse using interpretivism.

Another reason that inspired the choice of the interpretivism paradigm is the axiology of the study. According to Thanh and Thanh (2015), interpretivism places emphasis on the need of locating analysis within a context, and interpretivists are interested in comprehending the world from the subjective experiences and meanings that individuals attribute to social reality (Wahyuni, 2012). Accordingly, interpretivism heavily relies on methods that incorporate measurement and meaning, such as participant observation and interviews (Kelliher, 2011). The adoption of the interpretivist paradigm provided the opportunity to interact with the participants and gain a deeper insight into the social phenomenon under study as well as unearth underlying issues with regard to how the Omani entrepreneurial ecosystem is

managed, which would have been limited if the study had adopted a positivist philosophy that aims at collecting quantitative data, and prove hypotheses in a deductive manner

The other motivating reason for the choice of interpretivism was the nature of the study. The purpose of this study is to explore how the Omani entrepreneurial ecosystem is managed (a study interpretivist in nature) rather than determine relationships between variables (a study of positivistic nature). This study's final goal is to contribute to the conceptual framework that explores Islamic Leadership Model (ILM) and the Adaptive Co-Management (ACM) concept. These models act as an alternative to the effective management of the entrepreneurial ecosystem in Omani culture. It can be further stated that the study will not be testing any predetermined hypotheses. The study tried to analyse the entrepreneurial ecosystem in a way that requires emphasizing sense-making, even which entails understanding how people interpret and give meanings to their experiences (Thomas, and Mustafa, 2019). As a result, this would require a paradigm that can uncover subjective meanings and reasons that lie behind this social phenomenon. This is one of the strengths of interpretivism (Samnani, 2015). The study mainly aims to evaluate how an entrepreneurial ecosystem is managed and understand the effect that current and future policies on the entrepreneurial ecosystem have considered for the study. Thus, the interpretive paradigm adopted is suited to the exploratory research design that aims at acquiring qualitative data for accomplishing the inductive reasoning goal of proposing a theoretical framework through the study.

The research study places emphasis upon understanding the entrepreneurial ecosystem in Oman and the Islamic leadership model that can support in gaining a better sense of the entrepreneurial environment in the country. Moreover, the outcomes of the study will aim to help towards highlighting the business environment in Oman, which contributes a major part to Oman's GDP, thus further helping towards improving the economy. Therefore, the collected data from the interviews will help to elucidate the different aspects and policy changes in the country that can enhance the entrepreneurial environment, and the NES will help to narrow down the research to

come to a conclusion to assess the impact on the management in EE Global Entrepreneurship Monitor is directly developed on its own, this helps in uncovering the information and acts as the tool. Tool named as the National Experts Survey, known as the NES. National Expert Survey (NES) conducted by Global Entrepreneurship Monitor (GEM) enables in capturing the qualitative data on exogenous factors. The factors that create an impact on the activities of the entrepreneurial. Through observation and analysis of the theories discussed in the context will be developed to achieve the study's aim. Therefore, the study's analysis will help to understand future opportunities in Oman for young entrepreneurs and the development of the different sectors through the exploratory research study.

### 5.3.5 Ontological assumptions

According to Ormston et al. (2014), ontology is a branch of philosophy that supports the framing and comprehension of concepts such as existence, being, becoming, and reality. It comprises the queries concerning how entities are grouped into basic categories and which of these entities exist on the most fundamental level. The relevant queries in accordance with the ontological perspective, are aimed at examining the nature of reality (Nelson, Groom and Potrac 2014). Ontological assumptions within the interpretivist paradigm are subjective and are governed by the multiple realities' theories (Irshaidat, 2019). By adopting the qualitative research method to conduct social research on the policy reframed and leadership models followed by the entrepreneurs in the country. The ontological assumptions adopted in this study are:

- Entrepreneurship is a social phenomenon with multiple realities.
- An entrepreneurial ecosystem can be constructed and explored through human interactions
- Entrepreneurship exists due to different human experiences, knowledge, interpretations and observations.
- Leadership models used by the entrepreneurs in the business to improve the business environment.

- Policy development and reframed to create business opportunities for young entrepreneurs.

### 5.3.6 Epistemological assumptions

Manion and Morrison, (2007) outlined that epistemology focuses on the assumptions that one makes about the nature for knowledge. For That reason, epistemology is closely related to the nature and form of data that will be acquired. Moreover, it is concerned with how reality will be communicated with the individuals not related to the study. Furthermore, epistemology highlights how reality is interpreted by different individuals and how this variation impacts their social behaviour. The epistemology of the study is concerned with my role performed in the research framework, especially while collecting data (Nelson, Groom and Potrac 2014). It is concerned with gaining an understanding of the researcher as an active participant, along with the other respondents of the study or a passive observer of the information provided by the respondents.

In the context of epistemological assumptions within the interpretivism paradigm, I played the role of both the observer and facilitator of the social phenomenon as critical. According to Cornuel et al., (2015) a researcher can play the role of both the involved participant and an outside observer simultaneously. In the current study, I played the role of both as outlined above. At one point, I was ‘actively’ engaged with the interviewees in the discussion, seeking clarifications and responding to their questions. As a result, I acted as an involved participant. At the same time, I was ‘passively’ engaged in observing the respondent's body language, listening to how they describe concepts and making notes as an outside observer. Based on the assumptions of the grounded theory research approach, this is because the researcher is required to be knowledgeable and familiar with the research topic. This is essential in order to decipher what the research participants portray through their responses (Barodal, and Gildea, 2015).

The epistemological assumptions made were:

- One can comprehend the concept of entrepreneurship through the mental processes of interpretation that are a result of social interactions
- Individuals that are actively engaged in entrepreneurship can socially construct knowledge through their information, skills and experience within the entrepreneurial ecosystem
- The participants have been engaged in deep dialogue, the conversation of question and answers with the facilitator and part of the research process. Also, it has been observed through listening to the connections that the interviewees made, how they defined concepts and how they understood/analysed things, and in this observer role. The philosophical aspect of the research mainly depends on the grounded theory that has been considered in the research study; the policies and leadership model for the entrepreneurial ecosystem was discussed and ensured that the information is adequate and legitimate.

### 5.3.7 Using Interpretivist Paradigm to Study Entrepreneurial Ecosystem

Over the years, researchers in the business relied upon a positivist paradigm as they utilise high numerical and large archival data sets that can be studied objectively through deductive and quantitative methods (Leppaaho, Plakoyiannaki and Dimitratos 2016). However, this phenomenon is slowly changing due to the emergence of social issues within business and economics research, which is neither entirely numerical nor can be explained from an objective scientific perspective (Antwi and Hamza, 2015). This has led to a shift from positivism's objective to interpretivism's subjective thinking in business research. Further, this has been characterised by a change from quantitative to qualitative methods in the field (Myers 2013; Parker 2012). Thus, the current study has applied the qualitative inductive approaches which mainly focuses on the interpretive perspective. Hence, this approach is utilised in the study because it can support the research towards helping identify a better scope to accomplish the aim and objectives of the study (Wahyuni 2012). The analysis of the entrepreneurial ecosystem of Oman from an interpretivist perspective would provide

a better understanding of the subjective meanings that entrepreneurs and professionals that are actively engaged in the Omani entrepreneurial ecosystem attribute to the nature and conduct of study phenomena (Goldkhul, 2012).

Based on Vogel's (2013) definition, it is evident that entrepreneurial ecosystems are the product of socioeconomic interactions among different actors. This further implies that these actors create social realities such as new ventures, innovations, funding, etc., depending on their roles and motives within the entrepreneurial ecosystems (Spigel, 2015). To understand how these actors create social realities within the entrepreneurial ecosystems, it is important to use a research paradigm such as interpretivism because it offers multiple perspectives into the issue (Owoade, 2016). As such, the use of the interpretivist paradigm in analysing the ecosystem of entrepreneurship is considered the most appropriate one, because it can be used to understand the behaviours and motives of the actors within the entrepreneurial ecosystems (Logie-Maclver, Piacentini and Eadie, 2012). The Interpretivist paradigm is also used in understanding how the actors in the entrepreneurial ecosystems form social constructs based on their subjective meanings and experiences.

## 5.4 Qualitative Research Methodology on Entrepreneurship Ecosystem

### 5.4.1 Research Approach

Qualitative inquiries are ethnographic and interpretivist in nature and entail a detailed explanation of the research process or social phenomenon (Lewis, 2015). The main aim of the study within a qualitative design is to uncover the meaning behind how people construct or make sense of their social world or experiences; the researcher plays the vital role of being the observer or facilitator for studying a phenomenon of the natural setting (Goldkhula, 2012). The inquiries collected with the help of the Qualitative research approach can be descriptive and narrative-based in nature. Under such a research approach, I tried to formulate a social understanding of a phenomenon in a described form. So, the description would be collected either orally, visually or in written form (Tuffour, 2017). Further, it is also observed that most of the qualitative inquiries follow an inductive approach, which mainly helps in

creating and developing concepts, abstracts, theories or hypotheses from the details (Gioia, et al., 2013).

#### 5.4.2 Rationale for choosing Qualitative Research Approach

In the current study, qualitative and cross-sectional approaches were adopted to understand the entrepreneurial ecosystem in Oman. Since the current study aims at proposing a new theoretical framework through the course of its findings, the adoption of the inductive approach is more appropriate. With the help of grounded theory, theoretical frameworks were developed. Further, based upon the qualitative information acquired through the interview method, the theoretical framework emerged. A cross-sectional approach was used in the research process, as opposed to a longitudinal approach because there were no follow-ups done (Sullivan and Calderwood, 2016). The data was collected at a specific, short time-frame, making the cross-sectional approach most suitable (Maher, et al., 2018). The fundamental reason why the study utilised a cross-sectional approach as opposed to a longitudinal approach, is the fact that a cross-sectional design was relevant to address the research question in this study since the study did not seek to investigate the changes or evolution in the Oman ecosystem over time.

A qualitative approach was chosen because it allows learning from the participants based on real-life experiences of how they experience a phenomenon, and the meanings that they attribute to it or as to how they interpret it (Sekaran and Bougie, 2016). In the context of the current study, a qualitative research approach, along with an inductive reasoning approach, was utilised. This helped in the deep exploration of the study matter and led to the generation of new knowledge (Gioia et al., 2013). The research questions and assumptions are qualitative in nature, making inductive reasoning the most appropriate (Padgett, 2016). Moreover, a qualitative research approach is the most appropriate, especially if the research topic is a new one or has not been explicitly explored (Punch, 2013). In the context of the current research, management and context/culture are the core focus of the study. The perspectives that emerged represent the new aspects of studying entrepreneurial ecosystems.

Additionally, the policies developed by the government in the industry helped towards improving the entrepreneurial environment the research has developed with special consideration of the culture, attitude, educational structure, business opportunities and the management's decision making and strategies for the growth of the small and medium business organisations on the EE. Therefore, these aspects will help analyse the socio-economic aspects that influence the culture of the individuals in Oman. They will also shed light on the political and management aspects that create and provide opportunities to the youth entrepreneurs. This will help towards improving the business environment and balance the entrepreneurial ecosystem in Oman.

### 5.5 Grounded theory as a research design

The type or nature of research is considered a critical determinant of a research study's success. As a result, the researchers are always warned to exercise maximum caution and precision when choosing the type of study (Punch, 2013; Sanders et al., 2013). The majority of the methodological literature suggests that the researcher must decide the appropriate nature of the research based on the research questions and the purpose of the study (Wahyuni, 2012). In this study, the grounded theory was implemented. It specifically implemented the version of grounded theory provided by Glaser, which highlights the development of a concept or theory based on the categories and themes to emerge from the data (Chun Tie, et al., 2019; Walsh, 2015).

#### 5.5.1 Definition and history of grounded theory

According to Stern and Porr, (2017) grounded theory can be defined as an inductive approach that is used towards building and developing an accurate theory or concept of interest. This is mainly based on empirical data collection. Moreover, the Grounded theory can also be termed as a research design that presents new concepts or theories generated from an exhaustive analysis of empirical methods (Rieger, 2019). There is a major difference between grounded theory and other research designs to undertake a grounded theory approach, the researcher must be

open-minded, reflexive and sensitive to the underlying meanings of the data (Thistoll, 2011). The sensitivity of the researcher is called "theoretical sensitivity" within the grounded theory approach (Kenny and Fourie, 2015). Theoretical sensitivity can be even defined as the ability of the researcher to utilise their skills and knowledge in generating concepts from the data, and then be able to relate those concepts to the normal models of general theory (Howard-Payne, 2016).

Historically, grounded theory was developed by Barney Glaser and Anselm Strauss in the 1960s with the goal of developing theory from the data (Charmaz, 2017). The first publication of the grounded theory was found in the book, "The Discovery of Grounded Theory" which was written by Glaser and Strauss, (2017). The authors provided an outline for constructing a systematic research methodology for deriving theories of human behaviour from an empirical data collection approach (Ralph, et al., 2015). Glaser and Strauss (2017) argued that substantive theory could be used to formulate a more formal or bigger theory. Glaser's (2017) book titled '*Theoretical Sensitivity*' made grounded theory methodology more explicit, while Strauss' (2017) book titled '*Qualitative Analysis for Social Scientists*' made grounded theory more popular and available to many readers (Charmaz, 2017).

#### 5.5.2 Versions of the grounded theory

Glaser and Strauss's perspectives were considered with regards to the grounded theory methodology, which evolved in two directions after the theory was developed. From this division, there are two main versions of the grounded theory, namely:

- a. The Straussian version
- b. The Glaserian version.

Although the two versions of the grounded theory differ from each other based on the coding that is adopted, the practice of coding is used in both to derive and develop concepts from data (Glaser and Strauss 2017). According to the Glaserian version, grounded theory is considered a powerful research methodology for understanding client behaviour in a particular area. Glaser and Strauss defined grounded theory as

the exploration or development of a new theory from data acquired systematically and analysed in social research. Further, Bryant and Charmaz, (2010), highlighted that grounded theory is a systematic, inductive, and comparative approach for conducting an inquiry for the purpose of developing a theory. Today, the term Grounded Theory is used to describe a specific methodology used to analyse the data and develop a new theory through it (Urquhart, 2013). Therefore, based on its purpose, Grounded Theory can be considered primarily as a research design, as well as a method of data analysis. Thereby, researchers relying on the Glaserian version of grounded theory are advised to allow and accept the data that emerges.

The respondents of the study belonged to the management professionals and the small business owners of the country. Semi-structured open-ended questions were asked to the participants in order to understand their point of view on the entrepreneurial ecosystem and the government policies to improve the business sector. Therefore, the open-ended questions helped the participants to share their experience, challenges, situation, and leadership theories they implement to improve the business process. Participants were also able to outline how they manage different cultures and people with different attitudes. Hence, it can be stated that the semi-structured questions gave these insights into the study and helped to explore more in this context. Glaser (2017) provided an updated definition of grounded theory, which he termed as a general methodological design for analysing data in a systematic manner through the application of methods that "generate an inductive theory about a substantive area"(p.114). The re-definition of the grounded theory developed by Glaser (2017) was to critique the Straussian version of grounded theory (more explanation on the critique is offered under the Straussian version below). Under the Glaserian version, the coding systems consist of open coding, selective coding and theoretical coding (Charmaz, 2017). Firstly, open coding and selective coding can be also defined as the coding systems under the Straussian approach. Further, the theoretical coding is found within the Glaserian variant whereas the Straussian version uses axial coding. Theoretical coding uses codes to conceptualise the relationship between substantive categories and to integrate these substantive categories into the theory that integrates the gist of the entire concept (Glaser, 2017). Theoretical codes

help in portraying the relationship that exists between data and theory. It also conceptualises the basic pattern from a set of indicators that are found within the data (Glaser, 2017).

A Straussian version was developed by Howard-Payne, (2016), whereby it was proposed that the researcher progresses through open coding, selective coding and axial coding. Selective and open coding is common in both the Glaserian and Straussian versions, but the axial coding is only used within the Straussian version (Ralph, et al., 2015). Axial coding is based on the axis of one classification at a time, which allows to accumulate knowledge about the relationships between the classification, other classifications, and sub-groups (Strauss, 2015).

The Straussian version undertakes an intensive analysis of one classification at a time to allow identifying the specific conditions and outcomes (Strauss, 2017). In that way, the Straussian version recommends researchers to make use of a coding paradigm in their analysis process because it enhances the connection between data groups, and it also offers cues regarding how to identify and relate the structure to the process (Ralph, et al., 2015). Another characteristic of the Straussian version is that it stresses interactions and actions and how they relate to macro and meso social contexts (Strauss, 2017). The main reason is that Strauss focused more on action theory rather than individual theories, and he had a strong stance that action created the basis for sociological analysis and experience (Bryant and Charmaz, 2017).

Glaser (2017) criticised that Strauss and Corbin's view of grounded theory could not form an emerging theory that is objective because the data and analysis would be contrived through a set of hypotheses, techniques and questions that are preconceived. In his part, Glaser (2017) advocated for abiding on the systematic, general views and comparisons that are not forced. Charmaz (2017) also cited Strauss and Corbin's view of grounded theory as consisting of too many sets of techniques that may divert the researchers' attention from the data, and as such, lead to a theory that is faulty.

### 5.5.3 Rationale for choosing Grounded Theory

Over the years, Grounded theory has been used numerous times in business, management and development related studies, specifically in fields like entrepreneurship research (Howard-Payne, 2016). Similarly, the theories that it has been related to include applications in management research, innovation, information systems, management action, business mergers (Rieger, 2019). Grounded theory has been used to identify the impact of culture on EE in Oman (Roundy, 2017b; Aaltonen, 2016). In the current study, the grounded theory is utilised to implement the inductive qualitative research approach systematically. Likewise, it even helps gather the particular data and the analysis to understand the current ecosystem situation in Oman and the policies in the country. The main purpose of selecting grounded theory for the qualitative research analysis is that it provides explicit, sequential guidelines to conduct the research. The significance of using the grounded theory is greater in this study as it helped providing an advanced conceptual analysis for the qualitative data. However, grounded theory can be misunderstood by the researchers while adopting it to conduct the social research context of research where the research adopts distinctive guidelines for the research study (Chun Tie, et al., 2019).

However, grounded theory can be very effective to conduct the study as it helps to analyse and collect primary data from the interviews in the context of the entrepreneurial ecosystem in Oman. This data can provide adequate information for analysing the implication of Islamic leadership to the business environment. The grounded theory will include Oman's political environment and government policies on the entrepreneurial ecosystem. Moreover, the interview technique will help explore empirical information pertaining to the co-adaptive theory, educational structure, and socio-cultural difference.

Additionally, it will be useful for accentuating the market and environment that exists in Oman which might create opportunities for strong entrepreneurship in the country. There is a lack of information available with regards to the governance that exists in the environmental ecosystem in the prevailing literature. As a result, the current study will help shed light on these aspects in a systematic way. With the help

of the grounded theory, it will outline the significant impact of Islamic Leadership on culture and management.

One of the main reasons for selecting the grounded theory was to relate the interrelationships and interactions between the contexts being studied. More importantly, the use of grounded theory would allow for meanings to emerge from the data in a systematic manner (Glaser and Strauss, 2017), which enhances our understanding of the subject matter, that is, the policy-making and reframing of entrepreneurial ecosystems of Oman. According to Seidel and Urquhart (2016), the use of grounded theory enhances the researcher's comprehension of the research issue that is yet to be known, and it can be effectively used to find answers to general research questions that are socially and purposefully designed. Moreover, the study will analyse the business environment and change in policies to increase the businesses' sustainability. The reflexive nature of the grounded theory approach prevented personal bias from being presented in the following literature review.

The approach taken can help shed light upon new, emerging angles, such as business opportunities emerging for young entrepreneurs in Oman, or the ways in which the economy has been hampered due to the pandemic. Therefore, the grounded theory will help to analyse the impact of Islamic leadership on the culture in the entrepreneurial ecosystem and adaptive co-management theory impact on management in the entrepreneurial ecosystem.

The current study adopts the Glaserian version of Grounded theory. This is specifically done because it relies on and utilises theoretical coding, which allows the key concepts to emerge from the data (Glaser, 2017) inferentially. Within this study, the research is broadly focused on how the entrepreneurial ecosystems are managed and on the subsequent emerging issues that disrupt the ecosystem. In addition to this, the Glaserian version strongly attributes the idea that the major themes freely emerge from the data (Glaser, 2017).

#### 5.5.4 Methodology: Justification and Significance

The current study has adopted grounded theory as this helps in solving the complex research aims and even helps in developing a suitable research design as it provides a holistic view. For the present study, I adopted the qualitative methodology for the grounded theory, whereby the study mainly focuses on the grounded theory-based insights in order to analyse the impact of Islamic leadership on the culture and co-adaptive model on the management in the entrepreneurial ecosystem. As the initial direction was to adopt the qualitative inquiry approach, however, deep engagement with GEM methodology influenced the use of GEM statistical tools for a better examination of Oman's entrepreneurial context. This took place as a side activity, as part of your governmental role (ie: not as the main focus on the PhD). Thus, the study has been conducted with the help of a qualitative research study where both primary and secondary data was collected to find the answers to the general research questions. However, the primary data for the qualitative research study was collected through interviews of the management professionals and the business owners of Oman. Moreover, the grounded theory would help to investigate the theoretical aspects. Similarly, even the GEM survey would help to achieve the research objectives as the information from the survey would provide additional support to the theories and also give insight into the entrepreneurs in Oman.

#### 5.6 Data analysis

Agresti, (2018) argues that researchers utilising grounded theory tend to collect data through both informal and formal interviews. This was also one of the pertinent reasons that the current study utilised the semi-structured interview technique as a tool for data collection. Grounded theory is elaborated by analysis tools such as coding, customising, category building, and constructing the theories to understand the implication of the collected data in the study. With the help of the rich literature reviewed in the previous chapters, major variables were highlighted. Based on these variables, the study aimed at understanding the entrepreneurial ecosystem and its impact on Oman's economic condition. Hence, the study also engaged with analysing the cultural aspect of Oman which involves Islamic leadership and their role in the

entrepreneurial ecosystem. The use of semi-structured interviews, according to Timonen, Foley & Conlon (2018), allows the respondents to define the world in their own way- an aspect consistent with the interpretivism paradigm. Semi-structured interviews, as pointed out, use specific and more focused questions, which is also consistent with the grounded theory. Moreover, as far as the aim of this research is concerned, which is to analyse the impact of culture and management on the entrepreneurial ecosystem, the use of this data collection approach and strategy allowed the experts to give deep and detailed explanations about the conceptual as well as theoretical underpinnings of the Islamic model and its applications in entrepreneurship.

## 5.7 Research process

### 5.7.1 The Glaserian protocol

The current study has utilised the Glaserian protocol as this helps in collecting the data and in conducting the analysis in an in-depth, informative manner. With the help of this protocol, grounded theory achieves five fundamental characteristics, firstly it helps in building theories, secondly, it ignores preconceived ideas, followed by making constant comparisons and theoretical sampling (Urquhart, 2013). to develop theory using qualitative data.

According to Urquhart (2013), a researcher should ignore any preconceived ideas that emerge due to existing literature until he/she collects data and develops a relevant theory. This is essential to ensure that the conclusions drawn are purely based on the data and are not 'contaminated' by the ideas that exist in theories. In other words, the data acquired must be able to outline unique findings to portray a new theory and not depend upon the bias that existed due to my preconceived ideas. Constant comparison is another important aspect of the Glaserian protocol. This is because research is an iterative process that involves a constant change of codes, incidences, categories, and the properties of these categories. The current study, thereby, uses the interview method's source to collect such empirical unexplored information. The NES survey that is directed by the Global Entrepreneurship Monitor (GEM) was utilised as references in the process of data collection and construction of

the semi-structured interview instrument for the current study. The current study collected the data with the help of the GEM data and that is derived from two main sources, namely:

(1) Adult Population Survey (APS)

(2) National Experts Survey (NES)

APS helps in providing information associated with the level of entrepreneurial activity within the country. Whereas, NES provides each and every insight of the entrepreneurial start-up environment. Entrepreneurial start-up environment created in each economic country those who focus on the major nine entrepreneurial framework conditions. The information acquired through this instrument will help the study to narrow down further to reach a conclusion. These data will help assess the business scenario in Oman and the contribution of the businesses to the country's GDP. Further, it will help to assess the business opportunities for the young entrepreneurs in Oman and the changes in the entrepreneurial ecosystem in the country due to change in governmental policies.

#### 5.7.2 Data collection

There are two major sources through which data is acquired for a research framework. It can be either primary or secondary, depending on its source. This study relied largely on primary sources of data, i.e., semi-structured interviews. The respondents of the current study were entrepreneurs and professionals who are well-versed and experienced in the Omani entrepreneurial ecosystem's various dynamics. Semi-structured interviews consist of open-ended questions allowing the respondent to provide a detailed response as they prefer (as long as it is within the context) and offer explanations on any aspects that describe not only phenomena but also understand the reasons behind the noted behaviours (Campbell et al., 2013). The approach is also critical to the current research framework. It helps to note any additional factors or issues related to the research that would otherwise not be discussed when using structured questions (limiting the participant to the available responses).

Nonetheless, the use of interviews as a data collection instrument has its own set of disadvantages, as for example it can be time-consuming. This is because the interviews have to be scheduled based on the availability of the respondents. It is costly as I had to select a convenient location. Moreover, the use of recording materials also contributes to the added costs of using this approach. Finally, the massive amount of data gained through the processes can be tedious and challenging to manage (Van Teijligen, 2014, Nardi, 2018). These weaknesses are sometimes overcome by using instruments such as surveys with closed questionnaires that are quantitative in nature. As discussed above, this quantitative technique can lead to descriptive superficial data that does not explain human phenomena in elaborate details (Nardi, 2018). Hence, such a data collection approach is inefficient to draw conclusions based on new discoveries. The qualitative research approach through the interview process helps in understanding the research objectives in a better context and helps in exploring the opinion, experience, and behaviour of the respondent.

Additionally, the interviews are instrumental in addressing the pertinent objectives of the present study. The primary research question that the study aims at addressing is concerned with the factors that influence the effectiveness of the entrepreneurial ecosystem that exists in Oman. The qualitative approach is also intended to investigate the leadership and the leadership co-management techniques in the Oman context. On the other hand, a qualitative research approach also has a limitation of potentially adding biases to the data because the previous knowledge of the interviewer may influence the answers. Specific preventive measures adopted to reduce researcher bias included the following:-

- All collected data were considered for the analyses
- Multiple visits to ensure the responses are free of pre-existing assumptions
- Leading questions were strictly avoided.
- The interviews started with general questions to let the interviewee expand and his thoughts freely

The National Experts Survey (NES) developed by Global Entrepreneurship Monitor (GEM) was used as the guiding tool during the interviews. GEM is a global

institution that helps in collecting and interpretation and sharing data on levels of entrepreneurship across the globe (Bosma, 2013). To achieve this, the institution, consisting of scholars and industry experts, evaluates the entrepreneurial attitude within a location and the citizens' attitudes towards entrepreneurship (Bergmann *et al.*, 2014). Furthermore, it also focuses on the national aspects that influence entrepreneurship within a region allowing governments. In addition to this, even other regional bodies to influence policies on entrepreneurship within their jurisdictions (Bosma, 2013). By utilising a set of research questions, the GEM questionnaire tool can determine or illustrate entrepreneurship's potential for entrepreneurship in a country. Thus, stakeholders were informed on certain areas to focus on achieving individual regional goals on entrepreneurship. Moreover, Myers (2019) asserted that in grounded theory-based research, the researcher could become exhausted at the coding stage because open coding requires time and effort. It is somewhat a strenuous process.

A literature review is a debatable topic in Grounded Theory as it sometimes discourages the researchers from using this approach. Throughout the development of Grounded Theory various researchers have put forward debatable ways of using existing literature under the umbrella. Martínez-Fierro, Biedma-Ferrer, and Ruiz-Navarro, (2016) clearly encouraged regressive literature review after they have collected, processed and extracted findings from the data to minimise the researcher bias in the Grounded Theory approach. The structure and questions provided in GEM's NES acts as a guide during the interview process. The current study focused on open-ended questions that allowed for semi-structured data collection by investigating and asking further questions and asking additional questions. The questions asked focused on the state of Oman's entrepreneurial ecosystem, stakeholders and policy making.

NES has been developed by global intrapreneurship monitor methodology and conducting semi-structured interviews with 36 experts. The interviews took time around 45 minutes to collect all the information from the participants.

- The steps for the data collection process were as follows:

1. The first step was selecting the respondents, where I used my social networks. Secondly, I have used social media references to identify the study population that included well-known personalities in Oman's entrepreneurship sector.
2. The next step was the sampling process, which came immediately after identifying the study population. According to the GEM methodology, the number of people with whom the interview process is going to take place is 36.
3. Assigning the participants to the respective clusters where equal members have been selected in each cluster. In this way, 18 entrepreneurs and 18 experts from the perspective of the entrepreneurs and professionals already working in various organisations will have the opportunity to represent the target population of the sultanate of Oman.
4. To ensure that the chosen participants were appropriate for the study, the names of participants were strategically shared with two experts in Oman. These experts helped in verifying that the targeted sample is the right people engaged with entrepreneurship in Oman.
5. The interview instrument was developed with the help of an NES survey that is sponsored by GEM. Some of the closed-ended questions were modified and transformed into open-ended questions to fit the research approach and collect more detailed information about the research aim.
6. The selected members have been contacted for the interview requests, and after agreeing to participate in the study, interview dates and time were scheduled, and interviews carried out.
7. The interviews were carried out through face-to-face meetings, online platforms and even on the phone. The interviews were recorded before they were transcribed, ready for analysis.

### 5.7.3 Choice of Participants

The choice of the research participants was performed methodically to ensure that the sample is representative and informative. The study used a non-probability sampling procedure wherein a purposive sampling technique was implemented. The

first step was the recruitment process, where social networks and social media were strategically utilised to gain references. The process also helped to identify the study population that included well-known personalities in Oman's entrepreneurship sector. After the complex process of identifying the population, the sampling process was done wherein two clusters, one for entrepreneurs and the other one for professionals, were created. The second step involved assigning the participants to the respective clusters. Each cluster consisted of an equal number of members, i.e. 18 entrepreneurs and 18 experts. In this way, the entrepreneurs and professionals already working in various organisations would have the opportunity to represent the target population of the Sultanate of Oman. To ensure that the chosen participants were appropriate for the study, as discussed previously, these participants' names were shared with two experts in Oman. They verified that the targeted sample included the right people who were engaged with entrepreneurship in the country. The participants were monitored on the basis that they had a good background in the entrepreneurial activities in Oman and double-checked the names and proposed different ones where necessary. The selected members were then contacted for an interview and after agreeing to participate in the study. Lastly, interview dates and time were scheduled, and perhaps, the interviews carried out.

#### 5.7.4 Participants' Characteristics

The participants were chosen based on their knowledge and active involvement in entrepreneurship in Oman. All the participants were aged above 18 years and were Omani citizens living and running their entrepreneurship activities in the country or working with the entrepreneurs. Persons aged below 18 and non-Omani citizens were excluded from the survey because they were perceived as minors (age-wise) and non-representative of the research phenomenon (non-Omanis). According to the National Institute of Statistics, the data between 2015 to 2018, in Oman, the total population was 4,500,000 and among which the nationals were 56% and non-nationals were 44%. The entrepreneurs constituted individuals running an entrepreneurial activity or founders of a profit-making business. Social entrepreneurs, who are the individuals who have established a business or founded a start-up to solve

or effect social change, were also considered. Adetu (2014) stated that social entrepreneurs are the primary change-makers within a society. He highlighted that social entrepreneurs shape social values based on their perceptions, observation, and actions. Moreover, the activities generated by social entrepreneurs play a vital role in drawing attention to the entrepreneurial ecosystem, enhancing the ecosystem and benefiting all the stakeholders (Roundy, 2017). Also, the profile of experts included persons working within the Omani entrepreneurship sector as policymakers, investors, venture capitalists, academics, bankers, consultants and politicians were considered, among others. The Global Entrepreneurship Monitor (GEM) survey would include entrepreneurs from the country who have small and medium enterprises and face issues in the country. Problems of small and medium enterprise like

1. Inadequate access and marketing platform
2. Lack of access to new technology
3. Lack of required credit
4. Cumbersome regulatory practices
5. Leveraging the e-commerce trend
6. Adoption of technology and many others.

The study also included start-up businesses started by the entrepreneurs from 2009 onwards will also be part of the study.

#### 5.7.5 Interview Guide

In 2017, the SME Authority of Oman decided to study the entrepreneurial environment using GEM methodology and awarded this project to A'Sharqiyah University. In the context of my work, I offered my support to conduct the NES data collection, and my organization was part of the entrepreneurial policy-making. I was inspired to do that to move forward with my qualitative inquiry, and then I dropped the NES survey that would be helpful for practitioner-oriented purposes. There was some inspiration that I acquired through this informative process, and this helped me shape the qualitative categories.

According to GEM, the respondents were chosen based on NES entrepreneurial frameworks that total nine frameworks. Total respondents are 36; 18

were entrepreneurs, and 18 were experts engaged with the entrepreneurial policymaking. Four respondents were interviewed under each entrepreneurial framework according to the NES methodology. Since the focus of the study is to explore the entrepreneurial ecosystem in Oman, the use of GEM's methodology and particularly the NES was considered the most appropriate in getting answers to the research questions. The NES tool was also chosen as the interview guide because it is part of the standardised GEM methodology that evaluates different Entrepreneurial Framework Conditions (EFCs) and other topics relevant to entrepreneurship. The tool also allows for a dialogue with the National Expert, which was found useful in identifying strengths and weaknesses about domestic entrepreneurship and how it influences the development of entrepreneurship. This is because the professionals and entrepreneurs provided their suggestions on the country's policy on entrepreneurship. This is crucial in formulating an image of entrepreneurship resulting from various experiences and perspectives. During the interview, respondents were asked various questions about the entrepreneurship ecosystem and dynamics that take place between the stakeholders. They were also asked to identify issues that either constrain or foster entrepreneurship and even were asked for recommendations to improve it.

Entrepreneurial framework conditions (EFC) can also be defined as the conditions in which the country's entrepreneurial ecosystem hinders or enhances the creation of new ventures. Even though the entrepreneurial ecosystem is affected by the prevailing socio-economic, political and cultural factors within the country, the EFCs directly influence the capacity and level of entrepreneurship activities of a country. As such, it is important to study these critical factors when assessing the business dynamics and the environment for creating a new business.

The report of World Economic Situation Prospect suggests that nations whose economies are more developed tend to have higher EFC scores as compared to the developing countries that tend to have low EFC scores. Based on these scores, GEM proposes that developed countries provide the most conducive environment to create new businesses. Hence, they exhibit better economic growth and development.

Following the EFC and entrepreneurial conceptualisation provided by GEM, the conceptual framework could be summarised, as shown in the figure below.

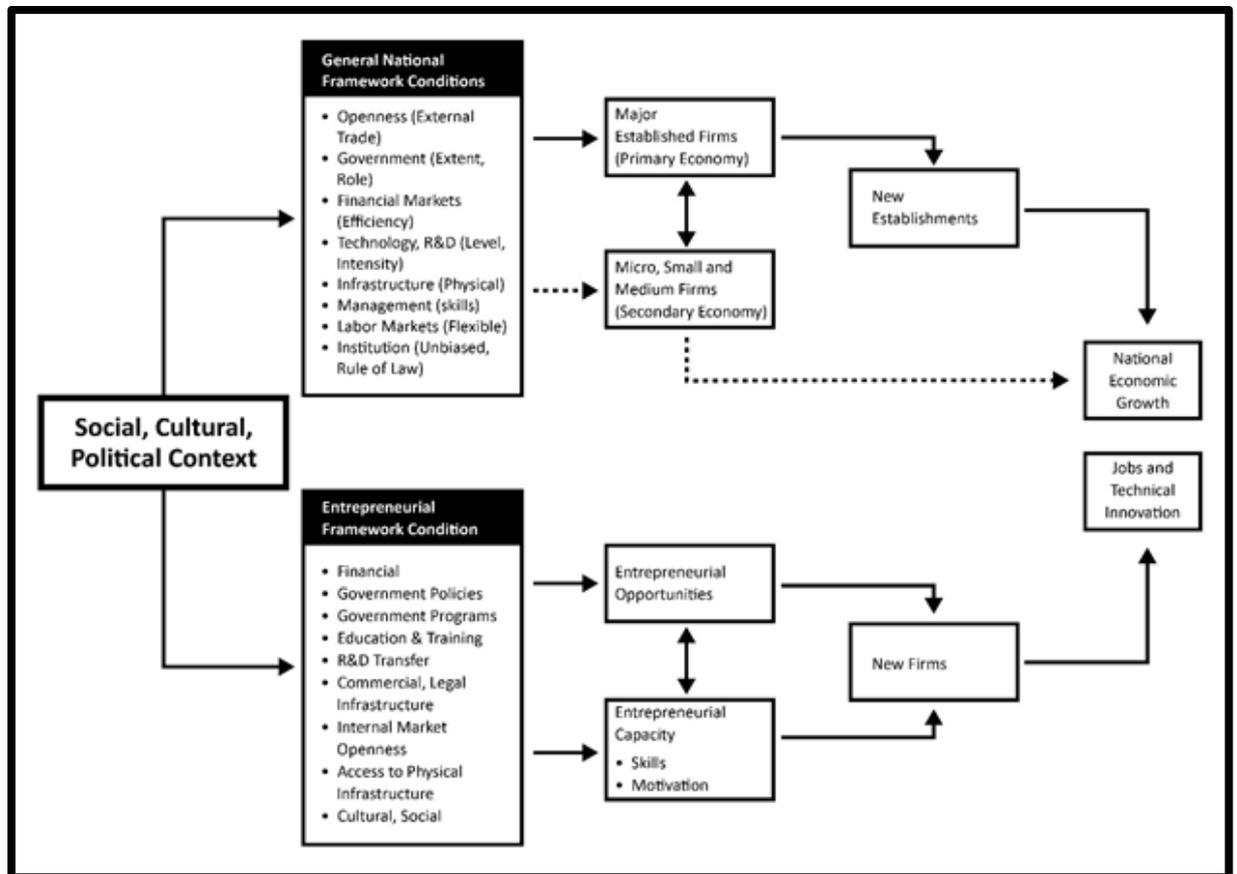


Figure 24 GEM conceptual framework of the entrepreneurial ecosystem

Source: (Levie and Autio, 2007, p. 33).

While there are other assessment tools that can be used to evaluate the country's entrepreneurial ecosystem, such as the OECD Entrepreneurship Measurement Framework and the Babson Entrepreneurial ecosystem Project, the NES developed by GEM was mostly preferred as it has been widely adopted by other researchers that have studied entrepreneurial ecosystems (Mason, 2014; Autio, 2013). The OECD Entrepreneurship Measurement Framework is a good measure, but some of its measurement components and indicators do not apply to the Omani entrepreneurial ecosystem because it was designed for the European region (OECD, 2016).

Some international institutes such as the Global Entrepreneurship and Development Institute have highly recommended using the NES tool in entrepreneurship-related research. It is worth mentioning that GEM uses NES data in their official published data. The National Experts Survey (NES) is part of the GEM methodology. It is widely used in entrepreneurial-related research and helped identify the data related to entrepreneurial support, business opportunity, growth, etc. On the other hand, the experts often judge NES as the tool of the nationally harmonised measure and there are controversies on finding out the judgment of the specific national conditions. Additionally, NES data covers most countries in the world and Arab Gulf countries, which makes it easy to position Oman and draw the lessons. Finally, given that GEM is the world's most famous and reliable institution in terms of entrepreneurial studies, with a reputation of providing high-quality information, which enhances the study's reliability (Mason, 2014).

#### 5.7.6 Semi-Structured Interview Protocol

The interview protocol consisted of four main steps, namely:

1. Planning
2. Introduction
3. The interviews
4. Conclusion

Various steps are involved in each stage, under the first stage of the planning, the participants were identified, then interviews were set up, and the interview protocols that entailed the rules and guidelines to be followed during the interviews were identified:

I arrived before time to survey the environment I met every respondent involved in the study. Further, I introduced the topic and the main objectives of the study to each respondent. I also informed all the participants that their views and opinions for the statements would be recorded. Therefore, they were informed regarding some ethical issues, including informed consent, voluntary participation,

anonymity and confidentiality, limited and authorised access and respect of the participants' rights and freedoms throughout the interview.

During the interviews, notes were simultaneously taken while recording via audio. The interviews were carried out in conducive environments such as the participants' offices, which provided the ambience needed for the study while data was recorded for transcription at a later stage of the study.

#### 5.7.7 Why Pilot study?

Prior to the primary research, a pilot study was undertaken. The main motive behind conducting the pilot study was to assess the feasibility of the proposed methods and procedures. Moreover, it helped in refining them, improving the research process and ensuring everyone in the sample understands the questions in the same way they were intended. According to Thabane et al. (2010), pilot studies play a major role in determining a study's success in the given time period. The pilot phase also gave an indication of the time taken by each participant to provide information for the entire instrument. This proved useful in the planning and management of the interviews. Pilot studies are very useful in identifying the existing and expected problems and challenges (Moser and Kalton, 2017), and in the case of the present research, it helped to identify the challenges faced by the participants. Additionally, it helped in identifying the probable mechanisms to deal with the challenges. The pilot study was also useful in estimating the interview time span in real-time. The pilot phase targeted the individuals involved in entrepreneurial activities in Oman and represented the various entrepreneurship frameworks. This phase took six weeks, and it helped in the identification and resolution of all issues pertaining to the methodology approach before the actual data collection.

#### 5.7.8 Transcription and Translation

After all the interviews were finalised, the analysis process began with the transcription and translation of the interview records using the same process that is proposed within the Grounded theory approach. The audio recordings were transcribed verbatim. After this, the recordings were translated from Arabic to English

because all the interviews were in Arabic. The transcribed primary data acquired through semi-structured interviews (with open-ended questions) were analysed qualitatively using NVivo software, where main themes were identified. The main themes generated from the qualitative interviews with the 36 key informants were coded, analysed and discussed with the support of narratives of the respondents.

## 5.8 Data analysis approach

### 5.8.1 Coding process

The main source of data was primary in nature and emerged through the semi-structured interview instruments. The data was analysed using the three coding systems, that is, open coding, selective coding and theoretical coding as highlighted in the Glaserian version of grounded theory (Glaser, 1992). The data analysis began with the open coding, which Dikaiakos, et.al., (2017), defined as a process of breaking down the data into smaller discrete parts and then assigning codes, or labels, to the small portions of data. These portions are then brought back together when I began identifying the theoretical relations within the data. Identified open coding acts as a very significant step in analysing data through a grounded approach. This is because it allows to identify the direction that their study takes through theoretical sampling, even before they can use the selective coding or focus on a specific issue. In this study, open coding was useful for identifying the key issues to focus on, given the fact that the study began with general research questions.

Throughout the coding process, the constant comparison analysis was used. As highlighted previously, this is a process through which occurrences are compared with others and analysed for differences and similarities (Thistoll, 2011). The constant comparative method involves shifting between the raw data, the codes and the developed themes with the aim of extracting the relationships between the categories. In addition to this, it helps to understand the robustness of these categories. The use of constant comparison analysis is very useful in grounded theory because it allows the researcher to identify the key themes or categories as well as their associated properties (Glaser, 1992). Definition of these key themes has helped to simplify the collected theoretical data and further analysis in this context. The

themes are generated from the data and to do this, the researcher is required to be consciously aware of the process of reflexivity (McGhee et al., 2017). Reflexivity in grounded theory is achieved through the writing of memos such as paragraphs, sentences or few pages. Adoption of reflexivity is important because it allows the researcher to freely explore concepts and ideas about the themes generated and how they integrate with each other. For this study, memos were noted in the form of sentences; samples of the same are shown in the results and discussion chapter.

The present study mainly aims at assessing the impact of Islamic leadership on culture and management on the entrepreneurship ecosystem and in the process, it also highlighted the problems of most entrepreneurship ventures in Oman. It was observed that these people are struggling a lot with the lack of ideology, authenticity, and lack of strategic planning to survive in the marketplace. Thus, the main aim of the study was to outline these factors and describe the problems. Start-up business in Oman by the Oman entrepreneurs is established aiming towards making the changes in the business environment, bring other SMEs together, contribute towards growth of the society, and facilitate commerce. The current study further aimed to investigate what the respondents felt about the entrepreneurial frameworks that shape the ecosystem, how to support local and international entrepreneurs and enrich the economy. As it was observed that getting this information was very critical, acquiring relevant information was accomplished by asking follow-up questions, and these questions were not necessarily part of the prepared interview guide. The analysis of the collected data began along with examining the qualitative data. (from the open-ended questions) as this helped in identifying the main themes and recurring concepts. Moreover, the information from open-ended questions was reviewed to identify themes and patterns among the participants. The themes were then grouped further in a meaningful manner which helped narrow them down further. Thematic analysis further helps in identifying certain factors under particular topics. These factors are further explained and elaborated and are finally generated.

The coding process was done using a grounded theory-inspired coding system. The themes are analysed with the help of the table format. Each and every table is

narrowed down and major themes are lastly outlined. Moreover, this system helped in portraying the interviewees' understanding and experiences about the entrepreneurial ecosystem. Further, the coding process helped to yield the experiences and meanings in a more dynamic and contextualised manner. I was able to spot and map the relationships and processes as well as their consequences for the interviewees. In this regard, the coding of the interview transcripts was done line by line because it helped in identifying the various descriptive categories that emerged from the data. After identifying and examining the main themes of the study, these themes were further interrelated and were followed by developing the concepts through abstraction. Abstraction can be defined as the process of conceptualising data to formulate a meaningful picture of some key theme (Goulding, 2017). The concepts were developed with the help of the abstraction where the data is generated and the data were used to illustrate the concepts. The process of identifying and developing concepts requires theoretical sensitivity, which Glaser (1992) defined as the ability to generate concepts from the data and be able to relate them based on the normal models of a general theory. The ability to use theoretical sensitivity was one of the key reasons why the Glaserian grounded theory approach was chosen for this study.

Glaserian grounded theory approach is considered to be a powerful methodology for understanding the behaviour in especially with the approach of qualitative analysis. For this purpose, the current study has adopted the Glaserian grounded theory approach to identify the behavioural aspect of the entrepreneurial ecosystem that highlights the positive impact of leadership (Rieger, 2019). Glaserian grounded theory also facilitates the integration of both qualitative and quantitative data through the thinking and the action process (Morse, et.al. 2017), which was a major reason for the adoption of the Glaserian grounded theory approach. The approach differs from content analysis as the researcher that adopts the grounded theory aims at creating the context of the specific study by explaining the phenomenon and theoretical context as per the data.

After developing key concepts that were developed through abstraction and using theoretical sensitivity, the data analysis process moved to narrowing of the key

issues and emergent theory. This is done by using selective coding and theoretical sampling, as proposed by Glaser (1992). Selective coding is defined as a process that enables the researcher to delimit the coding to the concepts that relate to the main themes (Glaser, 1978). In the end, the core themes become the guiding tool to further data gathering and theoretical sampling (Glaser, 1978).

Theoretical sampling is the process through which the researcher gathers data, generates codes, analyses data and identifies which further the type of data collection method that the researcher should adopt. The approach also outlines the source through which data should be collected in order to develop the theories as they emerge from the data (Glaser, 1978). Theoretical sampling is a very important step in grounded theory because it informs the process of theoretical coding and helps the researcher to develop theoretical codes that illustrate the relationship between various themes (Birks and Mills, 2015). The research process further progresses until what is termed as 'theoretical saturation' is reached (Urquhart and Fernandez, 2016). The theoretical saturation is a point where all the themes are well developed in terms of their characteristics, scopes and variation. As a result, there are no further improvements that are to be made in the conceptual significance. Hence no further data gathering is needed (Charmaz, 2014).

The coded qualitative data was then entered into the NVivo data analysis tool for further qualitative analysis (Verma 2013). The use of qualitative data analysis tools was initially provided as an option under the grounded theory. However, they have become more popular lately due to technological advancements and the development of data analysis tools that support the grounded theory process (Corbin and Strauss, 2008; Denzin, 2017). However, regardless of the software used to analyse qualitative data, Corbin and Strauss (2008) note that the data analysis process should always be a feeling and thinking process that is driven by the researcher even though it is supplemented by computer programs. The primary role of the researcher is highly stressed in both the Glaserian and Straussian versions. Glaser (2005) notes that even though computer software would, with no doubt, lead to the generation of a theory, the final theory generated from the hand sorting of memos would be richer (Glaser,

2005, p.29). However, given the current technological advancements of the computer software, this study relied on the Nvivo analysis combined with memos. The software is now more advanced than when Glaser (2005) published his book. Human bias is the phenomenon in the research where one person favours the beliefs through his own choice rather than looking into the study aims. The qualitative data comes with the most of the human biases because the responses are mostly derived from the perceptions, beliefs, thoughts and other subjective denominations held by the respondents. Human bias is also related to the inclination of mind and opinion about something favourable or unfavourable. The human bias has the potential to damage any research by discomforting the measurements, interpretation, and observation thus making the conclusion of the study hampered and bended towards any particular research.

The findings were organised based on the key categories identified where the core and the major themes were discussed first, then the minor themes with the help of respondents' narratives. The results were finally discussed from a practical and theoretical perspective where the study contributes to the entrepreneurial ecosystem as well as a reflection of the study.

#### 5.8.2 The Coding software

The coding and analysis software used for this study was NVivo 12. The NVivo software can be defined as a powerful data management and analysis tool. This tool is basically designed to automatically categorise and classify data into themes, attributes and sentiments (Hesse-Biber, 1996). This tool enables users to build and develop all types of research methods. Moreover, NVivo software helped to tabulate and visualise the findings of the data. In order to brainstorm and map ideas and identify relationships in the data as well as to discover new paths of inquiry (QSR International, 2018).

The NVivo software is used because of its usefulness and ease within the grounded theory approach-based research framework (Bringer et al., 2014). Several scholars have employed the grounded theory approach in their study, as it helps in

obtaining better results. Therefore, I have employed this software to identify and examine the factors of the entrepreneurial ecosystems (White, 2016; Lim, 2016; Parrish, 2010; Kensbock and Jennings, 2011; Ritala and Almpnanopoulou, 2017). The current study, therefore, uses the NVivo software mostly to organise and manage the raw data rather than for interpreting the data. This made sure that the software use did not distance me from the physical data; neither did it prevent from making sound judgements.

There are various reasons to make NVivo software a common data analysis tool among many qualitative researchers. Firstly, NVivo is a Computer-Assisted Qualitative Data Analysis Software (CAQDAS) which is most efficient and quick in organising and analysing data (Schreier, 2012). Additionally, the NVivo software allows for transparency in the data analysis process, and it can provide an accurate outlook of the data (Richards and Richards, 1994; Morison and Moir, 1998). Richards and Richards (1991) also described the NVivo tool as very useful in adding rigour to qualitative research.

The tool was useful in the coding of the interview data collected from the 36 key informants. The interviews were first transcribed from Arabic to English, after which they were uploaded into the NVivo 12 software. The initial first-order codes are called “nodes”. They were strategically developed using the hierarchical node system with the help of the software. These first-order codes constituted of ‘parent nodes’ that represent the theoretical dimensions from the grounded theory perspective. Each of these parent nodes had ‘child nodes’ that represent the first-order which were in alignment with open coding in grounded theory and the second-order that are also referred to as selective coding in grounded theory (Pfeifer, Sarlija and Zekic Susac, 2016).

Main themes were generated from the data (Glaser, 1992); by writing memos in the form of sentences in practice called reflexivity process (McGhee et al., 2017; Charmaz, 2006). After identifying the main themes and how they were interrelated, the next step was to develop concepts through abstraction (Goulding, 2017) and theoretical sensitivity (Glaser, 1992). The data analysis process then progressed to

narrowing of the key issues and emergent theory using selective coding and theoretical sampling, as proposed by Glaser (1992). Selective coding helped in delimiting the coding to the concepts that relate to the main themes. In the end, the core themes became the guiding tool to further data gathering and theoretical sampling. Theoretical sampling was done until the theoretical saturation point was reached (Charmaz, 2014). The coding and data analysis of the qualitative interview data was performed using the NVivo data analysis tool (Verma 2013).

### 5.9 Field Work Challenges

The access to key policymakers was one of the major fieldworks challenges I encountered, and this was mainly because of the smaller number of people involved in the development of entrepreneurial policies in the country. Statistics show that Oman's population is 4.6 million, where Omani constitutes only 54% of the population. Besides, most of the policymakers have busy schedules during their office hours, making it extremely hard to get an appointment with them. Nevertheless, I tried my best fix the appointment and address the needs of organizing the interviews

I tried to connect people and kept on searching for various appointments and interviews to address the needs of every category that the sample required. So, as there were nine frameworks and to explain each methodology, four people were required to represent each framework (two policy makers and two entrepreneurs). The response rate was also a challenge as most of the selected experts in the first phase did not respond to the invitations in the first place, which forced me to find replacements in the form of other individuals that were engaged with entrepreneurship in Oman. There were some entrepreneurs who are viewed as role models in Oman by many entrepreneurs, but they did not show interest to participate due to busy schedules.

There were also some geographical challenges that were encountered while conducting the study. For instance, it was difficult reaching entrepreneurs located outside Muscat (the capital) due to their small numbers. Moreover, I had to travel sometimes for long distances, some involving more than 500 kilometres. As a result,

there was a strong need to balance the demographics of the sample in terms of the geographical distribution of entrepreneurs across Oman. These demographics specifically concerned gender, entrepreneurs benefited from government direct support (loans, incubation) and those who never received anything plus the enterprise size. This ensured that the appropriate and representative sample that represents Omani entrepreneurs were chosen. The other risk was that the translations of Arabic content to English could at times lose the meaning. In accordance to overcome this issue, a transcriber who was well versed with Arabic and English languages was hired.

### 5.10 Overview of the methodology

The present chapter discussed the data collection which was conducted with the help of the semi-structured interviews where there were 18 key players and 18 entrepreneurs, so total 36 participants. Firstly, the data collected with the help of the interviews was transcribed from Arabic to English before conducting data analysis. Further, the data collected were analysed with the help of the Glaserian grounded theory approach, which was consistent with the interpretivism paradigm. The data was analysed using the three coding systems, that is, open coding, selective coding and theoretical coding paradigm. These three types of coding belong to the Glaserian grounded theory version (Glaser, 1992), and this helps in portraying the systematic representation of the interviewees' understanding and experiences within the entrepreneurial ecosystem.

The data analysis began with the open coding, where the data was broken down into smaller discrete parts after which codes were assigned to smaller portions of data that were later integrated together to identify the theoretical relations within the data. Moreover, open coding helped in identifying the key issues to focus on, given that the study began with general research questions. Thus, constant comparison analysis was used throughout this process in order to identify the key themes or categories as well as their associated properties and their robustness; this process was selected as it was more appropriate to discuss the results in light of the previous finding and it also aligns with the grounded theory (Thistoll, 2011).

The entrepreneurship activities in the region depend on the support and assistance provided to the entrepreneurial individual. The structures of establishing the entrepreneurship relationships and the ecosystem can include the framework of the mentorship programs, which are required extensively for the success of entrepreneurial activities as they guide the start-up ventures and help them to compete in the market place with the other business. An effective entrepreneurial ecosystem establishing the culture, financing, human capital, innovation and supporting the organisation with the different types of entrepreneurial ship such as the start-up, large companies through taking into account the importance of support structures. Preferred leadership and management style in many Arabic countries are complex and thus, the data needs rigorous analysis of the data.

As discussed earlier, the analysis of the entrepreneurial ecosystem in Oman from an interpretivist perspective would provide a better understanding of the subjective meanings that entrepreneurs and professionals attribute to the nature and conduct of study phenomena (Krueger, Schulz and Gibbs, 2018). This would help in revealing how the participants construct the challenges and components of the entrepreneurial ecosystem in Oman. As a result, their experiences and assumptions would be useful in contributing to the identification of the changes that can be adopted to achieve the desired entrepreneurial ecosystem in the country. The entrepreneurial ecosystem is a social reality that is constantly changing. Therefore, it can be better understood through the incorporation of a paradigm that offers multiple perspectives into the issue (Spigel, 2017). As such, the use of interpretivist paradigm in analysing the ecosystem of entrepreneurship has been considered the most appropriate because it allows to understand this phenomenon and form social constructs based on the subjective meanings and experiences that the individuals who are actively engaged in entrepreneurial activities (Johnston, Lassalle and Yamamura, 2018).

The study began with general research questions, that is:

- ***How can the Omani entrepreneurial ecosystem be effectively managed?***

The sub-research questions are:

- *How are the entrepreneurial ecosystem policies formulated and implemented in this context in Oman (Al-Balushi and Anderson, 2017)?*
- *What are the challenges to the effective management of entrepreneurial ecosystems in the Omani culture in EE (Bilal and Al Mqbali, 2015)?*
- *Which approaches can be effectively used in the management of entrepreneurial ecosystems in Oman's culture (Ennis, 2015)?*

From an entrepreneurial perspective, it can be stated that an effective entrepreneurial ecosystem is very important for the economic growth of any market. The present study aims at highlighting the research question such as the policy and the formulation with respect to Oman and the challenges that exist in the sectors. The data from the qualitative analysis was essential to identify the factors influencing the policy and management of the entrepreneurial ecosystem. Entrepreneurs are responsible for adapting the practices which are quite useful to their business growth and are also in line with the cultural and geographical characters of the region. There is a need to find a balance between theoretical and empirical knowledge. Moreover, it helps to identify the answers related to the study's aims and objectives through the bottom-up management and leadership approach adopted in most Arab countries. As a result, this process allows entrepreneurs not to be confined by the local forces because they acknowledge and accept multiple fields on how entrepreneurship can be applicable and give importance to the study's aim and objectives.

### 5.11 Ethical Considerations

The necessary ethical approval was obtained from the university prior to carrying out the study. Accordingly, the study followed the research ethics guidelines with regard to informed consent, voluntary participation, anonymity and confidentiality, limited and authorised access and respect for human rights and freedoms, among others. All the participants were fully informed about the purpose and significance of the study, how the findings will be used and the importance of their

contributions prior to undertaking the study. The participants were also informed of who will access their data. According to Schofield (2014), informed consent in research helps the participants decide whether they want to be part of the evaluation or not from an informed position.

The participants were handled with respect, and their privacy was maintained, and no personal questions were asked. The identities of the participants were kept anonymous and the information provided was handled with high confidentiality and had limited access as suggested by Kaiser (2009). This included naming the participants using acronyms such as Interviewee 1, 2...36 as shown in the table below. The participants were also informed that they were being recorded and it was ensured data protection guidelines by securely storing the recordings in password-protected drives.

Table 9 Tabulation of the participants' demographics

| Interviewee | Age | Gender | City    | Category     |
|-------------|-----|--------|---------|--------------|
| A1          | 36  | M      | Nizwa   | Entrepreneur |
| A2          | 29  | F      | Muscat  | Entrepreneur |
| A3          | 41  | M      | Muscat  | Entrepreneur |
| A4          | 34  | M      | Muscat  | Entrepreneur |
| A5          | 37  | M      | Muscat  | Entrepreneur |
| A6          | 40  | F      | Muscat  | Entrepreneur |
| A7          | 38  | M      | Muscat  | Entrepreneur |
| A8          | 45  | F      | Muscat  | Entrepreneur |
| A9          | 33  | M      | Salalah | Entrepreneur |

| Interviewee | Age | Gender | City    | Category                            |
|-------------|-----|--------|---------|-------------------------------------|
| A10         | 39  | M      | Saham   | Entrepreneur                        |
| A11         | 35  | M      | Sohar   | Entrepreneur                        |
| A12         | 39  | M      | Muscat  | Entrepreneur                        |
| A13         | 47  | M      | Muscat  | Entrepreneur                        |
| A14         | 32  | M      | Samial  | Entrepreneur                        |
| A15         | 41  | M      | Muscat  | Entrepreneur                        |
| A16         | 42  | F      | Muscat  | Entrepreneur                        |
| A17         | 29  | M      | Muscat  | Entrepreneur                        |
| A18         | 26  | M      | Buraimi | Entrepreneur                        |
| A19         | 43  | M      | Muscat  | Senior Advisor                      |
| A20         | 38  | M      | Nakhal  | Member of parliament                |
| A21         | 40  | M      | Muscat  | Director of incubation Program      |
| A22         | 42  | M      | Sur     | Director at SME Authority - Sur     |
| A23         | 48  | M      | Muscat  | Deputy Chief Executive Officer      |
| A24         | 47  | M      | Salalah | Economic Researcher                 |
| A25         | 39  | M      | Muscat  | GM                                  |
| A26         | 38  | M      | Salalah | Head of Economic Affairs Committee  |
| A27         | 40  | M      | Khasab  | Director at Chamber of Oman Chamber |

| Interviewee | Age | Gender | City   | Category                                                  |
|-------------|-----|--------|--------|-----------------------------------------------------------|
| A28         | 38  | F      | Muscat | Deputy Director of Education Curriculum - SME             |
| A29         | 39  | M      | Muscat | Director of Research Centre & ICT Research                |
| A30         | 36  | M      | Muscat | Director                                                  |
| A31         | 44  | M      | Muscat | Journalist                                                |
| A32         | 39  | F      | Muscat | Deputy Director, Innovation & Entrepreneurship Department |
| A33         | 42  | M      | Muscat | Director of Knowledge and Technology Transfer             |
| A34         | 40  | M      | Muscat | Acting CEO                                                |
| A35         | 38  | M      | Muscat | Member at Enjaz Oman                                      |
| A36         | 44  | M      | Muscat | Director                                                  |

## 5.12 Chapter Summary

The current chapter outlined the rationale of the methodologies which were used, as most appropriate for the current study. The methodologies were specifically chosen to accomplish the research aim of determining how the entrepreneurial ecosystem in Oman is managed. The research methods chosen for this study were selected and designed systematically to fit the research topic and direction. The study sample was carefully selected to have balanced participation, which provided a comprehensive and diverse representation of the entrepreneurial ecosystem in Oman due to the incorporation of various experiences, views and perspectives. The data collection was performed using semi-structured interviews with 36 experts that provided information through the NES tool as the interview guide which helped in assessing the various components of the ecosystem in Oman. The qualitative data

obtained was transcribed, coded using open, selective and theoretical coding paradigms of the Glaserian grounded theory and analysed qualitatively using the NVivo data analysis software.

NES can be also considered as the effective tool and also widely accepted as a measure for judgement of the specific national conditions. The advantages of the NES are also identified as it helps in highlighting particular issues such as entrepreneurial finance, entrepreneurial programme, entrepreneurial education, research and development, commercial and legal matters, entry regulation etc. Efficient management is highly achieved when their proper sharing of the information, making efficient decisions and also having a proper communication among the business partners (Omar, Ali, and Imhamed, 2020). Application of the framework also took into account the social and cultural norms by allowing the newer business venture to prosper in the selected region. fieldwork challenges which were faced, and the ethical considerations which were considered have been discussed in this chapter.

## Chapter 6: Findings

### 6.1 Introduction

An entrepreneurial ecosystem refers to a complex particular set of systems with interdependent actors and thereby, a direct or indirect impact on the creation or growth of the firm (Cavallo, Ghezzi, & Balocco, 2019). The current study examines Entrepreneurial Ecosystem in Oman in the light of the Islamic Leadership Model. The study proposes that the Islamic leadership model can help to govern the Entrepreneurial Ecosystem in Oman in a more efficient way. In order to accomplish this purpose, the study collected data from Omani citizens that were above the age of 18 years. These participants either were entrepreneurs themselves or were people engaged with the entrepreneurial policies. The present study has adopted an inductive reasoning approach. The inductive approach supports the development of a new theory from prevailing generalized phenomena present in nature and is associated with the qualitative data collection approach (Lewis, 2015). According to Thanh and Thanh, (2015), interpretivism research philosophy is appropriate to implement when the objectives are directed towards outlining and measuring social issues. The current study has utilized the interpretivism research paradigm as it aims at outlining the impact of Islamic leadership on the entrepreneurial ecosystem. This can help reduce any kind of bias that exists due to the involvement of the researcher. The grounded theory refers to a set of systematic inductive methods for conducting qualitative research which mainly aims at developing theoretical frameworks and theory

In order to obtain the data, semi-structured interviews were conducted with the entrepreneurs or the employees that were in close contact with the entrepreneurs. For a better understanding of the adaptive co-management model, the study implemented the National Experts Survey (NES) s survey, sponsored by the Global Entrepreneurship Monitor (GEM) for specifically identifying entrepreneurial activities. The adopted methodology supports understanding the real issues associated with the entrepreneurial ecosystem and its impact on the entrepreneurs of Oman. One of the assumptions made in the current research framework was that the respondents must have been accustomed to a specific procedure and pattern of

operating in the EE. This procedure or pattern is specifically developed on the basis of their understanding pertaining to the dynamics of the entrepreneurial ecosystem in Oman and their local knowledge. Exploring helped in interpreting the uncovered conceptual frameworks that further assist in deriving the participants' opinions regarding the entrepreneurial ecosystem in Oman.

Entrepreneurs face many challenges in Oman such as political, leadership, and human capital workforce that impact entrepreneurship. As a result, it is imperative to understand the varied strategies that can be adopted in the country to establish an effective business environment for entrepreneurs to become successful. It is noted that there is a significant impact of Islamic leadership on entrepreneurial strategy and this motivates entrepreneurs in the organisation. Islamic leadership provides a strong orientation where entrepreneurs get to know about the scope and opportunity of the market that prevails in Oman. Moreover, this allows entrepreneurs to implement various strategies and develop their strength and ability.

The current chapter summarizes findings acquired through the semi-structured interviews in the form of thematic analysis. This will help in answering the main research question that is to identify the challenges and importance of the Entrepreneurial Ecosystem (EE) in Oman. For this purpose, the study will examine the responses provided by the respondents in the context of the interviews made. The interview questions were specifically structured to acquire viewpoints regarding the Omani entrepreneurial ecosystem- in particular factors that enhance the effective management of the Omani EE, and how effective management of EE in Oman can be achieved. The chapter is divided into relevant sections according to the themes derived from the responses of the participants. Moreover, each theme is interpreted and discussed in-depth. In order to gain clarity on the context of the prevailing Omani entrepreneurial ecosystem, the analysis was undertaken by the current study which was instrumental in outlining a variety of themes. These themes shed light on the existing challenges, drivers and opportunities for the growth of the entrepreneurial ecosystem in Oman. Thus, the current chapter showcases findings acquired through the thematic analysis and simultaneously discusses the same. Moreover, grounded

theory helped towards finding links between the theoretical framework and literature review. The thematic analysis helped towards identifying various challenges as one of the recurring or key themes in the semi/structured interview. Along with the challenges encountered by the entrepreneurs or the key actors in the entrepreneurial ecosystem in Oman, the study also sketches the varied solutions that can be adopted to abate the same.

The Omani government was very vigilant during the labour market intercession. However, they were uncertain during the occupation nationalization program. As a result, to employ the potential workers in the labour market and provide a direction as well as clarity for future vision, the presence of a viable authority is deemed necessary. This will help in making a sound decision and keeping an appropriate framework in place for entrepreneurship to develop. As business visionaries are necessary for spreading information, capital, and work, attraction and retention of talented employees are also essential for new companies to keep pace with their rivals. Additionally, gathering pertinent information is a significant activity for the development of both public and private organizations. Moreover, according to Stam, (2017) gaining ideas and assistance from the employees at the middle management level in the framework is also crucial. This is because they can highlight the challenges faced by them at their level and thereby, in turn, ensure that these challenges are curbed from within the exact same level. Characteristics of Islamic leaders are mainly considered for the purpose of maintaining sustainability, making and developing sound associations for bringing the devotees together in a dedicated manner. These characteristics appear to be vital initiative attributes, albeit not all pioneers show these characteristics simultaneously.

The responses obtained were identified and further examined with the help of the thematic analysis. Based on this thematic analysis following themes are derived:

1. Part A: Challenges faced by entrepreneurs in Oman
2. Part B: Factors fostering Omani entrepreneurial activity
3. Part C: Solutions that improve Omani entrepreneurial ecosystem

## 6.2 Part A: Challenges faced by entrepreneurs in Oman

The main purpose of the thematic analysis was to acquire qualitative information and to identify the data pertaining to the related themes of the current study. These themes or variables can be used to interpret the entrepreneurial ecosystem in Oman. Grounded theory is considered significant for the current study because it assisted in acquiring explicit knowledge in terms of qualitative data. It offered specific strategies for management of the analytic procedures of inquiries made with the participants in the current study. Additionally, it assures that a qualitative research approach is accompanied and implemented as a scientific inquiry.

Moreover, there are many merits of adopting Grounded theory: implemented in the current research helped in identifying the situation of Oman as well as the contingent nature of practice considered in Oman. Further, theories helped in providing a thick description of areas of conflict and contradiction. Furthermore, its theories helped in determining the actual status happening in Oman to provide a realistic view. If there is a change that has to be adopted in Oman then grounded theory is the best, as this impacts the behaviour change. The adaptive co-management is used to shed light on the dynamics and governance systems that can be effectively used in the management of entrepreneurial ecosystems (Fabricius and Currie, 2015). In alignment with the Islamic leadership model, the ACM is also considered as an alternative approach to the management of EEs (Autio and Levie, 2015)

Based on the nuances of the grounded theory insights, the following themes pertaining to the key challenges were revealed:

1. Inadequate entrepreneurial experience, knowledge and skills
2. Capital/Financial
3. Attitudes and culture
4. Low stakeholder engagement
5. Weak systems and policies
6. Markets

### 6.2.1 Inadequate entrepreneurial experience, knowledge and skills

As entrepreneurial knowledge is an important element for the effective management of an entrepreneurial ecosystem, some of the participants outlined that they face this challenge due to unclear perspectives. This can be observed through the excerpts below:

- *“The first challenge would be the unclear perspective for entrepreneurs here in the Sultanate if I was right. They say, “There is entrepreneurship.” But when you ask, “What is it?”, or even if you know what it is, there is nothing clear”* (Expert interview 5).
- *“We don’t have the necessary skills and experience to start the project and employ the loan correctly”* (Expert Interview, A33).
- *“Entrepreneurs started and failed because they didn’t have a real knowledge of commerce and entrepreneurship”* (Entrepreneur Interview, A15).

From the interview conducted with the entrepreneurs in Oman, it can be stated that there is a lack of knowledge among the entrepreneurs about entrepreneurship. Moreover, it was found that this lack of knowledge has an impact on Oman's economy.

The participants also tried to address some sources of the knowledge, skills and experience inadequacies in Oman. According to one of the interviewees:

- *“SAS program is an incubation program meant for IT startups which is part of ITA which is a government body that is regulating IT sector in Oman. SAS has limitation concerning regulating knowledge. There is something we call generating knowledge and the universities and maybe the research centres responsible for creating knowledge. When you create the knowledge, you help entrepreneurs to get ready and enter the market. (Expert Interview, A1).*
- *You may have to do the link between the organisations that generate the knowledge to the organization that distributes the knowledge, which is the*

*third category, the knowledge distribution organization. This category must have Science Park, incubation and even facilities such as prototyping facilities; these are subsidized by the government. (Expert Interview, A32).*

- *Like when “Knowledge Oasis” made the NPC incubation. SAS made the ITA. The innovation factory is the same thing as ITA. They made them as components from the third category which is the distribution. They got involved in two sides; they are not generating knowledge. But they were regulated as ITA and entered the distribution category, the TIC is regulating and entered the distribution category as they made IPM.” (Expert Interview, A36).*

Another prominent challenge faced by the entrepreneurs with concern to skills and experiences needed for a sustainable entrepreneurial ecosystem was found to be the lack of mentoring and networking between entrepreneurs (Lafuente et al., 2017). In alignment with this, Feldman and Zoller (2016), illustrated that networking and mentorship programs are important, especially in sharing entrepreneurial knowledge within an ecosystem. A similar finding was revealed through the current study when an interviewee strategically discussed the role of mentors in the entrepreneurial ecosystem:

- *“It means he needs mentorship. To be attached to a true Mentor. I have worked in technology for 3 years. Someone from technology came to me. I give him a full lecture for Dos and Don’ts. He sat with me, followed me and lived with me so he could see and learn. Like I told you the example of Bahwan, Bahwan let him join, adopted him in the IT Segment, directs, informs him, and teaches him accounting. Teach him how to calculate Cochin, as well as delivery, so those are the calculation secrets of the IT. Every sector has its secrets; every work has a secret. Here the intelligence is necessary to make this person understand this sector” (Entrepreneur Interview, A12).*

In concern to this, Bilal and Al Mqbali, (2015) highlighted that although Oman has a number of sources to attain knowledge, skills, and education for entrepreneurship, these sources provide more theoretical knowledge than a practical

one. Stam and Spigel, (2015) accentuated the example of Waterloo, Ontario wherein a university was set up to provide education and guidance pertaining to industry-focused research. The university helped in incorporating the formal and informal skills that are essential for entrepreneurship. This suggestion can also be applied in the case of Oman. This implication will also help in developing strong networks of entrepreneurs, mentors, and financiers. These networks help new entrepreneurs learn the formal and informal skills associated with being a high-tech entrepreneur and help knowledge about new markets, technologies, and opportunities to flow through the region.

It seems that the main problem in the Omani entrepreneurial ecosystem is the lack of time to train, guide and nourish the skills of the upcoming entrepreneurs. The interview identified some famous people in Oman such as Sharif Al Baraamy, Ishak Al Shiryany and Youssef, who are in the position to inspire and enlighten new entrepreneurs. However, the major challenge was managing their time in providing such encouraging guidance. One of the interviewees noted that:

- *"I used to ask the youth, are you benefiting? Are you able to sit with this person? They say: it's not easy, we can't sit with them, and they're very busy! So, imagine one person running a group of companies, and has a large group of businesses, it's very hard"* (Entrepreneur Interview, A12).

Another interviewee also emphasized the importance of having the role-models' commitment to inspiring the entrepreneurial spirit in the country:

- *"I want to see them (well-known role models) in the market. I mean, positively. They are present at the exhibitions. They should increase their presence in the media and their publicity"* (Entrepreneur Interview, A4).

Further, another interviewee threw light on the obstacles faced in the form of a lack of unclear visions and perspective in the entrepreneurial ecosystem in Oman.

- *"The situation in Oman sultanate is as follows: We have been working on the*

*first half only. And even this effort exerted on the first half has a lot of remarks on it. No determination of priorities. The research is not connected to the industry. It is not connected to global trends. It is not connected to the local market. It is not connected to the market in general. So, it is only about making research culture. Let's say that we have the first half. But the second half, converting this outcome into innovation, is absent. (Expert Interview, A2).*

- *What do we need to work on? Concerning the first half, we need reconsideration. Instead of doing research in everything, we need to focus on the fields that will give us outcomes that can be converted into products. And I want to say there is really good news concerning this. (Expert Interview, A5).*
- *There is a big national project called the national Innovation strategy. It is under the supervision of the Research Council and the technical supervision of UNCTAD, the global organization that belongs to the United Nations. They have made great progress. They will introduce something soon. (Expert Interview, A11).*
- *The important thing is that we need to reconsider everything, policies, legislation, and procedures. We also need to think about the environment; we need to create an environment that encourages creativity and innovation. And that needs a lot of work to be done. (Expert Interview, A5).*
- *The strategy has four pillars. The first one is economic diversification. The second pillar is intellectual property. The third one is human resources. And the fourth pillar, whichever we knew just recently, is institutional communication. Each group does research alone; then, they will share their outcomes together to create a national strategy to promote and develop the innovation” (Expert Interview, A35).*

The attitude of the youth In Oman was also found to be detrimental to entrepreneurship as they were unwilling to learn. A similar attitude has been acknowledged by Manyika et al. (2017) whereby it was noted that the new graduates should have the ability to adapt and learn in small firms while new graduates want to

get a stable job in a well-developed organisation.

- *“A graduate of Qaboos University does not want to work with you because he is looking for stability, and he does not want to work with pay 700 or 800 OMR... if he wanted to gain skills and experience, he will accept 800 or 1000 and work for six months or a year and then find a better job”* (Entrepreneur Interview, A6).

Lack of business management skills and concepts was another challenge that was closely linked to the lack of skills and knowledge among the entrepreneurs. When inquired about the challenges faced by them in the Oman ecosystem, one of the respondents outlined:

- *“The challenges include a lack of knowledge. Entrepreneurs lack business management experience... Of course, if you go back to one of the Central Bank studies that it made, you will find that more than 70% of entrepreneurs are youth aged below 30 years old”* (Entrepreneur Interview, A1).

The skills and knowledge-gap have also been discussed in the literature.

### 6.2.2 Human Capital and Finance

One of the most recurring problems discussed during the interview was lack of capital (such as finances, land and resources). Thus, the lack of access to finance or capital acts as an underlying challenge that hinders the development of the entrepreneurial ecosystem in Oman.

From the findings as they emerged from the thematic analysis, land and employees were found as the recurring themes. These themes indicate that the participants perceived land and human resources (which can be connected to employees) as main issues. The human resource challenge was well-contextualized by this interview participant who depicted:

- *“The third challenge is human resources, Outputs in the country are not good to operate in the private sector, and I will give you an example, there was a*

*course with I.T.A for studying C.C.N.U. They were looking for funding, and this is just a simple example... There is no database and if there is you will not find qualified Omani people. (Expert Interview, 27).*

- *How many Omani people are in the market with an instructor or a university degree? ... I visited Cisco. I met the young people at Cisco and they told me that there was not (project management) in Amman. There is a complete absence of effective staff. In order to get the qualified cadres, you have to go to the colleges of the Middle East, I do not want someone who has no experience and cannot deal with the client” (Entrepreneur Interview, A6).*

Al-Abri, Rahim, and Hussain, (2018), in their study, highlighted that entrepreneurs in Oman mainly face human capital barriers due to lack of necessary knowledge, (planning, accounting, administrative, financial, lack of competition culture, and lack of familiarity with services provided), lack of confidence, lack of work skills, and unwillingness to accept the cluster’s concept. Thus, there is a dire need to address these issues to overcome the barrier of human capital. Similarly, even there are problems related to the institution, such as lack of support service, as there are no clear steps given, consists of longer processes, some policies are not implemented, updates are not provided on a timely basis. Mason and Brown, (2014), outlined that the growth of an entrepreneurial ecosystem is dependent on financial institutions and established funds. Entrepreneurs need finances to start businesses and to run those that are already established. As such, availability and easy access to capital funds are vital in any entrepreneurial ecosystem. Past studies have shown that the financial institutions in Oman are very cautious and have strict rules with regard to lending funds and making direct investment decisions. Mostly, when deciding whether to finance a venture or not, they review the entrepreneur’s track record instead of the entrepreneur’s idea (Magd and McCoy, 2014).

Due to their inability to maintain a good track of financial history, upcoming entrepreneurs often end up with a lack of financial capital for ventures, even though they have promising ideas. To contextualize this problem, one of the participants outlined

- *“...Banks do not give small businesses any services at all unless you have 20 employees. If I work in a small company, I cannot get a car loan or a marriage loan or even a credit card. The system does not encourage small businesses to work. This is why the graduate believes that it is better to stay home without work than to work for 400 OMR and cannot secure his future”* (Entrepreneur Interview, A6).

In addition to this, the teaching of Islam propagates that monetary resources must not be lent for the purpose of attaining interest in them. As a result of this, many entrepreneurs in Oman are unable to acquire the desired capital for appropriately establishing their ventures. This is a major reason due to which entrepreneurs in Oman are unable to address their financing needs.

In the Oman ecosystem, some entrepreneurs are forced to turn to banks due to the bureaucracies of government loans. This issue has been described by one of the interview participants who delineated:

- *“Government support requires you to be a full-time entrepreneur, requires certain conditions. Some entrepreneurs prefer banks support, or private sector support just for the sake of diversifying. Also, when it comes to time, some government procedures take longer, so, they prefer the banks because of faster procedures. Also, the banks could have a lot more facilities than the government”* (Expert Interview, A34).

In concern to this, Al Buraiki, and Khan, (2018), found that the government of Oman has developed many policies and programs to address the issues of finance by the entrepreneurs. However, the procedures of the government and public institutions that provide loans are long and time-consuming. As a result, the government of Oman should ease out their procedures for providing the needed support to the entrepreneurs. Many existing initiatives offer financial support to the entrepreneurs in Oman such as loans and grants, where Al Raffd Fund is one of them. However, entrepreneurs trying to obtain financial support from these initiatives also face similar challenges that are encountered while seeking financial assistance from

banks and governmental offices. Especially the entrepreneurs who own small-sized enterprises face severe financial challenges while seeking such loans. According to one of the interview participants

- *“The second point is to obtain funding for the project through the banking system located in Oman; I will not talk about Al Raffd Fund. It has its own special condition. You must be a full-time project owner, but here in reality, it is not for your project, but for personal financing. If you want to finance 30,000, you have to own a property worth 30,000... In case you own land of 30000 OMR, it is better to sell it, and the project is created without a loan plus the insurance value as the probability of losing the project is 90% because in the business system if you fail to pay a premium or two you are blacklisted and you are prosecuted You will not be able to get a loan or get a phone line up”* (Entrepreneur Interview, A6).

Nusrat & Wickramasinghe (2014) identified and provided the reasons why SMEs fail in gaining success. They also found that the SMEs lack professionalism with respect to financials, administration etc. and contacts with larger firms. Al Bulushi & Bagum (2017) found that the SMEs in Oman mostly struggle to manage their short-term finances such as working capital finance which becomes a costly affair in the growth of the business

Furthermore, Barwani et al. (2014) found and claimed that while SMEs play a leading role in solving societal issues, they eventually lack business knowledge, incur the high cost of finance, face unfair competition & non – availability of skilled staff, and limited usage of modern technologies. As a result of these characteristics of the SMEs, the public institutions of Oman refrain from assisting SMEs in the provision of finance.

These findings are in alignment with a study conducted by Varghese and Hassan (2012) that surveyed the entrepreneurial attitudes of Oman’s youth. The study illustrated through its results that the majority of the youths (67%) were interested in engaging in entrepreneurship activities. However, they expressed their concerns

about engaging in entrepreneurship. This was because they considered entrepreneurship as risky and feared that they would not get any financial support from the government or bank. Another financial challenge in the Oman ecosystem was described by one of the respondents:

- *“We do not have large capital and there is no investor involved in profit and loss. Yes, it is a special case, but if we talk about funding, funding is not just money sometimes if you enter the hotel business you need a partner to help you in management, which is called venture capital to help you with his experience in the field. Each partner completes the other and improves the performance of the promoter and in case of a risk that cannot be borne by one person. But there are no such investors here in Oman. The investor depends on intuition only and does not give you the money to invest free”* (Entrepreneur Interview, A6).

This challenge can be further explored by looking at the Islamic values within an Islamic leadership model. As discussed earlier, the existence of halal (permitted) and haram (forbidden) services and products is what distinguishes Islamic entrepreneurship from the other religious forms of entrepreneurship (Davis 2013).

When comparing Islamic values with mainstream economics, it can be observed that Muslims are restricted to achieving material wealth moderately. Furthermore, Islamic values regard interest (riba) is haram (forbidden). In this regard, most Islamic investors, - who are the majority in Oman, are not likely to offer large amounts of capital because they cannot earn interest on the same. In economics, interest is simply the payment that a borrower pays to the lender over and above the repayment of the principal sum (Hicks, 2017). Given that Islamic values forbid charging of interest, then it means that Islamic investors cannot get capital gains from the amount they borrow out to the entrepreneurs. According to Hossain, (2009), Islam prohibits people to lend money and earn interest on the grounds that earning money by interest makes a person refrain from labour. This affects the motivation of people to earn money through labour. Hence, people are bound to lose interest in agriculture, industry, trading and construction, and more. This will negatively influence and

hamper the total welfare of society. On the other hand, Hossain, (2009) also outlines that such beliefs are true for old times. However, today the rich get richer while the poor get poorer. And this is only due to the inability to acquire sufficient capital to start a new venture.

The entrepreneurs engaged in agriculture cited land as one of the major challenges that they face in their ventures. One of the respondents contextualizes the issue as follows:

- *“Today it has been 16 years for me now in the trade sector, and I can’t even get a piece of land, while there are people that work as government employees and own land or trading residence, two, three and four that they took from the government. How did they get that, they have relations and acquaintances through this governmental work enabling them to get all these benefits, this is one of the simplest things that happen...”* (Interview Expert, A31).

The availability of resources is very important because the benefits of entrepreneurial ecosystems are associated with resources that are specific to the process of entrepreneurship (Spigel, 2016). This implies that the lack of the necessary resources, be it human capital, land or finances, inhibits the development of the ecosystem.

### 6.2.3 Attitudes and culture

It is imperative to understand that Islamic leadership has a significant impact on the culture and attitude of entrepreneurs. Moreover, the management of the EE within an Islamic context facilitates the business environment in developing the infrastructure for the business. In order to examine this further, the study has also aimed to understand the cultural and religious impact of Islamic leadership on entrepreneurs. Nonetheless, it can be stated that Oman is a country where entrepreneurs share their thoughts and point of view towards developing entrepreneurial ecosystems. The majority of the interview participants cited culture as a major issue that hinders the ecosystem in Oman, and in fact, via the analysis and emerging issues, it was understood that the culture of entrepreneurship is currently

absent from most of the youth in Oman.

This lack of entrepreneurship enthusiasm amongst the youth is perceived to exist due to issues that prevail in practising entrepreneurship with superiors that are unaware of the reality of entrepreneurship. Moreover, these superiors fail to take any needed initiative either due to lack of work experience in entrepreneurship or with entrepreneurs. One such instance was described by a respondent, as follows:

- *“We all know some institutions that were said to spread awareness and culture among the youth. We were ordered to work there by a royal decree. The chief there did not know how to get a commercial registration... He did not know how to get a commercial registration. He did not know about the prices. He did not know the difference between the 4th, 2nd, 3rd, 1st, world, advisory, and excellent classes. He had no idea about any of that”* (Entrepreneur Interview, A10).

Moreover, another problem was that the administrative regulations did not have the 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. Challenges like community culture urged direct action in the private sector. The entrepreneurs lacked the knowledge and skills that could enable them to enter the market and understand the current market solutions. Shah, Amjed, and Jaboob, (2020), highlighted that the youth in Oman has a negative attitude towards entrepreneurship and as a result, it acts as a barrier for them to operate in the entrepreneurial ecosystem. The study comprehended through its findings that youth felt that being an entrepreneur implies that there are more disadvantages than advantages to them. This attitude was majorly held as they felt that they had a lack of access to desired resources to start and operate a firm efficiently.

Some of the participants resonated with the negative cultural outlook and mentality towards entrepreneurship in the country that has been developed over the

years; this was the case because many Omanis do not regard entrepreneurship as a career and generally have low levels of appreciation for entrepreneurs.

- *“...the problem with changing mentalities is that it doesn't happen overnight, it needs time, and you need consistency of efforts... The first thing is; changing the culture of society and institutions as well, to plant the love of entrepreneurship, and its acceptance from the beginning. (Expert Interview, A4).*
  
- *In 2007, we started working with some colleges and universities and every time we used to meet a class or group of students; we received –honestly- a response as such: "By Allah, my father works as a policeman, I also want to be a policeman, my mother works in that ministry, so I think doing the same is best for me" Why? Because we don't have the culture of entrepreneurship, except with some people whom we met and their families were traders or had factories, so when we asked those what they wanted to be when they grow up, they said: "By Allah, I want to run my father's factory"., they inherited the idea, but they're not saturated with it nor convinced by it, they inherited it as an idea, this was one of the solutions, I should do this job because my father said so and that's it, you want the new generation to live the idea of entrepreneurship, we want them to live it, to give them the opportunity to work in factories, to work in administrative offices, legislative offices, consultancies, to go for a summer training, for one or two months in a company, for instance, to learn how to a make cash flow, how to run an office” (Entrepreneur Interview, A16).*

Another respondent added:

- *“Still, the situation needs to be improved a lot because, entering the market— It takes time to change the culture of entrepreneurship” (Expert Interview, A34).*

Basically, there are two viewpoints on the evolution of entrepreneurial ecosystems:

1. The bottom-up approach

## 2. The top-down approach.

While the 'entrepreneurial ecosystem' literature implicitly draws on these aspects, it falls short to explicitly mention and discuss them, thereby neglecting to consider the governance issues in 'ecosystems.

Further, noted issues included the lack of trust between key actors. From the interviews, it is apparent that the key stakeholders, such as entrepreneurs do not trust the government and the media. Consequently, the banks/investors do not trust the entrepreneurs. There is also a lack of trust and cooperation amongst the entrepreneurs. The governance of entrepreneurial ecosystems majorly coordinated and motivated in a self-regulating way by the interests of the different stakeholders, such as banks, public officials, entrepreneurs, investors, and large corporations. This type of self-regulating mechanism requires the costs and benefits of the ecosystem to be traded-off against each other and self-interested actors to coordinate and motivate the actors in the entrepreneurial ecosystem by means of an 'invisible hand'. In concern of this, one of the respondent' stated:

- *"The principles of trust: what do I mean by trust? Despite all this media edifice that says there are small institutions. They still do not give trust to those small intuitions where Omani youth are, unlike private and government companies. Which gets the tenders. Because it needs great expertise and foreign agencies, experts and studies. Maybe, they help them with small things, like money and follow-up, up to five to six thousand riyals but not more than that because the trust is still missing"* (Entrepreneur Interview, A7).

The respondent further explains the reason behind this mistrust among different stakeholders and entrepreneurs.

- *"(The trust is missing) because there have been changes in some laws in regard to tenders. And 10% was enforced. And they have been given small jobs, but do they trust them in big ones? Not yet. (Expert Interview, A30).*
- *Also, leaders and leadership departments don't yet trust that Omanis can*

*succeed in a particular field, and this is reflected in the points I gave you. If you don't educate them, train them and didn't facilitate the process for them and if they didn't have a role in the leadership of the institution and how to develop it and get the trust, they wouldn't succeed, right? So, these are the three points we need" (Entrepreneur Interview, A7).*

This cycle of mistrust hindered the emergence of meaningful networks and engagements.

#### 6.2.4 Low stakeholder engagement

The role of stakeholder engagement has been highly emphasised by Gathara, et al., (2020). They defined stakeholder engagement as a process by which an organization involves people who may be affected by the decisions it makes or can influence the implementation of its decisions .Furthermore, Gathara et al (2020) also highlight that stakeholder engagement is a change process that instils values, commitment and responsibility in relevant partners and institutions Autio and Levie (2015) identified that policy approaches which focus on the deep engagement of stakeholders and key players are likely to yield better targeted, informed, and more effectively implemented policy initiatives in entrepreneurial ecosystems. This, in turn, would reduce the existing market and structural failures. Other studies have also found strong evidence that links stakeholder engagement to the creation of innovative ideas and the generation of knowledge that is critical for sustainability (DeFillippi and Roser 2014; Ayuso et al., 2018).

Low stakeholder engagement was reported to be a challenge occurring in the Oman ecosystem. The majority of the interviewees reported that entrepreneurs in Oman are not engaged in the community. According to one of the respondents, the entrepreneurial ecosystem in Oman is in dire need of stakeholder involvement. He further elaborates:

- *"we are also looking at the involvement of large companies that get excellent government contracts such as M.H.D and H.I as the budget of the IT department exceeds 200 million to 300 million OMN. There is no community*

*responsibility for these private companies, such as government companies. There is a Royal decree directing 10% of government contracts for these companies like IT. There are influential individuals in some things who disrupt procedures and make decisions that affect the entire sector. If I took a project from I.T.A they gave me 50% in advance, why did not Dr Salem apply this decision? Why did not all ministers apply this decision? When applying for a project, applicants must meet with them and to ascertain the number of Omani employees Instead of giving a salary of 700 or 800 OMN; they train staff” (Entrepreneur Interview, A6).*

#### 6.2.5 Weak systems and policies

According to Isenberg’s (2011) development of the six domains of the entrepreneurial ecosystem as well as the NSE’s GEM survey, policies are classified as one of the most important domains of the entrepreneurial ecosystem. Many of the participants cited the inadequacy of a proper system that supports the entrepreneurial ecosystem. The weak institutions and poor systems are challenging parts that need to be addressed for the lack of knowledge and skills but with more adverse negative effects on the ecosystem. One of the interviewees contextualized this problem:

- *“We do not have this process. We need to create it. We need business incubators to receive the ideas of these innovative people. We need centres for prototyping their ideas. We need to build science parks. We should give them access to the research labs in the universities to enable them to develop their ideas. They should be connected to the industry. They should be given the fund they need. Marketing is essential. So is the Propaganda. It is an integrated system. We should create this system so that we can promote any ideas that solve the problems in our country and turn them into products” (Expert Interview, A35).*

According to Al-Abri, Rahim, and Hussain, (2018), the weak systems and policies of the government are mainly due to the unwillingness of them to implement smart government or one stop points. Moreover, there are many regulatory and

administrative boundaries that result in multiple channels of procedure, which affects the entrepreneurial ecosystem by wasting time in unnecessary activities. Additionally, the new laws developed by the government are also weak in implementation and legislation. This showcases that the majority of the efforts only stand on paper and are not government in reality.

The issue of unfavourable laws and legislations was also highlighted as one of the key hindering factors in the development of the entrepreneurial ecosystem in Oman. According to the Index of Economic Freedom (2017), Oman faces some challenges regarding inefficiencies in the regulatory policies (World Bank, 2018).

According to the one of the participants, the laws and procedures of Oman are detrimental to the entrepreneurial ecosystem:

- *“The main problem is the judiciary, and it has laws and procedures, we don’t get into the 1% and try to close it or 0.5% and lose people. We made the home business that was for 3 riyals, and after that, we made many things, there were changes I mean they brought Khalifah Al Abri, khalifah doesn’t understand the strength of entrepreneurship nor the sector despite being kind and respected with high ethics, you can’t say for example if Khaled is a dentist and wants him to enter as a farmer, this can’t happen, you can’t make the dentist do farming or make the farmer treat cement, he doesn’t know anything about it”* (Entrepreneur Interview, A18).

Another interview added:

- *“I see that the officials now are going without rules. I really wish that the ministry of industry and trade regarding the changes in 2011, there should’ve been a suitable number in the ministry because that lower network isn’t disintegrating, all of them on monitoring funds and the ministry of trade and industry, they’re not keeping up. We need a change in leadership and ideology. Like Saeed Al Kaabi, the head of consumer protection. We’ve asked for a new ideology, even if he disappeared from the scene”* (Entrepreneur Interview, A14).

Riyada program was also criticised for being inefficient by the participants as they affirmed:

*“... the authority (Riyada) didn’t play its role regarding activating that side, maybe because the lack of efficiency to run the authority well, or maybe the authority doesn’t have the ability to put innovative ideas for entrepreneurs. What is apparent is entrepreneurs’ dissatisfaction with the decisions taken by the authority and making entrepreneurs equal to businessmen and also small and medium organizations, they also gave them a card called Reward Card that they call Reyada Card or entrepreneurs card... the entrepreneurs said that this card is nonsense and of no importance, because it’s only to prove that the authority has a role while it gave them nothing, meaning the entrepreneurs get no advantage of this card” (Entrepreneur Interview, A8).*

As a way forward, several interviewees called for reforms in the entrepreneurial laws, rules, regulations and policies.

- *“Also, one of the things that I think is good and encouraging is that Riyada - the Public Authority for SME Development has started to provide land for the owners of small and medium enterprises. I’m talking about the right of usufruct, commercial and industrial land hoping it will be distributed in the future. At least it serves the owners of enterprises and provides them with the right place to start their projects” (Entrepreneur Interview, A17).*

Other challenges related to institutions, systems and policies highlighted in the study included a low emphasis on youth entrepreneurship. The majority of the respondents felt that the Omani ecosystem lacks policies that promote youth entrepreneurship and that youth entrepreneurs are not involved in the decision-making processes. One of the interviewees correctly contextualized this situation, where he illustrated:

- *“I think... the government will lose an important source of information which is entrepreneurs or youth. There is an arising gap between the government, the decision-makers, and the people that are affected by the decisions because*

*entrepreneurs do not share in making decisions... .... The entrepreneurs were given a chance to participate in making the decisions of Saih Al Shamikhat and evaluating them. They were also given a chance at the private and general conferences. Also, the Chamber of Commerce and Omani industry gave them a chance, and there are several other examples. You can notice how there is an extremely great reduction in the interest in attending these meetings. Only the managers themselves and the entrepreneurs that have business with them attend now” (Entrepreneur Interview, A10).*

In a study conducted by Muthuraman, and Al Hazi, (2019), it was revealed that there is a gap between expectations and reality as different agencies aim at encouraging the youth for entrepreneurship differently without any coordination between them. Thus, when an agency proposes a new policy or program, there exists a weak implementation of the same due to prevalence of lack of coordination. Hence, the study suggests that the government agencies, private sector enterprises, the chamber of commerce and industries, and the educational institutions need to work together, in close cooperation and coordination, to provide strong stimulation to the young generation of Oman. The respondents also portrayed that the poorly planned projects and poor implementation of the government-funded projects are a major challenge in Oman. These projects and the implementing authorities have been described as inefficient.

- *“The government established Riyada - the Public Authority for SME Development to improve the small and medium organizations. They said that the authority would give them (entrepreneurs) agricultural lands and industrial lands since its start and there are approvals on that, but this didn’t happen. The authority only takes the role of making training programs for entrepreneurship, and entrepreneurs don’t attend these programs because they see that it’s a waste of time because it doesn’t provide anything useful for them... The entrepreneur only attends to receive facilitation benefits” (Entrepreneur Interview, A8)*

With regard to the inefficiency and poor planning, the respondent explains

that Riyada - the Public Authority for Small and Medium Enterprise (SME) Development in Oman has been in existence for three years. However, it has not been able to achieve the majority of its mandate that it was established to achieve. This was illustrated by the respondent, as follows:

- *“...now the age of entrepreneurship is three years old since the day of opening companies’ decision, but what have we fulfilled during this period? There are a lot of things that we are required to achieve, but they haven’t been achieved yet. Also, the role of entrepreneurship is very weak because I think that those who work in entrepreneurship aren’t of much efficiency, I mean there is no reliable efficiency, they work only on the social media programs, and I don’t think that I should appear only on Social media, it’s bigger than that”* (Entrepreneur Interview, A8).

The issue of corruption and lack of transparency was also highlighted during the interviews with some of the respondents reflecting on how the culture of favouritism, corruption and nepotism has a negative impact on the growth of the Omani ecosystem. Several sectors, including the pharmaceutical sector, government boards and other big firms were mentioned in that respect. Some programs that became crippled because of the corruption such as the Invest Easy were also mentioned where a lot of fraud companies registered on Invest Easy Portal. Nepotism was also mentioned as another major problem, especially at the government offices. Some of the respondents’ sentiments expressed this strongly in the following ways :

- *“There is still nepotism in the government because, you know, “So and so sent me” and things like that. More than one person comes to me and says, “So and so sent me. (Expert Interview, A21)*

Some companies were reported as using the entrepreneurship channels inappropriately as demonstrated in the example below:

- *“Big organizations like Ahmed ElSodiar , so they say that they provide funds for entrepreneurs but in return for what? In return for a reputation that he achieved through the media, while what he actually provides is something very*

*little, for example, I adopt ten entrepreneurs annually, I give them training courses and teach them, and at the end, I get a prize for being the best company that supports entrepreneurs, I mean I spend 100 thousand riyals and get a prize that is worth 100 thousand riyals... , it is not social responsibility; it is all about promotion just to improve their image in front of the society” (Entrepreneur Interview, A8).*

Many of the interview participants felt that the problem of bureaucracy further gave rise to the problem of high fees, and subsequently entrepreneurs faced difficulties in getting the permits and licenses.

- *The major challenge is the complexity of procedures. It is clear for everybody. This challenge is clear for everybody, and there are ongoing efforts to overcome it. Also, I think it’s been discussed a lot in TV programs and Tanfeedh, the National Program for Enhancing Economic Diversification... When an entrepreneur goes to get permits and faces the process and complexity of procedures at a certain point some of them the reason for their failure was because they reached a certain point where they took the steps and put in the money, but the permits procedures got complicated between several agencies. In short, the procedures are not interrelated between the agencies” (Entrepreneur Interview, A7)*
- *This can’t be, today, for example, to ask for permissions about elevators, they made me laugh when they asked me to bring contracts for them to get that permissions and labour and the entrepreneurs are obliged to present the contracts to the government, they know that it’s useless, but they say that it’s the followed procedure” (Expert Interview, A31)*

Some of the respondents also argued that the issue of bureaucracy also leads to corruption and lack of transparency problems. This is because people do not prefer to wait for lengthy procedures, and as a result, they would prefer to buy their way out rather than waiting. In this regard, it was identified that most respondents felt that resolving the bureaucracy problem would make the ecosystem more transparent and efficient. The existence of conflicting laws between different institutions was also

mentioned as a potential reason that increases the waiting periods and bureaucracies.

The poor education system in Oman was also discussed as a big hindrance to the development of the Oman entrepreneurship system.

- *“Our educational system is not good; When an Indian worker comes to me with a good language, he can learn the technical aspect quickly. Currently, coaches are not competent as an entrepreneur. I need people who are trained and qualified to work and not people I train because it is a burden and a cost to me. This is because there are no well-trained people especially in the technical field, I'm talking about the technical field in general, and you can ask other people about it These are the three challenges we face governmental bureaucratic problems and lack of clarity of processes and lack of knowledge of the reasons that lead to the disruption and delay of work. In the case of making a plan of the work, you cannot implement them because the actions are unclear”* (Entrepreneur Interview, A6).

The findings of the study are in line with the literature that showcases that there has been an increased number of graduates who are now competing for the limited available employment opportunities. The Entrepreneurship sector employs those individuals that do not get public sector jobs due to some of the challenges such as bureaucracy and lack of capital, knowledge/skills, among others (Magd and McCoy, 2014).

#### 6.2.6 Markets

According to Arshi (2012), most entrepreneurship ventures in Oman have failed because they pose unconventional ideas that lack originality, and most of the entrepreneurs' start-up new ventures without considering the existing challenges of competition that are eminent in saturated markets. Producing a less-competitive product in an existing competitive market is less likely to be successful. One of the participants voiced this concern in the following way:

- *“One is we don't have entrepreneurs. We have small business owners. Everyone is afraid. I think the word entrepreneurs, I think there's very few of them; I*

*would share the 10% of them. 90% they're all just small shop owners. They lack creativity. They don't know where they want to go. They will say, "No." They want to be self-employed"* (Expert Interview, A19).

The major rationale behind this barrier was elaborated by Muthuraman, and Al Haziati, (2019). They highlighted that financial markets at times are biased and thereby, refrain from supporting new businesses. Moreover, they at times discrimination in marketing their products as customers are sceptical about the reliability and quality of their products and services. As a result of this, the new entrepreneurs who have limited resources are more likely to enter industries with low entry barriers where competition is fierce (Ceptureanu and Ceptureanu, 2015).

- *As a solution to this, some of the respondents suggested that Oman needs to create an environment that encourages creativity. "Also, the participants pointed out the lack of product/services exhibition initiatives if you want to make a presentation for your product you have to afford huge amounts of money, you can see some of the showrooms that we join in some of them you have to pay 500 OMR just for three days, and that is just for View products not for selling"* (Entrepreneur Interview, A9).

The exhibitions have been described as very expensive for entrepreneurs to afford, which makes it hard for them to market their goods.

- *"The government showrooms are under the supervision of ministries. For example, the Agricultural Exhibition that took place at the new Oman Convention & Exhibition Centre was under the supervision of the Ministry of Agriculture but a private company which took care of it. In the Agricultural Exhibition, we paid 300 OMR for it and if there are other international Exhibitions, you have to afford the cost of the ticket... you have to afford a lot of money to promote the product, and it is an Omani product?"* (Entrepreneur Interview, A9).

The challenge of poor market coordination was also mentioned, which also acts as a major barrier to entrepreneurship as new-ventures need support from the market players, which is not the case in Oman, for instance:

- *“These ministries don’t take Musandam Governorate into account regarding some decisions like the fees. Some entrepreneurs face challenges regarding the fees in Musandam. The governorate was neglected in a way because of the small size of the labour market there, and the small income of the enterprises because we aren’t capable of making the cost higher. If the goods were out, the field isn’t open for them that much. For example, if you want to move goods from Al Batinah, can only reach till Salalah. You cannot go further”* (Expert Interview, A27).

Competition and the existence of the black market were also identified as limiting factors in the Omani ecosystem.

- *“Another challenge in Oman is that entrepreneurs themselves aren’t ready to enter this market because they depend on the experts in their work and they still have hidden trade; the expert is still the decision-maker and owner of the idea and also the leader in this topic”*. (Entrepreneur Interview, A8).

*Table 10 Thematic analysis Table*

| Part A: Challenges faced by entrepreneurs in Oman                |                                                             |
|------------------------------------------------------------------|-------------------------------------------------------------|
| MINOR CATEGORIES                                                 | MAJOR CATEGORIES                                            |
| 1. Entrepreneurial programs and courses                          | Inadequate entrepreneurial experience, knowledge and skills |
| 2. Lack of mentorship and support systems                        |                                                             |
| 3. Inadequate role models                                        |                                                             |
| 4. Lack of business management tools and systems                 |                                                             |
| 5. Unclear vision and perspective                                |                                                             |
| 6. Lack of knowledge of entrepreneurship policies and procedures |                                                             |

|                                                                     |                            |
|---------------------------------------------------------------------|----------------------------|
| 7. Lack of awareness of entrepreneurs' business concepts            |                            |
| 8. Lack of creativity and innovation                                |                            |
| 1. Capital/funding                                                  | Capital/Financial          |
| 2. Low revenues and profits                                         |                            |
| 3. Lack of coordination between banks and funding institutions      |                            |
| 1. Lack of trust between key actors                                 | Attitudes and culture      |
| 2. Entrepreneurship not regarded as a career                        |                            |
| 3. Low appreciation respect for entrepreneurs                       |                            |
| 4. Negative cultural outlook and mentality towards entrepreneurship |                            |
| 1. Entrepreneurs not engaged in the community                       | Low stakeholder engagement |
| 2. Poor leadership                                                  |                            |
| 3. Disregard/poor implementation of proposed solutions              |                            |
| 4. Lack of support from the government agencies                     |                            |
| 5. Poor communication amongst key actors                            |                            |
| 6. Less youth engaged                                               |                            |
| 1. Low access to projects                                           | Weak systems and policies  |
| 2. Unfavourable laws and legislations                               |                            |
| 3. Low emphasis on youth entrepreneurship                           |                            |
| 4. Poor distribution channels                                       |                            |
| 5. Corruption and lack of transparency                              |                            |
| 6. Bureaucracy                                                      |                            |
| 7. Conflicting laws between different institutions                  |                            |
| 8. High fees                                                        |                            |
| 9. Permits and licenses are hard to get                             |                            |

|                                                    |         |
|----------------------------------------------------|---------|
| 10. Access to resources such as land, funds.       |         |
| 1. Weak domestic and regional markets              | Markets |
| 2. Lack of product/services exhibition initiatives |         |
| 3. Poor market coordination                        |         |
| 4. Competition                                     |         |
| 5. Existence of black market                       |         |

### 6.3 Part B: Factors fostering Omani entrepreneurial activity

#### 6.3.1 Institutions and Networks

Regarding the role of national incubation in developing and supporting SMEs, one of the interviewee's outlined:

- *"They are trying to come up with different--For example, for developing the SMEs, trying to push them through different programs, training programs, coaching programs, mentoring programs"* (Expert Interview, A22).

Some of the interviewees felt that there had been good cooperation between different actors:

- *"We already network with each other, and we made a great and brilliant change now, we also made a strategy through Raffd, it was great, and it has been applied. The first thing we made was a loan bank guarantee; the first time to happen in the middle east in Oman because the government guarantees the loan and the commercial bank is the one that gives the loan without flaws and with benefits price reaches 5%, and it becomes 5% if there is a loss. We made the home businesses, they said that it might cause problems, we said that it contains no problems, we are inviting youth to work and we aren't bringing workers from abroad, we made it in a professional way and we hired more than 3700 persons, and we didn't get a single complaint"* (Entrepreneur Interview, A18).

This cooperation seems to extend beyond just amongst the entrepreneurs to include other key actors as seen in the excerpt from another interviewee:

- *“We make connections, technology conferences or networking events where we gather the Specialists from different sectors to overcome these challenges. Then we were trying to give the solution by connecting them, for example, to the oil and gas industry. We get oil and gas researchers. And the government sector, the ministry for example, and this is our job last April. So, we have an event in oil and gas technology. Next February we will have another event that will focus on financial technology fin-tech. And we already have cooperation with the central bank, and universities speakers”* (Expert Interview, A36).

Another interviewee also added:

- *“...there is cooperation from the top of the pyramid... and support for small and medium organizations regarding training and consultancy, there is good support”* (Entrepreneur Interview, A13).

Some of the interviewees also mentioned that well-known role models have been attending exhibitions, which shows a sense of cooperation from their part as they can guide the potential entrepreneurs to perform better in their field by providing adequate guidance. More media coverage and publicity of successful entrepreneurs were also mentioned as yet another point of connectivity and networking between stakeholders, entrepreneurs and the media.

- *“There are some exceptions that appeared in the media like the inauguration of Manlieben Bosch and Shakalata cafes. However, even these exceptions are not continuous, sustainable businesses. They just have big propaganda. Why? Because these businesses lack the spirit of entrepreneurship. Entrepreneurs give rise to innovative ideas and execute them in creative ways we cannot imagine. They do everything they can to execute their ideas. They do everything for their business; they obtain the fund and do everything else the business needs. You cannot convince them to take the fund. You have seen that yourself last year. None of the true entrepreneurs went to Al Raffd Fund, correct? They*

*create their own methods for funding. They can convince people to fund their business because they have innovative ideas. They make investors work with them and it does not matter if their enterprises start small or medium because they are pioneers with their ideas` `(Expert Interview, A35).*

Although entrepreneurship and its difficulties in Oman have little or no media coverage, the participants highlighted the benefits of media coverage:

- *“The participation of the media in spreading the entrepreneurship culture is a beautiful thing. Some countries have TV programs about entrepreneurship like Dragons’ Den. Such shows spread entrepreneurship more than any educational or academic institution. Millions of people watch these programs. This increases the momentum around entrepreneurship and increases the social culture about it. The media should do this in a professional way, not just for propaganda. We do not promote propaganda. We want the media to make programs that serve entrepreneurship, talk about its challenges, talk about its positive payoff, motivate the guardians, institutions, and all the sects of the society, and extract the abilities of the young people. Complementarity is very important for supporting entrepreneurship in this country. We do not want it like; primary education focuses on one thing while the University focuses on a completely different aspect. It is a homogeneous, integrated environment. Exactly, just like an ecosystem. Entrepreneurship is just like an ecosystem. So, it needs support from the infrastructure, media, institutions, and individuals” (Expert Interview, A35).*

The participants also appreciated the increased technological uptake and the decline in the monopoly where one of the interviewees illustrated that:

- *“...that the markets used to be a monopoly market, and it got opened” (Expert Interview, A33).*

### 6.3.2 Support

Some of the interview participants reported that receiving support from local communities actually helped the entrepreneurs to promote their entrepreneurial activities. (Expert Interview, A20).

- *One of the positive things also includes entering the private sector as a positive shareholder. The private sector in a certain period didn't have this arrangement for small and medium-sized enterprises and didn't have the arrangement that laid down employment contracts for Omanis small businesses. Companies now contribute to programs like the Kazan program from the BP Company. These companies settle programs such as the financing fund. Therefore, the private sector is coming in as a real partner. This is one of the positive things that are happening for a year. And since a short period of time, all these initiatives are being coordinated through the support of the private sector and this is a positive thing (Entrepreneur Interview, A7).*

The respondent also identified some private companies that have been supporting the entrepreneurs. He further added:

- *Big national companies and companies with large foreign financial investments have a real role here in supporting entrepreneurs as an example through the Country Value and there're examples of it. One of them is the Omani Authority for Partnership for Development that is headed by Dr Dhafir Al-Shanfari plays a role with big companies and enters the SME sector as well. One of the pros that they have begun to at least also one of the biggest pros is that we started to notice that the Ecosystem began to form even if the system is not officially certified but it started to form (Entrepreneur Interview, A7).*
- *The accelerator is a program used by Yusuf or Sharifa that shows them where they invest because they invest their money in companies like HP, but it is not involved with them as a partner. They are an investment side that invests the funds of the government sector in the technology sectors they have no*

*connection with Amman. But sometimes they help young people who have good ideas and they cannot implement it on the ground (Entrepreneur Interview, A6).*

Other existing opportunities of the Oman ecosystem were identified during the study which included the linkages between the multiple sources of funding.

- *“One of the positives is the foundation of entrepreneurship organizations like Al Raffd Fund and Riyada. The first positive is that there is a loan that hasn’t been activated. Also having orders to establish this organization is a positive thing, to have a lot of money spent on it. Also, there is a foundation of Rafed fund and loans that are with huge amounts of money, these are positives, but also, they have a lot of challenges” (Entrepreneur Interview, A8).*
- *“Elrafed fund box which played a big role in enhancing the culture of entrepreneurship, it gave the entrepreneurs good funds that reach 150 thousand riyals, but there is bad exploitation for this fund, I think there is a problem that hasn’t been solved. Also about the prize of entrepreneurship, I have my own opinion about it, I think it isn’t supposed to have a prize in the first stage, in the first and second years because the assessment isn’t real, it’s only an entrepreneur that got assessed by a way or another and was given a prize, threw a big party and spend money more than the prize itself, I think this prize wasn’t successful because it didn’t provide added value for entrepreneurship” (Entrepreneur Interview, A8).*

The support from role models and other key actors were also mentioned as some of the positive things that have played a part in the development of the entrepreneurial ecosystem in Oman. Moreover, one of the respondents elaborated the historical overview of some of the key points regarding the positive steps that have been made in the Oman ecosystem. He further highlighted:

- *I think the seminar on institutional development attended by Sheikh bin Khalid in 2013 was the biggest positive jump in this sector. This sector now seems to have a lot of support. Do we have a real system for small and medium enterprises? We can’t say we have. But it is coming through. We are now in the*

*process of forming this system, and the situation is getting better day by day. If you noticed there are training in this field and growth even in the private sector. But the process is supposed to evolve rather than be a media wave and we need to be able to develop the system. Also, there are already many positive people and the subject seems to have a lot of support from papers and TV programs. This resulted in the establishment of leadership and the establishment of extension and specialized agencies. And this has supported the sector and led to the development of a few laws. We hope it keeps on developing (Entrepreneur Interview, A7).*

*Table 11 Factors fostering Omani entrepreneurial activity*

| <b>Part B: Factors fostering Omani entrepreneurial activity</b>          |                           |
|--------------------------------------------------------------------------|---------------------------|
| <b>MINOR CATEGORIES</b>                                                  | <b>MAJOR CATEGORIES</b>   |
| 1. More media coverage and publicity of successful entrepreneurs         | Institutions and Networks |
| 2. Cooperation between different actors and stakeholders                 |                           |
| 3. Increased technological uptake                                        |                           |
| 4. Existing laws and systems                                             |                           |
| 5. Less monopoly                                                         |                           |
| 1. Product innovation channels (e.g. exhibitions by Chamber of Commerce) | Support                   |
| 2. Organisations/institutions supporting entrepreneurial initiatives     |                           |
| 3. Local communities support/promote entrepreneurial activities          |                           |
| 4. Multiple sources of funding                                           |                           |
| 5. Support from role models                                              |                           |
| 6. Appreciation of local talent                                          |                           |
| 7. Youth facilitation                                                    |                           |

#### 6.4 Part C: Solutions that improve Omani entrepreneurial ecosystem

The entrepreneurial ecosystem in Oman has many opportunities that can be exploited by the entrepreneurs, which would help in improving the status of entrepreneurship in the country, and the development of the country itself. According to Jabeen, et al., (2015), Oman has a high potential for developing a strong entrepreneurial ecosystem mainly because it has a free economy, low taxes, stable government and growing sectors such as agriculture, tourism, light manufacturing, service and fishing. If these resources are well utilised, the country could achieve diversified economic prosperity and diversify its economy from oil dependency.

The above analysis shows the challenges and opportunities of the entrepreneurial ecosystem, which provides freedom to an individual for designing a plan regarding what can be done for the betterment of the ecosystem. The suggested areas of reforms included:

1. Law Reforms and Intervention
2. Education
3. Stakeholder Engagement
4. Culture

Analysis of the data acquired through the interview technique also uncovered significant gaps and difficulties within the context of Omans administration. The interpretation of the data revealed there is a strong link between adaptive co-management in an Islamic authority and Arabic culture settings. Adaptive co-management is an administration framework developed through the integration of two frameworks, i.e. Adaptive Administration and Co-Management.

*Table 12 Solutions that improve Omani entrepreneurial ecosystem*

| <b>Part C: Solutions that improve Omani entrepreneurial ecosystem</b> |                              |
|-----------------------------------------------------------------------|------------------------------|
| MINOR CATEGORIES                                                      | MAJOR CATEGORIES             |
| 1. Reform entrepreneurial laws, rules, regulations and policies       | Law reforms and intervention |
| 2. Provision of guidance, facilities and infrastructure               |                              |

|                                                                                |                        |           |
|--------------------------------------------------------------------------------|------------------------|-----------|
| 3. Development of standards                                                    |                        |           |
| 4. More government involvement and follow-ups                                  |                        |           |
| 5. Legislation of SMEs laws                                                    |                        |           |
| 6. Execute proposals made during meetings/conferences                          |                        |           |
| 7. Increase opportunities for entrepreneurs to tender                          |                        |           |
| 8. Restructure Omani banking system                                            |                        |           |
| 9. Ease financial laws to increase financial access                            |                        |           |
| 10. Make government operations virtual/online                                  |                        |           |
| 11. Less bureaucracy                                                           |                        |           |
| 12. Better planning and execution/implementation                               |                        |           |
| 1. Successful role models involved in entrepreneurship at the local level      |                        | Education |
| 2. Compliance from entrepreneurs                                               |                        |           |
| 3. Educate entrepreneurs on the entrepreneurial rules, procedures and policies |                        |           |
| 4. Need for universities and colleges to offer entrepreneurship training       |                        |           |
| 5. Training programs from organisations                                        |                        |           |
| 6. Change the education system                                                 |                        |           |
| 7. Scientific rehabilitation (more scientists and engineers)                   |                        |           |
| 8. More funding to the universities                                            |                        |           |
| 9. Support graduates with entrepreneurial knowledge                            |                        |           |
| 10. More research                                                              |                        |           |
| 1. Support incubators and accelerators                                         | Stakeholder engagement |           |
| 2. Industry-specific support                                                   |                        |           |
| 3. Sponsorships                                                                |                        |           |

|                                                                                                   |         |
|---------------------------------------------------------------------------------------------------|---------|
| 4. Entrepreneurs feel like the meetings are waste of time                                         |         |
| 5. Mentorships                                                                                    |         |
| 6. Increased connectivity between stakeholders                                                    |         |
| 1. Change the cultural outlook that government jobs are better careers than being an entrepreneur | Culture |
| 2. Behavioural rehabilitation                                                                     |         |
| 3. Change the double standards morality                                                           |         |

#### 6.4.1 Law reforms and intervention

The findings from the current study revealed that Oman has weak systems and poor policies. In this regard, many respondents recommended reforms in the field of entrepreneurial laws, rules, regulations and policies. Similar findings have emerged in previous studies undertaken in the country. For example, a survey conducted in 2017 by the Index of Economic Freedom, World Bank (2018) recommended that the Sultanate of Oman should undertake the structural reforms that deal with the cumbersome regulations, bureaucracy and state-owned companies' distortion of the economy as these negatively affect entrepreneurial activities and business development. Therefore, such structural reforms and interventions will help in developing the governance rules for the entrepreneurship policies developed for the businesses in the country in terms of innovation and delivered.

Majority of the interviewees recommended that legislation in Oman should be made easy to serve entrepreneurs.

- *“To regulate the procedure so that everyone as they say, “Takes his right fairly.” The more the laws are modified, and the procedures are facilitated the more we reduce the challenges of government bureaucracy (that is as a result of) the complications in government procedures” (Entrepreneur Interview, A17).*

To achieve this, most respondents felt that it was essential to develop standards, provide guidance, facilities and proper infrastructure as they are still

untouched.. Some of the respondents' recommended for better legislation of Small and Medium Enterprises (SMEs) laws included statements like:

- *"(There is a need for) changes to the laws, the subjects regarding foreign investors and related subjects should be more flexible. One of the things that we, like SMEs, suffer from is that till today we don't have a law. We don't have a bankruptcy law even for SMEs. We don't have the law of property rights... the copyrights are a disaster..."* (Expert Interview, A22).

Another respondent portrayed a similar view:

- *"The labour law and a lot of laws are needed for the entrepreneur. But the law of the small and medium-sized businesses and the taxes law are the main laws needed and represent the entrepreneurs"* (Entrepreneur Interview, A15).

This view was opposed by other respondents who believe that the labour law in Oman is satisfactory. According to one participant:

- *"The subject of labour law, I think it's good the way it is. I think they're making a new law and with that law, there is supposed to be some sort of justice and equity between the sponsor and the business owner, or employee"* (Entrepreneur Interview, A17).

Some of the respondents also felt that all stakeholders had been involved in the policy and decision-making:

- *"Well, at first, all concerned entities created the policies. They contributed in issuing—There were two seminars; Saih al Shamekhat symposium and Sultan Qaboos University. They set the general framework of these policies in what is referred to as following up the implementation of the Saih al Shamekhat symposium Seminar. There were 41 decisions... there was involvement... Because, there were about 3,000 participants from which groups have been selected and every group has been divided into four main aspects; entrepreneurship culture, support and opportunities, laws and legislations and finance. Then every one of these groups presented a recommendation*

*regarding the laws needed in each aspect. All of that has been collected and they were about two sets of about 41 decisions and procedures” (Expert Interview, A34).*

This is one of the many examples where a contradiction in the opinions between the policymakers, the entrepreneurs and among different stakeholders existed. While the policymakers perceive that there are enough SMEs laws. On the other side, the entrepreneurs feel that laws are missing. This variation in opinion is an indication of a gap in the ecosystem. The Adaptive Co-Management (ACM) in Oman ensures that entrepreneurship is subject to many opportunities, with the help of these policies the entrepreneurs in the country can accrue benefits. Therefore, this is another aspect that shed light into the study and provides insights to find the answers of the research questions.

- *“There is a need for collaboration between all institutions and not just between specific institutions. You know, any business today has to go through the main agencies. Which is the Ministry of Commerce, Ministry of Manpower, municipalities, the environmental ministry... This (bureaucracy) is what leads most people to switch towards the electronic portal instead of pursuing entrepreneurship, where you keep spinning between agencies” (Entrepreneur Interview, A7).*

From the above comment, it seems that most Omanis prefer employment over entrepreneurship because they would not prefer to go through the frustrating process for obtaining various permits. This indicates that abating the long processes and permits for the entrepreneurs can attract more people into entrepreneurship. One of the proposed solutions to deal with the bureaucracies and difficulties in obtaining permits is the integration of various government agencies into one supreme agency. This can be done by centralizing the permit application process instead of having entrepreneurs visit different offices in order to attain their permits.

#### 6.4.2 Education

The more aware the entrepreneurs are regarding the laws and procedures, the more likely they are to make use of the available opportunities. Also, some respondents felt that this would increase compliance from entrepreneurs.

- *“The main challenge for us in Injaz is related to the curriculum of an entrepreneur which is still not validated in schools. We need it to be validated in all schools, even elementary and intermediate stages, and if we do so, we will not be applying a new thing as a lot of countries already have done. Why don't we benefit from their experience? For example, the Bahraini ministry of education had taken Jad's curriculums and approved it for schools in Bahrain when they noticed that they are good and stronger than the older ones. We already have good and well-done curriculums, but we still need the same step from our ministry of education... We have curriculums that cover all levels from kindergarten until final high school. I don't think that Bahraini have a greater awareness than us. I wish that we also implement this experience here in Oman... we need the decision-makers in the Sultanate to take this step and adopt such curriculums in our educational institutions in the Sultanate” (Expert Interview, A28).*

The need for scientific rehabilitation was highly stressed during the interviews with the participants calling upon the Omani government and other stakeholders to invest in more scientists and engineers. This would require more funding to the universities to support graduates with entrepreneurial knowledge as well as to fund more research.

One of the respondents quoted:

- *“...we have so many engineers graduating. Use those engineers to operate those machines instead of asking them to run on the field and stack up cement on top of cement. It actually is more sustainable. You reduce the labour-intensive resources, you increase the efficiency, you make it safer, you make it more reliable, and you're training Omanis to become creative. Because those*

*who are operating on these machines will be the ones who can also tell you, how can we improve this machine. But that mindset is not there, "No, let's just do it the easy way." (Expert Interview, A19).*

Some of the respondents indicated that the problem in Oman is not the lack of the education system that fails to encourage entrepreneurship but rather, the implementation of the systems and the bureaucracies.

- *"The educational system encourages innovation, and it started to appear in 2016 and 2017 in the way of learning. Before that time, there was no motivation for entrepreneurs. Now, it is applied in the applied and the technical college in the curriculum. Now. There are colleges for entrepreneurship and at the level of higher education. There is motion now in Muscat University. It became a total entrepreneurial university, all of it... Things are going in the way of supporting innovation, but the problem comes in the bureaucracy in procedures. They do not guide you. They just say, "You are responsible for this, now" (Entrepreneur Interview, A3).*
  
- *"Education is the source of anxiety from entrepreneurship. It does not fulfil our expectations as entrepreneurs in promoting entrepreneurship. Families, mothers and relatives still tell the children to study in order to get a government job. The education in the system is all about filling students' heads with a large amount of information just for the exams. (Expert Interview, A11).*
  
- *People may differ in my view, but I think we need skilled people, not educated people. We need people that have skills and competence. All societies say the same. I am not saying that gaining knowledge is a bad thing. But where are the skills? I need education to give me knowledge, skills, and competence. It must give all these things. Knowledge alone is not enough. (Expert Interview, A5).*
  
- *Do you know the definition of innovation? A brilliant idea and converting brilliant ideas, good ideas, smart ideas into social and economic values. When*

*students graduate from secondary school, they have nothing but knowledge... There are programs adopted by the Ministry of Education and the Research Council to develop entrepreneurship. They are extracurricular programs and that is a good thing. The problem is, they are not applied in all schools i.e., they are pilot projects. I hope they become a part of the curriculum so that the students learn how to become entrepreneurs... entrepreneurship is not understood in society... We need a paradigm shift to raise more entrepreneurs in each generation” (Expert Interview, A35).*

#### 6.4.3 Stakeholder engagement:

Findings outlined that respondents want a greater involvement of the stakeholders for abating the challenges faced by them. *“There is no involvement of entrepreneurs or society in decisions. They should not just make decisions based on their beliefs and perspectives without consulting other parties or engaging stakeholders” (Expert Interview, A23).*

Some of the respondents delineated that there had been some consultations and stakeholder involvement in policy and decision making They also highlighted that these engagements have not been optimal, and called for more involvement of the stakeholders especially the private sector.

- *“The private sector in a certain period didn’t have this arrangement for small and medium-sized enterprises and didn’t have the arrangement that laid down employment contracts for Omanis small businesses. Companies now contribute to programs like the Kazan program... there must be a decision from higher entities like the government; the government should interfere and make these big companies give a share of its work to the small companies otherwise this process won’t happen that way” (Entrepreneur Interview, A7).*

The participants also recommended more incubators and accelerators and the need for more sponsorships and mentorships. Lack of mentorship programs was highly emphasised both in the field of management study and in the literature.

#### 6.4.4 Culture

Some of the respondents noted that this cultural outlook has been planted in the minds of people for generations and that it will require a lot of time to change this outlook. However, through awareness creation initiatives such as success stories and education.

- *“...there is the introduction of awareness. I did not say a lot; the society still needs more. But I would say that from the pros is that the awareness seems to be forming little by little. Because of decisions and the result of its introduction to the education curriculum. I mean that it is positive that awareness has been increasing in this subject”* (Entrepreneur Interview, A7).

The neo-institutionalism school of thought helps us understand the processes through which culture becomes implanted. It involves the study of sustainability and the way concepts of sustainability are taken up by organizations (Williams and Bezeredi, 2018).

- *“In colleges and university, we could construct some work or incubation centres and through them, we can start planting the idea of entrepreneurship, and how you could start a project and make a business plan and how can you follow up with a certain ministry to acquire a certain permit, and we should recruit non-academic people, I don't need the academic who gives me information, data and numbers, instead I should recruit people working in the domain of entrepreneurship to sit with these youth and we should arrange competitions secondarily, and this is already present in some companies, but this program is limited, my dear brother, its possibilities are limited, it only covers a few schools and universities, it doesn't cover all of them if the government adopts this as a national project, and instead of having one accomplishment it would have multiple accomplishments”* (Entrepreneur Interview, A16).

#### 6.5 Summary of the Findings

Culture Management is the process of cultivating the work culture in the organisation system is concerned with the organisational skills of how people work

together in a diverse framework. cultural management is the collection of the values, practice, and expectations in the decision-making process that enables the community and the entrepreneurs to continue with a business even after failure. Failure can provide an opportunity to learn from oneself and from experienced and successful entrepreneurs from other companies or regions. Culture is an important factor in the success of an entrepreneurial ecosystem. To enhance the performance of EEs through Islamic leadership and co-adaptation, the Omani community must have an attitude of inclusiveness and willingness to share information and knowledge. The community must have a positive attitude towards entrepreneurs and entrepreneurship. This positive attitude will enable the entrepreneurs to run a successful business and in turn, contribute to the economy of its country.

With *Riba* (interest) being viewed in the Islamic culture as *haram* (forbidden), some entrepreneurial activities cannot take place, and this discourages entrepreneurship in general. Anti-entrepreneurial culture and attitudes were cited as some of the major challenges faced by entrepreneurs in the Oman ecosystem, and some of the respondents recommended the change of various perceptions and cultural outlook. The findings of the study show that one of the problems in Oman is the mentality amongst most youth that government jobs are better careers than being an entrepreneur. Some of the respondents noted that this cultural outlook has been implanted in the minds of people for generations and that a lot of time will be required to change this outlook. However, through awareness creation initiatives such as success stories and education the potential entrepreneurs can be provided the needed guidance. This means that the application of the Islamic model must take into account important financial and economic realities such as allowing interest on capital and other forms of borrowing as an important first step to give the Oman entrepreneurs a level playing field.

The existence of the support systems, networks and connectivity were identified as the main strengths of the Omani entrepreneurial ecosystem. The need for law reforms and intervention, education, stakeholder engagement and education can, however, not be overemphasized. The fact that most of the identified challenges

have limited the growth of EEs in Oman demands the need to improve the prevailing Entrepreneurship Ecosystem in Oman. This can be achieved by better governance and better government policy on EEs which will further enhance their performance. The ecosystem has components and a group of key players that works. The ecosystem is a natural system that is formed according to the variables. It maintains a certain form of a balance and in most cases, one supports more than the others do since it is not all of them that can offer the same support because they vary in their capacity. This one support channel is often the entrepreneur. While it is typical of an entrepreneurial ecosystem to have some non-performing components and others that are working more efficiently, the Omani ecosystem is still struggling to achieve this balance. Most of these problems can be addressed through better stakeholder engagement, training, education, change of attitudes and fostering an entrepreneurial culture in the country. As a result, many underlying efforts need to be taken for creating this balance. The GEM structure only helps in describing trends and issues concerning the entrepreneurial ecosystem as it uses quantitative information. However, the current study mended and added to the quantitative information and converted it to a qualitative survey to gain a more in-depth information.

The current study has demonstrated that the (GCC) Middle East is perhaps one of the most socially and culturally vulnerable parts of the world. Thus, it requires a tailor-made strategy for its upliftment, particularly in the domain of entrepreneurship development. And to bring this upliftment social entrepreneurs can act as the primary change makers within a society. Through their perceptions, observation, and actions they shape social values.

The six key leadership principles which guide the Islamic Leadership Management (ILM) which incorporates the skills development, strengthening of institutions, cultural diversity, distribution of resources, strengthening relationships and proper management of resources. All these elements have a role in the entrepreneurial ecosystem and can contribute to the maximization of the ecosystem. However, the ability to analyse and select the appropriate strategies for implementation will depend upon the desired goals that are sought to be attained

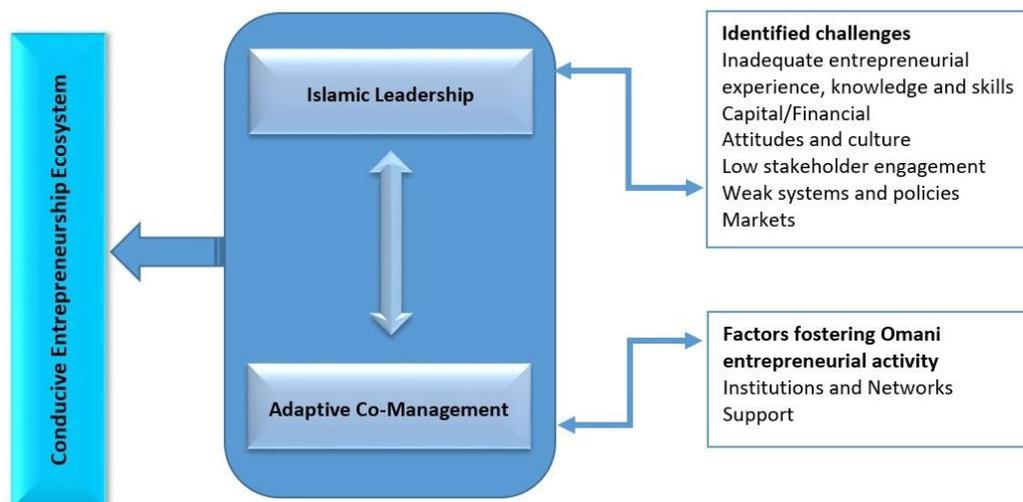
within an ecosystem. Most leaders in the Arab countries are utilizing these Islamic leadership models. However, these initiatives have mainly been witnessed in integrity related initiatives where high levels of ethics have been achieved in Islamic based initiatives. Additionally, scholars also illustrate that the continued rule of dynasties have in some cases undermined the resources sharing initiatives as witnessed in countries such as Saudi Arabia. This has led to limited inclusivity of the stakeholder as they are neglected or remain disadvantaged in the quest to grow the economy. For effective management of the EE, it is critical that the leaders develop ways to utilize and maximize the noted six principles towards a balanced ecosystem. This will help to eliminate possible challenges like mistrust among stakeholders, poor skills development due to lack of a common policy and failure in the small to medium-sized businesses due to lack of information, capital and professional advice or mentorship.

## 6.6 Conclusion

The current chapter has presented the findings of the qualitative study that was acquired using semi-structured interviews with 36 respondents. These respondents were entrepreneurs or key actors in the Omani entrepreneurial ecosystem. Thematic analysis was very useful in this study as it focused on the identification, examination and documentation of the patterns that recurred within data. These patterns were further used to identify the main themes that were related to the specific research questions, such as the challenges, strengths and recommendations within the Omani ecosystem. The findings of the thematic analysis showed that the main themes recurring under the challenges include issues like land, governmental challenges, skills, decision-making, schools and supports, among others. The adoption of grounded theory in mainly aimed at theoretical development. The grounded theory applied in the current study was very useful in identifying the nature of knowledge, practices, conflicts and the contradiction that prevailed in the entrepreneurial ecosystem in Oman. Moreover, it helped in determining the main themes associated with the existing opportunities and strengths of the Omani ecosystem which are support and connectivity.

The recurring themes under the solutions towards a developed entrepreneurial ecosystem in Oman focused mainly on the need for law reforms and systematic change. This explains why the government was a main theme under the solutions because some of the suggested changes such as system change and law reforms require involvement of the government to change the current scenario. The other solutions suggested incorporated the details of the need for stakeholder engagement, major focus on education and culture change. The next chapter will discuss and interpret these results in a more detailed manner. While it is typical of an entrepreneurial ecosystem to have some non-performing components and others that operate more efficiently, the Omani ecosystem is still trying to achieve this balance. Many efforts are considered for creating and developing the balance of the entrepreneurial ecosystem. From the results, it is evident that the challenges were more than the factors fostering the growth of the entrepreneurial ecosystem in Oman, hence there is a dire need for implementing the solutions derived through the results.

Based on the findings, the current study proposes the following model:



*Figure 25 Proposed model to overcome the challenges*

Solutions provided by Islamic Teachings to overcome the various challenges:

- a. Inadequate entrepreneurial experience, knowledge and skills:
- b. Attitudes and Culture:
- c. Low Stakeholder Engagement:

- d. Weak systems and policies:
- e. Institutions and networks:
- f. Support system:

#### **A. Inadequate entrepreneurial experience, knowledge and skills:**

The most important sources of Islamic leadership and guidance for leaders in Islam are Hadith and Al-Quran. This means that enterprise policies and programmes have to be formed with important reference to these Islamic sources. It is, however, important to note that Islamic leadership in Oman does not rely for its legitimacy upon traditional authorities only. Rather, it relies on rational-legal systems that are based on the acknowledgement of one's God, the unity of purpose, and the foundational example of Prophet Muhammad, whose overall impressive and charismatic authority is reiterated in the sunnah and the hadith. From the point of view of adaptive co-management concepts, learning institutions play a vital role in determining the success of entrepreneurial ecosystems, this is in line with the Islamic leadership model (Islam, Ruhanen, and Ritchie, 2018). As the Islamic Leadership model asserts the need for education which could bring economic benefit to a person and his/her family (Elihami, and Syarif, 2017). These institutions act as research hubs besides producing educated individuals who participate in the growth of the ecosystem, and entrepreneurial ecosystems benefit from intellectual capacity from university graduates.

The fact that both models emphasize education and knowledge sharing is an indication that both can play a key role in enhancing the performance of the EEs in Oman. The importance of education was emphasised during the interviews. This included the recommendations for arranging training programs within the organisations. Moreover, as has been depicted through the findings earlier, most respondents emphasized the need to educate entrepreneurs on the entrepreneurial rules, procedures and policies. This included the need for universities and colleges to offer entrepreneurship training as well as the need to change the education system. Many respondents felt that the current education system in Oman does not inspire

entrepreneurship activities. The more aware the entrepreneurs are regarding the laws and procedures, the more likely they are to make use of the available opportunities. Also, some respondents felt that this would increase compliance from entrepreneurs.

Some of the respondents indicated that the problem in Oman is not the lack of the education system that fails to encourage entrepreneurship but rather, the strict implementation of the systems and the bureaucracies. This is because the strict implementation of the systems and the bureaucracies give rise to corruption. While on the other hand, a functional institutional framework is more than sufficient to comply with the stated rules and regulations.

According to the teachings of Islam, acquiring knowledge is a prerequisite for Muslims. Prophet Muhammad (SAW) always prays to Almighty Allah (SWT) to increase his knowledge (Holy Quran, 20:114), irrespective of the fact that how knowledgeable or skilful he is. Regarding the importance of knowledge Allah (SWT) says *“The person who has been granted wisdom (knowledge) by Allah is, indeed, immensely resourceful”* (Quran, 2:269).

Knowledge is the lost wealth of Muslims so wherever they find they must acquire it. From an Islamic perspective, for having a successful business enterprise an entrepreneur must acquire sufficient contemporary and Islamic knowledge. Moreover, in Islam there is always room for improvement, as regards knowledge; Allah says.

- *“Those truly fear Allah, among His servants, who have the knowledge, for Allah is exalted in Might, Oft-forgiving”* (Quran, 35:28). The Holy Quran also declares, *“Pursue not that of which thou hast no knowledge”* (25:67).

Ali (1989) (R) stated that a person *“who acts according to knowledge is like one whose road is clear.”* As a result, on the grounds of Islamic leadership, excellence in knowledge regarding business is highly essential. It is necessary to identify the strengths, weaknesses, opportunities and threats relating to business. This is because identifying these characteristics will, in turn, be conducive to devising necessary policies and strategies to make the business successful.

As a result, for attaining success in entrepreneurship, entrepreneurs should hold the qualities of flexibility and adaptability. Hence, acquire new knowledge, skills, and experience as per the changing and needs of the environment. This will help to ensure that they are not lagging in terms of management, global development and the needs of the community.

According to Ahmad Beret, a successful entrepreneur is one that is motivated to work hard and will never stop learning something new. In concern of this, one of the verses that address this issue through the word of Allah SWT is:

*“O ye who believe! When ye are told to make room in the assemblies, (spread out and) make room: (ample) room will Allah provide for you. And when ye are told to rise up: Allah will raise up to (suitable) ranks (and degrees), those of you who believe and who have been granted Knowledge: and Allah is well-acquainted with all ye do.” (Al-Mujadilah:11)*

Ibn Kathir's interpretation based on the hadith narrated by Ahmad, Muslim and others that Allah SWT raised the status of Kitab and sends several other advantages. Only with the knowledge, would sharpen the mind and wisdom in action. Humans in general always require knowledge. With knowledge, humans can develop their potential by utilizing the gift awarded to them.

## **B. Attitudes and Culture:**

Davis (2013) identified and examined the Islamic perspective in entrepreneurship. Furthermore, he argued that Muslims derive their guidance pertaining to practices of everyday life. This indicates guidance for even conducting business. The Al Quran and Hadith are important guidance systems for the Muslims who basically rely on them for conducting their business. The Quran is not just a book that guides Muslims, rather it is considered by Muslims as the literal word of God (Davis, 2013). This is consistent with what the respondents said, especially in terms of the importance of the Al Qur'an and the Hadith as demonstrated in the quote below:

- *“...in terms of what guides my business principles, morals, ethics and even conduct, I would say my religion and the teachings of Prophet Muhammad. The understanding of entrepreneurship in Islam has almost everything to do with the Hadith and Al-Quran because we believe that apart from being the guidance of how we should conduct ourselves in everything we do, it is also the word of Allah....”*(Expert Interview, A29).

Some respondents also indicated that religious teachings in Islam encourage people to work as well as to seek and exploit available opportunities. In alignment with the findings of Davis (2013), respondents indicated that the teachings of Prophet Muhammad on entrepreneurship and entrepreneurial activity were such that Muslims should be entrepreneurs and provide opportunities for others as well. This is demonstrated in the excerpt below:

- *“.. According to the teachings of Islam, human beings have a responsibility to seek opportunities, regardless of the resources they have access to. Islam expects people to work hard and to find opportunities so that they can help themselves and others as well. (Expert Interview, A21).*
- *Islam also views entrepreneurship as the preferred behavioural model for Muslims, since it ensures that people have resources to lead a good life and that they are in a good position to help others who need them as well...”* (Expert Interview, A13).

Researchers like Gumusay (2015) and Davis (2013) also explained that Allah expects Muslims to work in order to achieve economic success. If Muslims are to be regarded as good human beings, one of the tasks they must perform is to work for their livelihood. Lazy people are not considered useful in any society, and the same is propagated through the teachings of Islam. The word of Allah in Hadith and Al Quran itself described that Muslims need to work hard for gaining wealth. As a result, being lazy and not working to earn a better livelihood is considered as going against the word of God. One of the greatest crimes in Islam is defying the word of God and performing activities that are against the teachings of the Holy Quran. Moreover, as stated in the

Holy Quran, every individual that is capable to work must do so. While failing to do so is regarded as defying the teachings of God. This is demonstrated in the excerpt below:

- *“.... In Islam, you can gain wealth unless you work honestly and persistently, and I believe this is true everywhere. The Al-Qur’an constantly refers to work and the wealth that comes as a result of this work. Work, in Islam, is consistent with God’s will and moral value. If we fail to work and prefer to borrow or beg, we are going against God’s will. Muslims are supposed to work and do business to gain any economic success. Therefore, for economic success, a Muslim is expected to work. People who do not work without any justifiable reason, for example, those who are able-bodied, are viewed as those in defiance of the law of God, and the poverty that comes from this failure to work is believed to Kufr, which simply means denying God’s teachings. So as a Muslim, I know work is scared, and honest business is what God would want us to be engaged in to make our lives better...”*.(Expert Interview, A14).
  
- *“...Islamic entrepreneurship encourages people to be innovative and active in pursuing business but should be able to do so in an acceptable and ethical manner. Islamic entrepreneurs are bound by ethics that can be best described as noble characteristics of a person in terms of their behaviour, attributes, and way of life. By creating a balance between the spiritual and physical, Muslims can be able to practice being compassionate, trustworthy, and piety. Muslims should be able to avoid corruption, help those in need, and most importantly learn the skills and knowledge to operate their business in a profitable manner. Therefore, as much as it is important to have the qualities that make one a good Muslim, it is critical to practice good business skills as the business foundation as they go hand in hand....”*. (Expert Interview, A5).

Based on the findings of the current study, it can be stated that an attitude to low risk prevails among the youth entrepreneurs. However, the future is surely uncertain when there is no risk there is no entrepreneurship. Thus, depending upon

the teachings of Islam risk may be derived at any time from economic, political and natural environments. In concern to this, Allah says,

*“[y] when you have made a decision, put your trust in Allah, certainly, Allah loves those who put their trust (in Him)” (Quran, 3:159).*

An Islamic entrepreneur must depend on Almighty Allah (SWTA) for the outcome of any action. It is known as Tawakkul in Islam. However, dependence on Allah without any thoughtful endeavour is not supported by Islam. But it is suggested to every Islamic entrepreneur that they must take a calculated risk. To reach the heights of excellence Entrepreneurs must possess extraordinary qualities and must be willing to take the risk. This will help them to be bold and confident enough to take timely decisions. Moreover, along with taking risks, it is also essential for entrepreneurs to run on the grounds of truth and honesty. Bribery and corruption will ensure their success. As a result, it can be stated that both customers and employees as well as society as a whole will benefit from entrepreneurs, only when the entrepreneurs will be honest and truthful. Thus, practices like bribery, corruption, falsehood, underweighting, frauds and adulteration should not be practised by entrepreneurs according to the Islamic leadership model. The Prophet (SAW) said

*“The truthful entrepreneur (merchant) [is rewarded by being ranked] on the Day of Resurrection with prophets, veracious souls, martyrs and pious people” (Tirmidhi).*

The Prophet (SAW) has also exhorted believers to strictly adhere to truthfulness in business transactions. He speaks

*“The seller (entrepreneur) and the buyer have the right to keep or return the goods as long as they have not parted or till, they part; and if both the parties spoke the truth and described the defects and qualities [of the goods], then they would be blessed in their transaction, and if they told lies or hid something, then the blessings of their transaction would be lost” (Bukhari).*

The tradition implies that Allah blesses business dealings if both the buyer and the seller (entrepreneur) are true to each other. Telling lies and hiding facts will result in the loss of divine blessing.

The Holy Prophet said: *“Traders (entrepreneurs) are wicked people.”*

The Companions asked: *“O Messenger, has Allah not permitted business?”*

The Messenger replied: *“Of course He has declared trading lawful. But they (i.e. the traders/entrepreneurs) will swear by Allah and do evil, they will not speak but tell lies” (Ahmad).*

Owing to honesty and truthfulness in life once Muslims were reliable to the non-Muslims. Muslim entrepreneurs should be out and out honest as well as truthful in their entrepreneurial activities.

Basically, Islam instructs its adherents to perform a task with confidence, courage and with great accuracy. As successful Muslim’s entrepreneurs, they have the courage and confidence in their abilities to progress in their field of work. This fact can be seen in the verses of the Qur'an, Allah SWT says:

*So do not become weak (against your enemy), nor be sad, and you will be superior (in victory) if you are indeed (true) believers.*

*(Ali-Imran:139)*

Within the meaning of this verse, Allah S.W.T. forbids Muslims from being negative, such as weak and sad. It is because of the peak, the believers will be victorious as promised by Allah S.W.T.<sup>[1]</sup> Thus, successful entrepreneurs cannot allow themselves to be oppressed with negative values which could be a barrier to stop them from succeeding. Based on strong self-confidence, successful Muslim entrepreneurs should brave to proceed and intelligently to take risks to seek opportunities and explore entrepreneurship.

The value of self-confidence is also supported by the evidence of *al-Sunnah*. This can be seen from the *hadith* of the Prophet S.A.W. which says:

*Anas reported Allah's Messenger (may peace be upon him) as saying: When one of you makes supplication, he should supplicate with a will and should not say: O Allah, confer upon me if Thou likest, for there is none to coerce Allah.*

Based on this evidence, a successful entrepreneur is an individual which has the courage and confidence in Allah SWT in carrying out the *mu`amalah*. According to Western scholars such as Ivan Burnell, he believes and found that the confidence level is high in entrepreneurs and this actually helps in producing a positive value in itself. Moreover, entrepreneurs also found that respecting each and every individual and believing there is also part of significance. It is because entrepreneurs will not only manage the physical aspects but also will encompass the emotional and mental components. Thus, obvious self-confidence is an integral part of successful entrepreneurs to act with more maturity. According to Meredith the higher the self-confidence of the entrepreneurs is considered as the greater the confidence and their willingness to try things that are considered a risk by others. Strictly, those with high self-confidence have the ability to make decisions accurately. Thus, a successful entrepreneur according to the entrepreneur framework is the individual who meets the general and specific characteristics as discussed. The combination of both features complements the entrepreneurs which meet the purpose of *al-Falah*.

### **C. Low Stakeholder Engagement:**

One of the key shortcomings of the Oman ecosystem was low stakeholder engagement. In the mapping of Oman's entrepreneurial ecosystem, and the review of literature it was established that the entrepreneurial ecosystem of Oman is in its infancy stage and underdeveloped; also, institutions that support the development of the entrepreneurial ecosystem in Oman are still developing. As such, the need for an effective working model to govern EEs cannot be considered. The improvements on the existing Entrepreneurship Ecosystem governance model should focus on stakeholder engagement since it is an effective intervention that encourages

opportunity entrepreneurship. This barrier can be overcome with the help of Islamic Leadership.

The understanding of entrepreneurship in Islam has almost everything to do with the Hadith and Al-Quran: Human beings have a responsibility to seek opportunities, regardless of the resources they have access to. Entrepreneurship is also viewed as the preferred behavioural model for Muslims. The Al-Qur'an constantly refers to work and the wealth that comes as a result of working. Work, in Islam, is seen to be consistent with God's will and moral value. Therefore, for economic success, a Muslim is expected to work. People who do not work without any justifiable reason, for example, those who are able-bodied, are viewed as those in defiance of the law of God, and the poverty that comes from this failure to work is believed to *Kufr*, which simply means denying God's teachings.

Islam also views entrepreneurial behaviour not just as a set of activities that are aimed at benefiting the entrepreneur, but also as benefitting the larger community by creating more opportunities for others.

The following is a summary of the model that the Islamic entrepreneurs follow;

1. An entrepreneur in Islam is viewed as a Steward.
2. Prophet Muhammad is an Exemplar.
3. The sources of the wisdom of an entrepreneur are The Qur'an and Hadiths.
4. The primary quality of any Muslim entrepreneur should be a Concern for the community.

However, Islam does not promote entrepreneurial activity directly. Nonetheless, Islam teaches, promotes, and propagates cultural value systems, and these value orientations then, in turn, impact the propensity toward entrepreneurial activity. For instance, Khan (1994) referencing the Qur'an and a'hadith, states that:

*"God, according to the Islamic view, has created the universe for the benefit of all human beings. God has made the resources of this earth available to a man who has*

*the responsibility to make use of them, to mould them, and to transform them according to his needs.” (p.3)*

In the Qur’an, there are clear references to the ‘work’ one does and the ‘wealth’ or ‘bounty’ that one is expected to seek.

*“...On earth will be your dwelling place and your means of livelihood for a time.” (Qur’an 2:36) “...to men is allotted what they earn, and to women what they earn. But ask God of His bounty, for God has full knowledge of all things.” (Qur’an 4:32)*

*“It is We (God) who have placed you with authority on earth, and provided you therein with means for the fulfilment of your life...” (Qur’an 7:10)*

*“And say: Work (amalu), soon will God observe your work...” (Qur’an 9:105)*

*“We have made the night and the day... that we may seek bounty from your Lord...” (Qur’an 17:12)*

*“It is out of His Mercy that he has made for you the night and day that you may rest therein and that you may seek His bounty; in order that you may be grateful.” (Qur’an 28:73).*

As per the teachings of Islamic teachings, it is the religious and moral responsibility of the entrepreneur (employer) to ensure the welfare and betterment of his employees. According to Islam, an entrepreneur is not only encouraged to pay fair wages and remuneration but is also encouraged to ensure that his employees are working in good conditions.

The Prophet of Allah (SAW) has said *“around you, Allah has placed those who are your brothers [workers under you] who are around you, Allah has placed them under you. So, if any one of you has someone under him, he should feed him out of what he himself eats, clothe him like what he himself puts on, and let him not put so much burden on him that he is not able to bear, [and if that be the case], then lend your help to him” (Bukhari).*

The Prophet (SAW) also said *“I will be a foe to three persons on the last day one of them being the one who, when he employs a person that has accomplished his duty does not give him his due” (Bukhari).*

The Prophet (SAW) is also reported to have said *“The wages of the labourers must be paid to him before the sweat dries upon his body” (Ibn Majah).*

As a result, based on the Islamic leadership model, Muslim entrepreneurs should never engage in any way to exploit their workers. On the contrary, they should practice the principles of Islamic industrial relations in their workplace to ensuring a productive workplace through employee involvement.

In view of Islamic teachings, one can be a successful entrepreneur if one is equipped with special characteristics that include the values with the charisma of a good manager. These characteristics are important because the individuals are constantly focused on the planned activities and give priority to the strategic management priorities. This understanding was indicated in the Qur'an, namely:

*“And We appointed, from among them, leaders, giving guidance under Our command, so long as they persevered with patience and continued to have faith in Our Signs.” (al-Sajdah:24)*

*“Ibn Kathir in commenting this verse explains that Allah SWT makes leaders who show his people the right way, to the ma`ruf and prevent acts of dishonour. Because of their patience and execution from the restrictions and fully believe in the content of wahyu based on faith so Allah will confer a strong leader to his people. Thus, as a leader or manager, the ability to systematically manage the employees is part of the pre-conditions to be a leader.”*

According to Al-Sunnah, many hadith touched on the leaders such as by the Prophet Muhammad, which means:

*From al-Hassan R.A.: “Ubaidullah b Ziyad visited Ma'qil b. Yasir al-Muzani in his last illness. Ma'qil said (to him): I am narrating to you a tradition I heard from the Messenger of Allah (may peace be upon him). If I knew that I am to survive this illness.*

*I would not narrate it to you. I heard the Messenger of Allah (may peace be upon him) say: If God appointed anyone ruler over a people and he died while he was still treacherous to his people, God would forbid his entry into the Paradise.”*

On the basis of the evidence presented by (Muslim people), it can be clearly stated that there are a lot of benefits provided by Allah to the human presence on the earth. Benefits like owning various responsibilities such as a leader, regulator, and administrator of the universe. To perform and execute such functions, every human act as a driving force to all the resources and equipment available within an organization. The source can be obtained either from humans or from raw materials. Humans who are placed as leaders, managers and human resource managers should benefit together from the treatment of natural resources. However, as a manager, the individual should take responsibility for what has been done. This is because, in the event of misconduct and the elements of fraud, the penalty will be imposed from Allah SWT.

#### **D. Weak Systems and Policies:**

Participants identified ways in which Islam as a religion is in favour of entrepreneurial activity, also encouraging Muslims to seek opportunities and optimally utilize them. Researchers like Al-Muharrami & Murthy (2017) explain the Islamic view of business, profits and charging interests. They highlight that apart from encouraging entrepreneurial activity, Islam expects entrepreneurs to stay within the ethical and moral frameworks according to the Islamic religion.

- *“My understanding of some of the features of entrepreneurship in Islam is that the business has to be set up based on certain characteristics that are in line with the Islamic faith. The faith-based focus helps to create honesty, equity, and prosperity in a manner that favours everyone and maintains a balanced ecosystem. For example, entrepreneurs have to adhere to the Muslim lifestyle that encompasses activities like prayer, honesty and prohibits haram (injustice, discrimination, illegal, or cruelty and many more negative aspects). Therefore,*

*practising Islamic entrepreneurship means adhering to the Islamic faith, teachings, and values". (Expert Interview, A21).*

Islam provides an opportunity for entrepreneurs to respond positively in order to stimulate the performance of activities. In fact, Islam encourages entrepreneurs to be far-sighted to create and take advantage of this nature to compliance others. They were given freedom by syara` to prosper all the blessings of Allah SWT and treated in the manner permitted by syara` for the benefit of all beings. This stipulation of Allah SWT calls people to think widely and openly to do good things to improve life with more dynamic and creativity. This idea is emphasized by the Qur'an, of Allah SWT says which means:

*"Allah created the heavens and the earth in true (proportions): verily in that is a sign for those who believe." (Al-Ankabut:44)*

The verse above outlines that Allah is the creator of the sky and earth. In alignment with this, he has showcased many lessons as the signs of His greatness for those who believe. Only those individuals that have a broad mind will be able to take a lesson from the guidance of Allah. As a result, successful entrepreneurs are regarded as individuals that possess both insight and foresight. This is because they have an optimistic mindset and work hard to accomplish their dreams into reality. According to Suryana (2001), it is not wise to regard entrepreneurs to be working in a comfort zone. Thus, to attain success, it is necessary that all stakeholders must aim at working together to operate in a strong system. The stakeholders comprise entrepreneurs, employees, government officials, policymakers, distributors and suppliers who should be working in tandem. Moreover, the issue of weak systems and policies can be resolved if entrepreneurial ecosystems in Oman comply with the teachings of Islam and follow the Islamic Leadership model.

#### **E. Institutions and Networks:**

Entrepreneurial activity and culture in Islam are viewed as an asset to the larger Muslim community. Thus, as discussed earlier, a Muslim who is an entrepreneur

does not only benefit him or herself but also the larger community as shown in the quote below:

- *“...In Islam, entrepreneurial behaviour is not just viewed as activities that are aimed at benefiting the entrepreneur, but also as an activity that benefits the larger community by creating more opportunities for others. When a person succeeds in business, they are likely to employ more and more people and have the opportunity of being employed and this is beneficial to the larger society. ...”* (Expert Interview, A25).

In terms of the model that is followed by Islamic entrepreneurs, the respondent indicated that entrepreneurs should, first of all, be stewards, and emulate Prophet Muhammad’s entrepreneurial. The Qur’an describes well-being as “a life that is good and pure,” feasible for “whoever works righteousness ... and has faith”; for those who succeed in fulfilling their double role as stewards (Khalifah) and servants (‘Abd) of God within the human community. In this sense, spiritual well-being can be depicted as the meeting point of tawhid, where connectedness with God (transcendence) is tangent to connectedness with humans (community).

Consistent with studies such as Gumusay (2015), the respondents also indicated that the sources of wisdom for entrepreneurs should be Hadith and the Al Qur’an. The concern and care for the community were also considered as the most important quality of a Muslim entrepreneur. This is shown in the quotes below;

- *“An entrepreneur in Islam is viewed as a Steward....”* (Expert Interview, A24).
- *“Prophet Muhammad is an Exemplar, and as such, all Muslims should act in ways that emulate the Prophet’s attitude towards business and entrepreneurship....”* (Expert Interview, A25).
- *“...in Islam, the most important source of wisdom of an entrepreneur in The Quran and Hadiths....”* (Expert Interview, A30).
- *“...The primary quality of any Muslim entrepreneur should be Concern for the community”* (Expert Interview, A29).

- *“Clearly, Islam, just like many other religions, does not promote entrepreneurial activity, at least not directly. Islam, however, teaches, promotes, and propagates cultural value systems...”* (Expert Interview, A26).

In the meantime, it is necessary to comprehend that a successful entrepreneur should always focus on the activities that are able to generate reasonable revenue. Moreover, the challenges faced by the entrepreneurs should not prevent them from performing their responsibility towards dependents or family members. Therefore, the responsibility cannot be charged to other parties that could lead to difficulties and dysfunctional family life from the economic aspect. The entrepreneurs are not only a great success as a businessman, but at the same time, they were leaders of family members. Even *syara`* really appreciate the actions and deeds, and it is considered as *sadaqah* performed by the perpetrators.

From the Qur'an point of view, the verses that urge people to be responsible for the family members as described by the Qur'an about the events of two women with Prophet Musa. Allah S.W.T. said:

*“And when he arrived at the watering (place) in Madyan, he found there a group of men watering (their flocks) and besides them, he found two women who were keeping back (their flocks). He said: "What is the matter with you?" They said: "We cannot water (our flocks) until the shepherds take back (their flocks): and our father is a very old man.”*  
(*al-Qasas:23*)

According to Yusuf al-Qaradawi, the Qur'an verse is to present an event that occurs at the time of Prophet Musa on the efforts of two women who gave water to their sheep with the help of Prophet Musa. Both women are employed as goat's shepherds owned by their family due to his old age. According to Ibn Kathir, due to both her parents being elderly and unable to do the work so they take responsibility for managing the business. Therefore, taking guidance from the essence of the text, we can conclude that it is an obligation on the entrepreneurs to assist and support the needs of their family members and dependents.

From another aspect, the entrepreneurs are also directly responsible to the employees or staff in the organization. In other words, entrepreneurs have a network of people working in the administrative structure. As employers, they are solely responsible for the welfare and create an atmosphere of excitement and harmony in employment or the services provided. For example, in terms of salary or wages, the entrepreneurs must take into consideration each employee based on expertise and contributions in advancing the company or business. It is because of Islam criticism of human being who takes advantage of others and make a profit by oppression and discrimination. This parameter is described by the Qur'an, of Allah S.W.T. says:

*"And withhold not things justly due to men, nor do evil in the land, working mischief. (Syuara:183)*

According to Ibn Kathir, this verse is the sequence of events that occurred between Prophet Syu `aib with his people. He advised his people to work on the grounds of honesty in business transactions. This is because when there is the element of cheating in the businesses, it tends to generate losses. Moreover, it will make a profit that does not belong to it. Thus, entrepreneurs need to take lessons from the interpretation of the sentence to organize activities based on accountability, integrity and fairness so that the people around them could live in peace and harmony. Similarly, for the welfare of workers especially in the matter of payment of wages or salaries should be considered. The entrepreneurs are advised to not delay payments or assailant by employing workers at rates that are not commensurate with the task being performed. Ideally, the remuneration received at a reasonable rate is not detrimental to any party.

#### **F. Support Systems:**

The Hadiths and the Al Quran are still the most important sources of information while deciding on policies and programmes for Islamic leadership. Charging "Riba" that is of interest, is illegal, and as such, businesses are not allowed to do so. Muslims are expected to exemplify the teachings of Prophet Muhammad and follow all his teachings on business especially for attaining profits in an ethical manner.

Islam is a religion that governs many aspects of Oman and in most of the Islamic world, and this includes enterprise policies and programmes. Every programme or policy should be consistent with the Halal principles. This is shown in the excerpts below:

- *“The most important sources of Islamic leadership and guidance for leaders in Islam are Hadith and Al-Qur’an. This means that enterprise policies and programmes have to be formed with important reference to these important references. It is, however, important to note that Islamic leadership in Oman does not rely its legitimacy upon traditional authorities only; rather, on rational-legal systems that are based on the acknowledgement of one God, the unity of purpose, and the foundational example of Prophet Muhammad, whose overall impressive and charismatic authority is reiterated in the sunnah and the hadith.”* (Expert Interview, A4).
- *“... The fact that riba (interest) is haram (illegal) means that entrepreneurs cannot charge interest. All enterprise programmes and policies must be formed based on compassion and justice...”* (Expert Interview, A20).
- *“... From an Islamic perspective. Leadership is a very important part of entre. (Expert Interview, A11).*
- *“Entrepreneurship. Leaders are tasked with the role of ensuring that the policies and ideas they implement work within the objectives and goals of entrepreneurship. The leaders are a bridge between the Islamic faith and the followers. Therefore, policies are built on the foundation of Islam. A leader should be able to develop a balanced personality and follow the teaching of the Quran, which will help to implement good policies...”* (Expert Interview, A20).
- *“...Islamic leaders need to understand the values and ethics of faith-based entrepreneurship to set up the right enterprise policies. This means looking at how business functions in the entrepreneurship world and connecting it to the right Islamic characteristics. This includes aspects like production, which should follow the concept of halal. The marketing should also be ethical and not lie about products or monopolies the market. Business functions and finance*

*should also comply with halal principles and avoid negative aspects like gambling and usury. Leaders who are conversant, aware of, and follow these principles are in a position to create enterprise policies that are useful...."*  
(Expert Interview, A14).

Islamic leadership has generated several instruments to support entrepreneurship. As an example, an entrepreneur can seek capital aid by cooperating with a financier in a *mudarabah* agreement. If a loss is suffered, the financier will bear it. But, if profit is gained, both parties will get their share according to their previously-determined agreement. This system supports entrepreneurship more than an interest-based loan system. The latter system demands payment regardless of the entrepreneur's loss. If he fails to pay, he will also have to pay the fine. This makes an entrepreneur economically stressed.

The impact of the vulnerable situation places humans in a dilemma. This is because they are unable to distinguish what is correct or vague about the objectives and requirements of their lives. The situation may invite problems and humanitarian crises. Fatigued entrepreneurs might ignore the importance of qualities and values that are admirable. This may thus, result in misconduct such as greed, miserliness, anarchy, oppressive, fraudulent, criminal breach of trust, corruption and other properties *madhmumah* impure by Islam.

Withholding an appreciation of these values is based on the firman of Allah S.W.T. in the Qur'an. In fact, many indicators of the verses of the Qur'an that call people to appreciate the noble values such as human with dignity, humble, tawakkal, emphasizing quality, managing perfectly, magnify the values of truth and a lot more.

*"Allah said: Whosoever desireth glory, then all glory is Allah; unto Him mount up the goodly words, and the righteous works exalteth it. And those who plot evils, --theirs shall be torment severe; and the plotting of those! --it shall perish."*  
(*al-Fatir: 10*)

Ibn Kathir further explains that for those who need glory in themselves, it is said that they should persevere to be faithful to Allah. This is because Allah always

looks for good words and good deeds. Likewise, if a person is not doing any good deeds then a painful punishment will be prepared for those who perform evil acts.

From the Sunnah perspective, there are some hadith that emphasize the importance of values to be internalized by entrepreneurs. Prophet Muhammad said, which means:

*“What is the best search?” He said the meaning: “People who work with their hands and every transaction are clean.” (al-Badhar)*

Based on the hadith, it can be clearly observed that the Prophet gave instructions to his followers, especially the entrepreneurs or traders to link businesses with the demands of religion. Therefore, it can be stated that Islam calls for his followers engaged in the entrepreneurial world to practice the values in all transactions carried out and denounced against those who act outside the requirements of the religion. Moreover, they recognize entrepreneurial practices as an act of understanding religion. As a result, it is certain that aims at increasing the productivity of the activities undertaken should be synergized to increase the values that need to be understood and practised by the Muslim entrepreneur.

In addition, Western scholars such as Gay Hendricks and Kate Ludman explained a few concepts through their study. Study namely successful entrepreneurs, the study found that individuals always practised good values in their work culture. The study even identified that in general, the highest values that withholding successful entrepreneurs such as honesty, responsibility, keeping promises, not interfering in the case of others, taking time to think, make a list of priorities and open to criticism from customers and develop better strategies such as choice of location, products to be marketed and so on. It is clear that these values act as an integral part of the noble values organized by Islamic entrepreneurship. In general, noble values that are bound by the provisions of the religion would have a positive impact on the individual entrepreneur.

According to the values described, it can be concluded that entrepreneurs must possess these values for becoming successful entrepreneurs. Qualities like trust, wise strategy, execute transactions according to the syari`at and moderate.

## Chapter 7: Discussion of findings

### 7.1 Introduction

The findings from the thematic analysis reflect that the main sub-themes under the challenges are issues like land, governmental challenges, skills, decision-making, schools and supports in the entrepreneurial ecosystem in Oman. These challenges have also been indicated through the prevailing works of the literature. For example, Schillo, et al., (2016) illustrated that SMEs in Oman have been neglected over the years and lack the required support from both the public and private sectors. As a result, the entrepreneurial ecosystem in Oman has not yielded the desired outcomes. This is due to the fact that there is a lack of cooperation between large firms as well as with the government and SMEs. This coordination is vital for shaping the entrepreneurial ecosystem of a country.

The entrepreneurial ecosystem depends on the policies, markets, human capital, support, culture, finance and more. Thus, changes in the policies and predictions about the future bring challenges to the entrepreneurs in the country. As a result, entrepreneurs struggle to manage the entrepreneurial operations in the business and contribute to the country's economy. There are skilled and unskilled labourers in the country who have lack of knowledge and skills. This is due to a lack of training and development of the employees as proper infrastructure is missing in the model. The policies can be changed in the country due to government policy changes in the organisation. Such policy changes have a significant impact on the entrepreneurship strategies and thereby, it supports the entrepreneurs in the country. The educational infrastructure of Oman is also not well-developed and thereby, fails to support the entrepreneurs of the country who want to establish their own business to contribute to Oman's economy.

Schillo, et al., (2016) also added that Oman's current poor infrastructure and negative macro-environment factors such as poor policies and weak education system have intensively contributed to motivating potential job seekers to take up entrepreneurship. Because of this, many entrepreneurs seek to indulge in entrepreneurial activities and new ventures. This leads to destructive and

unproductive economic directions rather than increasing the economy of the country by acquiring profit and business expansion. This is essential because not all potential job seekers have the required skills and abilities to take up entrepreneurship. Many of such job seekers just follow their peers, irrespective of the skills and qualifications they possess. Arshi (2012) further acknowledges that a lack of information on entrepreneurship is a major factor that limits most entrepreneurs from researching and testing their ideas in Oman. The participants of the field study seem to be holding similar views regarding the challenges faced in the entrepreneurial ecosystem of Oman. Based on the Islamic leadership theory and adaptive co-management model in the study, it will help to analyze the issues faced by the entrepreneurs and the impact it has on the business environment.

## 7.2 Part A: Challenges faced by the Entrepreneurs in Oman

### 7.2.1 Inadequate Knowledge, Experience, and Skills

According to Stam and Spigel (2016), the role of knowledge differs between ecosystems and related concepts like innovation clusters and innovation systems. Based on the literature it can be stated that in the realms of the traditional models, the term knowledge refers to the technical ability that is needed in developing new technologies and products, and the market information needed to know which new products will succeed in the marketplace. Although this kind of knowledge adheres to the entrepreneurial ecosystem, Stam and Spigel (2016) argue that ecosystems also require a new type of knowledge. The new type of knowledge refers to the process of entrepreneurship. Such a process of entrepreneurship implies that it is essential for the entrepreneurs and stakeholders to have good knowledge about the various challenges they would be encountered by them in the near future. The knowledge and skills about entrepreneurship will enable the entrepreneurs to develop and design a strong business plan that is capable of both attracting and selling the product simultaneously.

The World Economic Forum (2013) through their research directs that access to markets, human capital and finance are the most crucial indicators for attaining growth of entrepreneurial organizations. However, these indicators are often

considered superficial prerequisites or secondary requirements, as human resources and finance are the fundamental requirements for attaining success. Moreover, finance and human resources ultimately depend upon the education held by entrepreneurs (WEF, 2013). In alignment with this, Stam and Spigel, (2016), states that knowledge assists in the development of new technology as well as gaining market insights. Furthermore, knowledge integrated through multiple sources can help to increase the competitiveness of a firm. As a result of this, knowledge spillovers from universities and other large research-intensive organizations are crucial. In addition to the crucial factors like market and technical knowledge, entrepreneurial knowledge is also essential as it helps entrepreneurs in achieving success. Such knowledge about the entrepreneurship process can be attained by sharing it among entrepreneurs and mentors through informal social networks, entrepreneurship organizations, and training courses offered. In a study conducted by Acs et al., (2017), the major aim was to highlight the weaknesses and strengths in the Oman entrepreneurial ecosystem. Findings further suggested that the Global entrepreneurship index in context to Oman was 0.28 in 2013. This index was improved to 0.4 in 2014 before dropping to 0.2 in 2015 and further to 0.19 in 2016 and then rising again to 0.24 in 2017. When compared globally and regionally, the start-up skills index for Oman is lower than the average MENA and world index (Madbouly, 2017). The start-up skills in question constitute business formation, operation and management skills that are mainly acquired through education and training. These skills are measured based on a country's number of enrolments made in educational institutions and the quality of the education system. Both Acs et al., (2017) and Madbouly (2017) found that the number of enrolments in education institutions and the quality of the education system was very low in Oman. This provides the rationale behind why most entrepreneurs lack business management skills to run successful ventures.

In this regard, the current study directed that entrepreneurs in Oman face a lack of knowledge of entrepreneurship in terms of policies and procedures. In order to exploit the existing opportunities within an ecosystem, it is important for entrepreneurs to have a good understanding of the policies and procedures, an aspect that some of the interview participants noted as missing in the country (Madbouly,

2017). Through the activity of creating awareness and accessing information, entrepreneurs can expand their knowledge of the existing policies and procedures. The key players within the ecosystem must have access to essential information concerning the market, new technologies, financial services, entrepreneur ideas and other information (Kiesnere and Baumgartner, 2019).

Studies showed that ecosystems with few components of information sharing are generally less focused and are failed to develop (Mason and Brown 2014). Moreover, this is because entrepreneurs will miss out on important information that would have helped them in their ventures. There are many scenarios where the government or other stakeholders are offering free entrepreneurial courses, but those who should benefit must register themselves before a given deadline. However, since the information delivery mechanisms are inefficient, many entrepreneurs who would have benefitted from such an initiative end up missing out on the opportunity because the beneficiaries did not receive the appropriate information on time. In Oman, there are many entrepreneurs who have not been able to achieve the Riyada or entrepreneurship card because they possess a lack of knowledge with regard to the procedure via which they must apply. The Riyada or entrepreneurship card is provided to the entrepreneurs in Oman with the legal rights of doing business in Oman. Therefore, this card consists of various facilities for entrepreneurs and give benefits in different business areas. Moreover, the Riyada card facilitates small scale business owners to gain access to different areas of business. It also helps them in incurring better revenue and thereby, in turn, contributing to Oman's economy. As the individuals have a lack of knowledge and awareness about the Riyada card thus, they fail to seize the opportunities facilitated by the country. In addition to this, entrepreneurs initially face difficulties in acquiring financial resources like capital and investments for the business in Oman. This is due to the lack of knowledge and awareness of the procedures to apply for the accumulation of financial resources. There are also many entrepreneurs who have been unable to get loans because they do not know the application procedures.

### 7.2.2 Human Capital and Finance

The Human Capital pillar is considered one of the strongest pillars for Oman. This reflects quality education, mostly freedom of the labour market from the regulatory perspective the legal and regulatory framework of a labour market, including regulations concerning minimum wages, laws inhibiting layoffs, severance requirements, and measurable regulatory restraints on hiring and hours worked, and stability in the level of Omani investment in training and employee development

The poor circulation of information to the entrepreneurs in the country has also affected the innovativeness of the entrepreneurs in Oman, as many respondents reported that the ecosystem lacks creativity and innovation. Research studies depict that the most successful entrepreneurs spend a lot of time researching the market, comparing various business models, understanding their competitors, reviewing market research data and understanding the needs as well as preferences of their target market (Slamet et al., 2020). However, within the Omani entrepreneurial ecosystem where such information is limited, the likelihood of starting up a successful or high-impact venture becomes limited.

In the Islamic leadership model, the existence of “halal” i.e., permitted and “haram” i.e. forbidden, services and products distinguish Islamic entrepreneurship from the other religious forms of entrepreneurship. Under mainstream economics, Islamic values shape the Islamic leadership model upon which the Oman entrepreneurial ecosystem should be based. This allows Muslims to achieve material wealth only at a moderate level. Further, Islamic values regard interest (riba) is haram (forbidden). As a result, it can be asserted that when an individual takes up entrepreneurship, he does not aim at creating disproportionate wealth for himself. Rather, these individuals will eventually help many others in society to gain employability and acquire wealth to fulfil their basic necessities.

In this regard, most Islamic investors, who are the majority in Oman, are not likely to offer large amounts of capital because they cannot earn interest on the capital. In economics, and as defined in this study, interest is simply the payment that a borrower

pays to the lender over and above the repayment of the principal sum. Given that Islamic values forbid charging of interest, this implies that Islamic investors cannot get capital gains from the amount they borrow out to the entrepreneurs. This is perhaps one of the hurdles that might slow down entrepreneurship activity, considering the fact that lending and borrowing are important and very profitable entrepreneurial activities.

On the other hand, Islamic values prohibit rent-seeking practices such as corruption and nepotism. This shows that the implementation of the Islamic leadership model in the Oman entrepreneurial ecosystem would greatly minimise or even eliminate the identified cases of corruption. As a result, entrepreneurs that will follow Islamic ideologies will typically refrain from indulging in inappropriate activities to acquire capital or financial assistance.

### 7.2.3 Attitudes and Culture

The adoption of the Islamic entrepreneurship/leadership model provides a broader view and larger examination aspect for the study. Hence, it is evident to conduct the current study. The Islamic ideology views that Muslims are expected to work for a living and that work is seen as an act that is consistent with God's will and has moral value. The Islamic leadership model explicitly integrates conscious reflection and contemplation of God, faith as the basis for the motivation to perform righteous deeds, leadership as an ethical and moral responsibility based on spiritual values (e.g., humility, trust, patience, compassion, and forgiveness). It also focuses on ego transcendence and receiving spiritual or heavenly rewards as the basis for a vision for loving and serving others, especially the weak and unprivileged (Egel, and Fry, 2017) According to Ahsan, Zein, and Zakaullah, (2008), the first four caliphs, or "rightly guided successors," who followed the Prophet were also elected by the Islamic community through mutual consultation. Hence, it can be directed that Islamic leadership is a triangular relationship among God, the leaders, and the followers (Egel, 2014). God provides the vision of the leaders and limits their exercise of power. The followers, like the leaders, are answerable to God for their deeds and share the responsibility of the leader. The fundamental leadership qualities in this relationship

are stewardship, servanthood, and mutual consultation (Qur'an 2:30, 57:7) (Abeng, 1997; Ahsan et al., 2008). Thus, the adoption of the Islamic entrepreneurship/leadership model can abate the cycle of mistrust from emerging and hindering the relevant networks and engagement.

According to Fozia et. al., (2016), the concept of leadership in Islam is based on trust between the leaders and their followers. It represents a psychological and religious contract according to which each party will try their best to protect the other's interests. Through the adoption of the Islamic leadership model in the Oman entrepreneurial ecosystem, more trust can be developed among the key actors. The entrepreneurial ecosystem depends on different pillars which is fundamental to establishing businesses in the country. Thus, in terms of attitude, identifying and responding to opportunity aspects and risk acceptance are considered as the main factors that impact the business environment. Moreover, cultural support is considered as another important factor of the entrepreneurial ecosystem in Oman for the growth of the business environment. Therefore, the policymakers should adopt the Adaptive Co-Management (ACM) lens for the business environment in the country which will help them to identify the main issue pertaining to the implementation of the leadership model for balancing the entrepreneurial ecosystem. These factors imply that working together, trusting each other and sharing ideas are core values in having a successful ACM. In this regard, an ACM within the Arab culture would be possible if the policymakers support ecosystems that encourage entrepreneurs to create new business ideas and start-ups. Simultaneously, policymakers should create linkages and opportunities for these entrepreneurs to work with other stakeholders such as investors, suppliers and clients., whilst at the same time building trust in themselves and sharing ideas that eventually contribute to the entrepreneurship process. Once these connections and networks are developed, it becomes easier to collect feedback, thus allowing for easy learning and modification through various channels. This further helps in developing an effective communication and monitoring channel which ensures that the networks are placed efficiently. Eventually, through this feedback mechanism, the entrepreneurial ecosystem would grow stronger and gain higher resilience, which is the goal of ACM.

Thus, if the Islamic leadership model is implemented in an efficient manner, it could assist in overcoming many shortcomings. This is because the leaders are effectively required to adhere to moral and social norms while making any decisions for the employees. Combined with an Islamic leadership perspective, the voice of every person would be given prominence- which is essential in the Omani context as the policymakers often neglect the feedback of the entrepreneurs (Abbasi, Rehman and Bibi, 2010).

#### 7.2.4 Low stakeholder engagement

The adoption of the Islamic entrepreneurship/leadership model provides a broader view and larger examination aspect for the study. Hence, it is evident to conduct the current study. The Islamic ideology views that Muslims are expected to work for a living and that work is seen as an act that is consistent with God's will and has moral value. The Islamic leadership model explicitly integrates conscious reflection and contemplation of God, faith as the basis for the motivation to perform righteous deeds, leadership as an ethical and moral responsibility based on spiritual values (e.g., humility, trust, patience, compassion, and forgiveness). It also focuses on ego transcendence and receiving spiritual or heavenly rewards as the basis for a vision for loving and serving others, especially the weak and unprivileged (Egel, and Fry, 2017) According to Ahsan, Zein, and Zakaullah, (2008), the first four caliphs, or "rightly guided successors," who followed the Prophet were also elected by the Islamic community through mutual consultation. Hence, it can be directed that Islamic leadership is a triangular relationship among God, the leaders, and the followers (Egel, 2014). God provides the vision of the leaders and limits their exercise of power. The followers, like the leaders, are answerable to God for their deeds and share the responsibility of the leader. The fundamental leadership qualities in this relationship are stewardship, servanthood, and mutual consultation (Qur'an 2:30, 57:7) (Abeng, 1997; Ahsan et al., 2008). Thus, the adoption of the Islamic entrepreneurship/leadership model can abate the cycle of mistrust from emerging and hindering the relevant networks and engagement.

According to Fozia et. al., (2016), the concept of leadership in Islam is based on trust between the leaders and their followers. It represents a psychological and religious contract according to which each party will try their best to protect the other's interests. Through the adoption of the Islamic leadership model in the Oman entrepreneurial ecosystem, more trust can be developed among the key actors. The entrepreneurial ecosystem depends on different pillars which is fundamental to establishing businesses in the country. Thus, in terms of attitude, identifying and responding to opportunity aspects and risk acceptance are considered as the main factors that impact the business environment. Moreover, cultural support is considered as another important factor of the entrepreneurial ecosystem in Oman for the growth of the business environment. Therefore, the policymakers should adopt the Adaptive Co-Management (ACM) lens for the business environment in the country which will help them to identify the main issue pertaining to the implementation of the leadership model for balancing the entrepreneurial ecosystem. These factors imply that working together, trusting each other and sharing ideas are core values in having a successful ACM. In this regard, an ACM within the Arab culture would be possible if the policymakers support ecosystems that encourage entrepreneurs to create new business ideas and start-ups. Simultaneously, policymakers should create linkages and opportunities for these entrepreneurs to work with other stakeholders such as investors, suppliers and clients., whilst at the same time building trust in themselves and sharing ideas that eventually contribute to the entrepreneurship process. Once these connections and networks are developed, it becomes easier to collect feedback, thus allowing for easy learning and modification through various channels. This further helps in developing an effective communication and monitoring channel which ensures that the networks are placed efficiently. Eventually, through this feedback mechanism, the entrepreneurial ecosystem would grow stronger and gain higher resilience, which is the goal of ACM.

Thus, if the Islamic leadership model is implemented in an efficient manner, it could assist in overcoming many shortcomings. This is because the leaders are effectively required to adhere to moral and social norms while making any decisions for the employees. Combined with an Islamic leadership perspective, the voice of

every person would be given prominence- which is essential in the Omani context as the policymakers often neglect the feedback of the entrepreneurs (Abbasi, Rehman and Bibi, 2010).

In concern to this, Sisodia, Awad, Alkhoja, and Sergi, (2020), outlined there is a need for strong encouragement and involvement of the government for the involvement of all stakeholders. However, in the case of Oman, the government is more inclined to support the public institutions than provide a chance to the private and emerging institutions to prosper. As a result of this, there is relatively lesser profit that these entrepreneurial institutions can attain. Furthermore, this, in turn, affects the entrepreneurs from acquiring funds from relevant investors. Stakeholders include large firms which attract talent and offer training to keep the talent up to date with changing circumstances. With the growth of skills, employees of the large firms can start their own small firms contributing to the development of the private sector. Most importantly, large organizations initiate programs and provide resources for smaller organizations. This results in new entrants in the market and the creation of a favourable entrepreneurial ecosystem for every business (Isenberg 2013). These large organizations can provide stability to the entrepreneurial ecosystem, although collaboration with all players is rather difficult.

Some of the causes of the low stakeholder engagement include poor leadership, disregard/poor implementation of proposed solutions, lack of support from the government agencies, poor communication amongst key actors, lower participation of youth and other stakeholders in the decision-making processes. The Adaptive Co-Management concept considers collaboration as an evident process for the successful management of an entrepreneurial ecosystem. The entrepreneurial ecosystem peculiarly defines the system that needs to be placed in the organization and emerges the Adaptive Co-Management (ACM) elements, this further helps in achieving the aims of the study.

### 7.2.5 Weak Systems and Policies

Madbouly (2017) explains that the culture support index is determined by how society views entrepreneurs in terms of career choice, status, and corruption level. Countries where a culture of rent-seeking and corruption is condoned, are likely to discourage entrepreneurship because corruption acts as a barrier to opportunities and it limits development. The culture support index has been fluctuating over the last five years. In 2012 and 2013, the culture support index remained 0.57 after which it dropped to 0.55 in 2014 and further to 0.40 in 2015 after which it rose to 0.50 in 2016 before dropping again to 0.47 in 2017. The culture support index of Oman is closer than the average MENA region but higher than the average world index. The Corruption Perceptions Index (CPI) is an index published annually by Berlin-based Transparency International since 1995 which ranks countries. Oman ranks 64th globally and 5th in the MENA region for Transparency International's Corruption Perception Index (Sanyal, 2005).

The problem of corruption, nepotism and, misappropriation of funds in Oman can be easily resolved through the Islamic leadership model (Plummer, 2017). Contradictory evidence exists with regard to cases of corruption in Oman. While some academicians illustrate that a high level of corruption prevails in Oman, there are others that illustrate Oman as a relatively clear and transparent legal system that is favourable for business, and there are limited cases of investment disputes in the country involving both local and foreign investors (Al-Shanfari, 2012). There have been various cases of corruption involving executives and government officials of state-owned oil companies who have been prosecuted in the past years, but these cases are not as prominent as compared to some non-Islamic countries in developing countries.

In the entrepreneurial ecosystem of Oman, there is another aspect that impacts on the culture and management in the country, which is Islamic leadership. Empirical evidence suggests that the entrepreneurs who adopt Islamic leadership in the organisations of Oman, the powers and authorities are given to the leaders for better guidance and good intention. However, it might create an issue as culture is a big factor when adopting Islamic entrepreneurial leadership in the country. as it would

give the authorities directly to the leaders which they can misuse due to different cultures and understanding in the country. Therefore, in the entrepreneurial ecosystem it is observed that the culture and management is impacted by the norms of Islamic leadership in operating business. As a result, this provides the authorities directly to the leaders which was left for a long time. The positions were not given to the people because they used to think that if the position of leaders is provided, there are many chances of adopting different cultures. Analysing this issue of Islamic leadership, it becomes easy to understand why corruption has been less in Oman. This is mainly because Oman is a country where the majority of the population is Muslim, thus making Islamic values incorporated in the business culture. Islamic values prohibit rent-seeking practices such as corruption and nepotism. This shows that the implementation of the Islamic leadership model in the Oman entrepreneurial ecosystem would greatly minimise or even eliminate the identified cases of corruption. In Oman, there are various institutions which promote Islamic leadership and positively influence culture and management in maintaining a functional business environment.

Government policies, the institutional structure, leadership models and the economic condition of the country are considered as the pillars for establishing the businesses in the country. Therefore, the rise of the business and the Islamic leadership model helps in identifying the traits of the leaders in the business and the impact on the business as the policies are followed by the people in the business. This directly impacts on the culture which helps in maintaining the entrepreneurial ecosystem in Oman. The other major problem identified in the research was bureaucracy where most of the respondents felt that the government systems and procedures encourage inefficiency and discourage many entrepreneurs. Moreover, the education system in Oman also contributes to the general lack of encouragement.

#### 7.2.6 Markets

Prior research illustrates that there is lack of access to markets which is one of the major challenges faced by entrepreneurs in Oman and the larger Middle East and North Africa (MENA) regions (Liden, et al., 2014). Another major challenge identified

in research is the lack of access to market for their products – a highly discussed challenge by the interviewees, with the majority of the respondents voicing strongly their frustrations concerning the situation. The lack of access to markets can partially be blamed on the entrepreneurs for not developing innovative and unique products, and also partially be blamed on the government and other stakeholders for not creating the markets for entrepreneurs. On the other hand, some of the respondents argued that some of the entrepreneurs have creativity. However, they do not have access to a platform for marketing their products or the capital to implement their ideas. This is where the government and other stakeholders should come in the picture for creating a favourable environment for the entrepreneurs to access the capital needed as well as platforms to market their goods. There are currently existing programs that entrepreneurs in Oman can use to increase access to the market. However, they are not enough, and some of these programs were described by the interviewees as inefficient.

The other sources of the problem of the market cited incorporated the weak domestic and regional markets where the interviewees noted that both the local and regional markets are not competitive enough in comparison to the global markets. It is another cultural antecedent which points towards historical issues, based on the strong public sector restricting the growth of private markets.

### 7.3 Part B: Factors fostering Omani entrepreneurial activity

#### 7.3.1 Institutions and Networks

One of the strengths of the Omani ecosystem that was identified by the interviewees was the existing synergies that encourage networking and connectivity. Even though mentorship and networking were identified as challenges, the interviewees seemed to also appreciate the existing initiatives that support the ecosystem.

Therefore, it can be said that the entrepreneurs in the country should consider the technological factors as those can significantly help towards the development of the businesses in Oman. However, there are different factors such as the skills,

educational programs and the legal support which is required for the technological development in entrepreneurship. The recent trends in terms of technology and processes of administration enable entrepreneurs to identify the opportunities and challenges of the market. This creates further scope for the businesses to expand and assess the competition in the market through technology.

### 7.3.2 Support

Various existing programs and systems that support the ecosystem can be also identified and referred to as the strength of the Oman ecosystem. The interviewees reported that since the beginning of 2016, access had been granted to apply for land. This was applauded as a milestone because it would help entrepreneurs, especially those engaged in agriculture, own land. The product innovation channels, such as the exhibitions by the Chamber of Commerce, were also cited as examples of existing support systems which helped entrepreneurs bring success in their ventures. Several organisations and institutions supporting entrepreneurial initiatives were also mentioned and considered for future planning.

From the past literature, one of the studies explains about why the human resources factor is an enabler of the entrepreneurial ecosystem in Oman. According to Zoltán (2017), the human capital index in Oman has also risen from 0.62 in 2012 to 0.71 in 2017 even though it reached highs of 0.76 in 2014 and in 2016 with fluctuation to 0.64 in 2015. The key contributing factor to this improvement is the labour laws reforms specifically laws preventing layoffs, regulations on minimum wage, reduction of working hours per week and other related labour and taxation laws that have been enacted over the years (Zoltán, 2017). Another contributing factor was improvement in human capital, many improvements were made in the education and training sector, because a country's human capital actually reflects the education sector.

The government has also been credited, to some extent, for their effort in contributing to the ecosystem. Various initiatives implemented by the government have been mentioned in the conversation with interview participants. The recurring pattern in the participants' responses is that the Sultanate of Oman has come up with

some initiatives that, if implemented properly, could lead to a boost in the ecosystem. Regardless of these efforts, the lack of proper systems and policies has reduced these initiatives into 'just another There are different aspects of ACM, IL, IT which are used to continue with the further discussion.

#### 7.4 Part C: Solutions to Improve the Omani entrepreneurial ecosystem

The current study outlined the shortcomings and the qualities of various entrepreneurial ecosystems (EE) that can be integrated together for shaping a viable administration of the entrepreneurial ecosystem. Adaptive co-management can be accomplished through the combination of these two frameworks through learning and by performing such operations on a regular basis. The framework provides an international opportunity wherein the executives involved are from different disciplines, and different cultures. Thus, these executives can assist each other in varied ways and learn from one another in turn. Thereby, cultivate advancements. For this situation, both the Islamic and the Western EE administration models are required. Powers and relations between two organizations can be developed only with the help of data sharing, sharing power, sharing dynamic, and legitimate correspondence. The major administration power lies with the Islamic authority and Arabic culture settings. These managements are developed with the help of various people and are also developed by adding the monetary framework with the predefined rules and the standards. The ideas provided by the team members of the organizations consisting of various departments like financial specialists, organizations, pioneers and more help in making the process more productive. The pioneers of Oman have developed social help towards people and that is raised to the medium level and is still growing. The shortcomings revealed through the interviews in the Omani entrepreneurial ecosystem depict that there is a dire need for collaboration of partners and critical actors towards upgrading the mindfulness of business. Thus, guidelines should be laid for the Omani students for perceiving advanced education programs in sciences and business specialization. Further, business mindfulness must be developed for the Oman populace through the media foundations. It is also recommended through the interviews that there must be an

improvement in the degree of innovation status for Oman adventures. Moreover, pertinent efforts should be taken to decrease the high market syndication and strength in Oman. Efforts should also be made to improve the innovation in Omani firms, expand the public authority spending on R&D, and expand the enrolment and accessibility of academicians and researchers. Further, inquiries were made to accentuate whether the Islamic initiative model's usage can deliver strategic solutions for these difficulties and upgrade the exhibition of the EEs in Oman.

The achievement of the Entrepreneurship ecosystem (EE) in Oman, how the Islamic model's weaknesses can be abated by the qualities of other EE administration models. For instance, Islamic Models can follow qualities utilized in cutting edge Western nations. Adaptive co-management, as set up until now or until further decision, mixes adaptive and synergistic behaviours towards. It is critical to see how adaptive co-management and the Islamic authority model can be successfully applied in the administration of enterprising environments inside the Arabic culture.

The examination of ACM in the Islamic authority and Arabic culture was significant due to the interrelation between the two, and the significant similarities that could go far in improving EE management in Oman. It has been directed through the literature that one of the foundations for adaptive co-management is an empowering climate through guidelines and standards (institutional plans), strategies, authority, and enactment. It implies that it is imperative to comprehend the way of life and the authority style of an enterprising biological system before using the ACM. For accomplishing ACM, it is essential to cooperate, confide in one another, and share thoughts that are fundamental beliefs.

Additionally, the idea of initiative in Islam depends on trust and collaboration between the pioneers and their supporters. This accentuates that each group should have a clear mental view concerning the honest efforts they should make for attaining a relevant change. Similarly, trust and generosity are a significant part of the guiding principles of Arabic culture. The investigation found that Oman's enterprising environment has stability in Opportunity Perception, Networking, Human Capital, Opportunity Start-up, Internationalization, High Growth, Risk Acceptance, and Risk

Capital and shortcomings in Start-up Skills, Process Innovation, Absorption, Product Innovation and Competition.

#### 7.4.1 Law reforms and intervention

Findings reflected that the participation of the government should be increased and must be followed-up. This finding emerged when many respondents emphasized the need for more involvement of the various stakeholders in the policy and decision-making processes. There were also calls for the government and other stakeholders to increase opportunities for entrepreneurs to build networks. The findings reveal that the government of Oman follows a top to bottom approach in most of the cases while taking policy measures, thus failing to consider the views of other stakeholders. The study also stressed through its findings that the SMEs laws were not so friendly. This led to a call for legislation of SMEs laws as well as the implementation of some of the existing policies that were passed but have not yet been implemented.

This included investment laws, copyright laws and labour laws, among others. There were also some respondents who recommended that policymakers should implement financial laws for increasing access to financial instruments. While others suggested that there is a dire need to restructure the Omani banking system

#### 7.4.2 Education

The Adaptive Co-Management concept argues that learning institutions play a major role in determining the success of entrepreneurial ecosystems. This argument is in line with the Islamic leadership model which asserts the need for education, as this could benefit economically an individual and his/her family. These institutions act as research hubs besides producing educated individuals who participate in the growth of the ecosystem. Moreover, the entrepreneurial ecosystems benefit from intellectual capacity from university graduates (Feld, 2012). The importance of education was emphasised during the interviews, and this included calls for training programs from organisations. For this purpose, there was a need that universities and colleges offer entrepreneurship training as well as calls to change the education

system. Many respondents felt that the current education system in Oman does not inspire entrepreneurship.

The respondents also highlighted that there is a need for involvement of successful role models at the local level, as this would inspire entrepreneurship. Successful stories and role models are important in an entrepreneurial ecosystem because they not only inspire entrepreneurs but also contribute in knowledge sharing and paradigm-shifting activities. In the MENA region, leading entrepreneurs such as Naguib Sawiris of Orascom, Ronaldo Mouchawar of Souq.com, Khazen Baz of Nabbesh.com and Fadi Ghandour of Aramex among others, are good examples of role models. In Oman, some successful entrepreneurs such as Hind Bahwan of Bahwan Tours and Bahwan Cyber Tek and Qais al Khonji of Qais United Enterprises Trading and Genesis International are considered as good role models.

#### 7.4.3 Stakeholder Engagement:

One of the key shortcomings of Oman ecosystem was the low stakeholder engagement. In their mapping of Oman's entrepreneurial ecosystem, Eddin and Thomas (2017) found that the entrepreneurial ecosystem of Oman is in its infancy stage and underdeveloped and that institutions that support the development of the entrepreneurial ecosystem in Oman are still under development. The study recommended that there should be a stakeholder engagement citing it as an effective intervention that encourages opportunity entrepreneurship.

Mentorship is very useful in the transmission of knowledge such as the knowledge about the challenges that an entrepreneur might face in scaling up their business. Moreover, mentorship is also required for gaining knowledge about designing business plans and pitching ideas to the investors. In addition to this, mentorship can help in acquiring knowledge on how to work with other stakeholders such as clients and suppliers, etc. Due to this distinguishing feature of the entrepreneurial ecosystem, the aspect of networking and mentorship between entrepreneurs and other stakeholders is important. Moreover, it becomes very critical in sharing entrepreneurial knowledge within an ecosystem (Feldman and Zoller 2014).

The adaptive co-management (ACM) concept would help in creating an understanding of how networking and other activities that entrepreneurs engage among themselves or with other stakeholders that will contribute to knowledge creation and learning over time.

ACM offers multi-scale with regard to spatial scope and it focuses on including and improving the capacity of all actors that leads to stake for better management of available resources. This makes ACM more applicable in understanding and studying the entrepreneurial ecosystem. ACM is applicable in an entrepreneurial ecosystem because it encourages connectivity amongst the actors and the allocation of resources. The Adaptive Co-Management (ACM) model is the process of building an environment where there exists a strong linkage between the shared learning actors and government. The components of the adaptive co-management (ACM) are the ecological, relation establishing and the learning outcomes. Moreover, this helps in improving capacity, collaboration and adaptation also involving the actors like stakeholders, community, governance etc. The stakeholder's relation with the adaptive co-management (ACM) is the deliberate collaboration between learning and actions in livelihood as well as governance and network connection. The organisational level and the adaptive co-management is the varying process adapted through the complex frameworks.

#### 7.4.4 Culture

Isenberg (2011) highlights culture as an important factor in the success of an entrepreneurial ecosystem. A community that is keen to grow its entrepreneurial environment must be characterized by an attitude of inclusiveness and willingness to share information and knowledge. Such a community must have a positive attitude towards entrepreneurs and entrepreneurship. This positive attitude enables the community and the entrepreneurs to continue the business even after attaining failure. The failure provides an opportunity to learn from oneself as well as from experienced or successful entrepreneurs that belong to other companies or regions (Feld Burke, 2012).

Anti-entrepreneurial culture and attitudes were outlined as some of the major challenges faced in the Oman ecosystem. Some of the respondents recommended the change of various perceptions and cultural outlooks. The findings showed that one of the problems in Oman is the mentality amongst most youth that government jobs offer better career prospects than being an entrepreneur. ACM can be stated to be an approach that concentrates on learning-by-doing, occurs over the medium-to-long term timeframes through cycles of learning and adaptation, and focuses on the capacity, relationships and requirements of managers. Plummer et al. (2012) add that ACM creates vertical institutional links, which is likely to yield snapshots with short-to-medium timeframes, links the local and the government level, and puts emphasis on the communities and resource users' capacity.

## Chapter 8: Conclusion and Contributions of the Study

### 8.1 Introduction

From the above analysis and discussion, it can be stated that the study adopted a Grounded theory approach that aimed at collecting qualitative data for attaining its pre-defined objectives. The prominent aim of the current study was to propose the implementation of Islamic leadership model and adaptive co-management model in the entrepreneurial ecosystem in Oman. The Sultanate of Oman has various views on the management of the small and large enterprises which depend on specific leadership styles. This study relied only on the qualitative data collected from the 36 interviews while the statistical data was analysed and shared with concerned stakeholders for their reference and it is provided in the annexure. The entrepreneurial ecosystem is the most vital factor for the growth of the newly emerging businesses. The responses were obtained from Omani professionals and entrepreneurs who are actively engaged in entrepreneurial activities in the country. The data acquired helped in accomplishing the aims of the study and thereby, reaching relevant conclusions that expose the underlying issues. The analysis of the existing literature on the subject matter contributed immensely to the selection and design of the research methods and principles that are appropriate for the study. The methods used in gathering and analysing data assisted in outlining the reasons and justification for their choice preferred for the study.

Al-Balushi and Anderson, (2017) in their study aimed at examining formal institutions encourage local enterprise. For this purpose, the study acquired information from local entrepreneurs concerning the perspectives held by them pertaining to the effectiveness of government policies. The findings of the study depicted the prevailing industrial and commercial structure was insufficient to provide employability to the youth in Oman. further, the study included the details of how the government has helped entrepreneurs by developing modern formal institutions. Moreover, the government even supported them to conduct local entrepreneurship. Nonetheless, the study emphasized the need to accentuate empirical information

concerning how the entrepreneurial ecosystem policies are formulated and implemented in Oman.

- ***How are the entrepreneurial ecosystem policies formulated and implemented in Oman?***

Bilal and Al Mqbali, (2015) in their study aimed at outlining the challenges and constraints encountered by SMEs in Al Batinah Governorate of Oman. Further, a study by Autio and Levie, (2017) aimed at exploring the various challenges in an ecosystems approach to entrepreneurship policy presents for policy analysis and management. This paper has provided conceptual grounding to understand entrepreneurial ecosystems, elaborated resulting challenges for entrepreneurship policy, derived principles of successful management of entrepreneurial ecosystems and highlighted these using rich case data from Scotland.

Similarly, Stam, (2015) focused on reviewing the existing works of literature pertaining to a causal scheme of how the framework and systemic conditions of the ecosystem lead to particular entrepreneurial activities as the output of the ecosystem. Moreover, how it can help in value creation as an outcome of the ecosystem. In addition, it provides a framework for analyzing the interactions between the elements within the ecosystem.

Sussan and Acs, (2017) in their study aimed at developing a conceptual framework pertaining to the situation of entrepreneurship research within the digital economy, promoting the use of other business sub-disciplines within entrepreneurial research, broadening entrepreneurial ecosystem research to another more established ecosystem research—digital ecosystem, elevating digital entrepreneurs as the centre of the digital economy, and integrating a consumer and user-centric approach and extending the elements of institution-agency into a triangle of institution-agency consumer (user) in the entrepreneurial ecosystem.

Galan-Muros et al., (2017) in their study this paper identified and evaluated the mechanisms that European Higher Education Institutions (HEIs) are using to nurture industry collaboration at a strategic and operational level and assess their relationship with seven UBC activities. Therefore, the main results of the paper highlight the importance of the combination of support at both strategic and operational levels and the core role of the management committee for all UBC activities. Thus, this paper concludes with the contribution to the theory and the relevant implications for UBC managers and policymakers.

- ***What are the challenges to the effective management of entrepreneurial ecosystems in Oman?***

Ennis, (2015) in their study focused on two major themes. Firstly, he aimed at recognizing the central motivators of adopting entrepreneurship with regard to the Gulf policy agenda. Secondly, he aimed at assessing the emerging entrepreneurship ecosystems and the record of SME support in Oman and Qatar. In addition, Neneh (2012) explained in his study “the successful future strategists will exploit an entrepreneurial mindset and the ability or capabilities to rapidly sense, act, and mobilize, even under uncertain conditions.”

- ***Which approaches can be effectively used in the management of entrepreneurial ecosystems in Oman?***

The primary purpose of this study was to explore how entrepreneurial ecosystems are managed. In order to achieve this study purpose, the following research question was explored. The research gaps were identified in various literature reviews, this research question was general, and in order to address it further, the following sub-research questions were explored. Based on the gaps and limitations of the studies identified, various research questions were developed pertaining to the management of an entrepreneurial ecosystem. Therefore, the current study is aimed to understand the integration of Adaptive Co-Management (ACM) and Islamic leadership management. The rich literature reviewed was mainly concerned with the identification of the policy-related challenges in the challenges in

the management of entrepreneurial ecosystems (Dissanayake et al., 2017; Stam, 2015; Kawamorita Kesim et al., 2016; Galan-Muros et al., 2017). There were some other studies that were strategically directed towards identifying the challenges that hinder the effective management of entrepreneurial ecosystems in Oman (Bilal and Al Mqbali, 2015; Autio and Levie, 2017; Stam, 2015; Sussan and Acs, 2017; Galán-Muros et al., 2017). Moreover, there were other studies that specifically aimed at examining the approaches that can be effectively used in the management of entrepreneurial ecosystems in Oman (Ennis, 2015; Neneh, 2012; Tappeh and Ghorbaninia, 2015; Straub et al., 2002). Based on the above studies, it can be argued that there is a lack of empirical research concerning the effective management of the complex socio-economic and socio-ecological structures of an entrepreneurial ecosystem. As a result, the current study aimed at outlining how Adaptive Co-Management (ACM) theory and the Islamic Leadership Model can be used to respond to the identified gaps in the entrepreneurial ecosystem management. The Islamic leadership model further extends the discussion on the role of culture and religion, on the management of entrepreneurial ecosystems (Ramadani et al., 2017). Lastly, the adaptive co-management helps in gaining knowledge pertaining to the dynamics and governance systems that can be effectively implemented for the management of the entrepreneurial ecosystems (Plummer et al., 2012; Fabricius and Currie, 2015; Olsson et al., 2010).

## 8.2 Summary of the Key Findings of the study

From a methodological perspective, the study adopted a qualitative approach based in line with a grounded theory. The qualitative data were collected using face-to-face semi-structured interviews with 36 key respondents. Out of these 36 respondents, 18 were entrepreneurs and 18 were key industrial experts that were engaged in different areas of specialisation within the Oman entrepreneurial ecosystem. The interviews were conducted in the Arabic language, after which they were transcribed and translated to English. The qualitative data obtained was transcribed, coded using open, selective and theoretical coding paradigms of the Glaserian grounded theory. Further, it was analysed qualitatively using the NVivo data analysis software.

The findings of the qualitative study identified the main challenges and successes of the effective management of the Entrepreneurial Ecosystem. They also helped in outlining the real opportunities that can be utilised to enhance the effectiveness of EE management areas of the ecosystem. Further, various challenges like low stakeholder engagement, experience/knowledge and skills, institutions, systems and policies, attitudes and culture, markets and capital/financial challenges were identified for developing the effective management of Entrepreneurial Ecosystem. The availability of support systems and the networking/connectivity opportunities were identified as some of the existing factors that contribute to the efficiency in the management of an entrepreneurial ecosystem. In order to enhance the efficiency of EE, the respondents suggested changes in the form of law reforms and increased government inventions, investment for providing education and training, increased stakeholder engagement and more focus on enhancing the culture.

Due to the prevalence of incitement in business ventures, there is a dire need for the creation of an ethical entrepreneurial ecosystem. Various determinants of the business help in growing both at the Macroeconomics and microeconomics levels. The initial step involves evaluation of the current enterprising ecosystem for analyzing the possible difficulties in the same. The research in the entrepreneurial ecosystem has received special recognition from the specialists as well as analysts or individuals that work within or with the organizations. This has strategically led to the creation of numerous appraisal methodologies. Some of these methodologies are more elaborative and thereby, accentuate enormous numbers of individual pointers. While on the other hand, some methodologies have greater applicability and spot the key areas essential for the ecosystem.

The findings shed light on the pillars of support systems, institutions and networks, government policies and government programs. It showcased that although the governmental policies were in alignment with the needs of the entrepreneurs, however, the entrepreneurial ecosystem of Oman lacked in many terms. These included lack of social entrepreneurship, education and training, commercial &

services infrastructure, market openness and implementation mechanisms. The weak implementation mechanisms indicated that the real problem in Oman is not the lack of systems, policies or programs, but rather, the bureaucracy and the poor implementation of those policies. The key stakeholders involved in each pillar of entrepreneurship was also identified.

### 8.3 Evidence concerning the research questions

#### 8.3.1 Formulation and implementation processes of EE in Oman

The first research question from the gap identified concerning how the entrepreneurial ecosystems of Oman are managed. Based on this gap, the first research question was formulated as:

***“How are the entrepreneurial ecosystem policies formulated and implemented in Oman?”***

The study has uncovered supporting evidence that can describe how entrepreneurial ecosystems of Oman are managed. The findings show that the government of Oman tends to apply the top-bottom approach in their policymaking processes. As a result, in most cases, it does not take into account the views of the other stakeholders. This acts as the rationale behind the mixed responses acquired from the participants pertaining to the policies of the government. While on the one hand, it was found that the entrepreneurs perceived that the government was inefficient in terms of policy making and program implementation. On the other hand, the policymakers perceived that the Omani government had implemented sufficient policies and programs that are essential to support the entrepreneurs. Moreover, the entrepreneurs felt that their views and concerns were neglected while taking decisions pertaining to policy-making. Consequently, the policymakers believed that the entrepreneurs and other key stakeholders had been involved and unitedly decided policies.

The top-bottom approach is described as an ineffective process of addressing systematic and complex problems of the management of entrepreneurial ecosystems

(Audretsch, 2011). The top-bottom approach of policy making is very useful in addressing the specific non-complex structural and market issues like offering subsidised funding for new ventures or improving entrepreneurs' approach to research and development facilities (Galán-Muros *et al.*, 2017; Blackburn and Schaper, 2012). However, several studies based on the entrepreneurial ecosystem describes that the top-bottom policy approach has proven to be ineffective. This helps in addressing problems addressing complex issues in a systematic way such as the management of entrepreneurial ecosystems (Dissanayake *et al.*, 2017; Stam, 2015; Kawamorita Kesim *et al.*, 2016; Galán-Muros *et al.*, 2017).

It was found that there is inadequate knowledge when it comes to the understanding of the entrepreneurial process in Oman. This was because there are fewer skills and experience when among the people which increases their chances of failing in the entrepreneurial activity. The entrepreneurs in Oman do not have the access to mentorship programs as they can help develop their skills. Moreover, they were able to find that there is a lack of human capital resources who are well certified to conduct such activities. The banks also provide finances to the companies who are having a larger number of employees, even the Government support requires you to be a full-time entrepreneur, requires certain conditions. These conditions make it difficult for entrepreneurs to raise money for completing their projects. Further, it was found that the mindset and the culture of the people are such that it does not support the spread of entrepreneurship culture. The trust among the top-level leadership and the young entrepreneurs is very fragile. This pushes the enterprise to change its culture completely so that it can support the ideology and beliefs of these leaders, which can be detrimental to the growth and identification of the organization. Further, stakeholder involvement is an important aspect for any enterprise to grow as it makes them involved in the community and work towards the betterment of them, but in Oman, this is seen as a challenge as their stakeholder involvement is very low. Moreover, it was also noticed that there is an inadequacy of a proper system that supports the entrepreneurial ecosystem. There must be the establishment of the proper policies and systems like business parks where the entrepreneurs can get all the help and everything is made available to them in one place which reduces the

problem of not having enough connectivity. Then there must be the implementation of policies that are friendly to the growth of enterprises. Redundant judiciary policies create problems for the growth of enterprises as it becomes time-consuming. Further, it was also found that the establishment of institutions and networks can help provide training for up-gradation of their skills and better reach to other players in the market. It was also discussed that having proper support in the financial sense can be helpful for the entrepreneurs to excel in their field, Big national companies and companies with large foreign financial investments have a real role here in supporting entrepreneurs. It was also discussed that better reforms should be brought in the field of law and interventions, educational system for the budding entrepreneurs, engagement among the stakeholders and developing a culture of supporting the entrepreneurs and their contribution.

### 8.3.2 Challenges to the effective management of EE in Oman

To understand how the entrepreneurial ecosystems are managed in Oman, the second sub-research question was framed as:

***“What are the challenges to the effective management of entrepreneurial ecosystems in Oman?”***

There are various challenges when it comes to EE in Oman like having properly skilled, experienced entrepreneurs, having adequate human capital and finances to continue the business process, developing the culture of the people in the organization, the engagement among the stakeholders is usually low which is detrimental to the companies, the policies and the systems created for the development of entrepreneurs is fragile along with its policies and the market is not very supportive of new enterprises.

The main challenges to the effective management of the entrepreneurial ecosystem in Oman were identified as lack of skills, knowledge and experience, weak institutions, systems and policies, lack of capital and financing, negative attitudes and unsupportive culture, inaccessibility to markets and low stakeholder engagement. Entrepreneurial ecosystems are complex socioeconomic structures that are

embedded in multifaceted interactions between organisational and individual stakeholders that constitute the ecosystem (Spigel, 2015). Moreover, this helps in representing an institutional and dynamic embedded interaction that takes place between entrepreneurial ability, attitudes and aspiration” (Acs *et al.*, 2014).

The features of entrepreneurial ecosystems are complex in nature which implies that EE cannot be effectively managed using the conventional top-bottom approaches as suggested by previous studies (Dissanayake *et al.*, 2017; Stam, 2015; Kawamorita Kesim *et al.*, 2016; Galán-Muros *et al.*, 2017). In this regard, this study concludes that the use of a top-bottom approach to entrepreneurial policy and decision-making is ineffective. As a result, it can be stated that there is a need to outline an alternative approach for the effective management of the EE system in Oman.

### 8.3.3 Approaches to the effective management of EE in Oman

The third sub-research question to the exploration of how entrepreneurial ecosystems are managed was:

***“Which approaches can be effectively used in the management of entrepreneurial ecosystems in Oman?”***

To answer this question, this study formulated a theoretical framework that can assist in effectively resolving the identified challenges. From the perspective of the theoretical framework, the Islamic leadership model was recognized as one of the key alternative approaches that can be implemented for overcoming the challenges identified in EE.

The Islamic leadership approach can support the application of a bottom-top approach to entrepreneurial ecosystem policymaking. This study has identified that the top-bottom approach applied in the decision-making process is ineffective. Thus, the alternative to the top-bottom approach is the bottom-top approach. This approach is facilitated by the Islamic leadership model as can help in eliminating the socio-cultural practice of seeking the endorsement from the leaders (Tappeh and

Ghorbaninia, 2015). The reason why the Islamic leadership model is essential in supporting bottom-top approach is that it encourages leaders not to put their interests first, but rather, do good deeds for the sake of Allah, the Muslim community and the humanity/entire community (ummah) through the propagation of all that is good (Ali, 2009). The Islamic leadership model stipulates that particular considerations, such as community engagement and contributions, should be prioritised when formulating policies relating to the management of EE (Itani et al., 2011).

The Islamic leadership model is considered and implemented to deal with the challenge of low stakeholder engagement, unsupportive culture and negative attitudes. The rich literature of various studies informs that cultural belief and personal interests totally impact the ability of political leaders. This helps in developing the relevant policies with the intent of ensuring the entrepreneurial ecosystem is suitable for the creation of new businesses and the improvement of existing businesses (Khalil and Olafsen 2010).

However, if the Islamic principles of inclusiveness are applied, these inadequacies in making policies can be reduced, and the right policies can be implemented for enabling the potential entrepreneurs for performing their entrepreneurial duties in an effective manner (Bruton, Ahlstrom and Li 2010). In the formulation of policies about entrepreneurial ecosystems policies, leaders should not be allowed to make decisions based on their positions (Mohammed et al., 2011). Instead, the contributions to the policies should be made from various stakeholders such as entrepreneurs, several professionals who understand the entrepreneurial environment and several leaders whose contributions are all incorporated into the new entrepreneurial policies (Day and Harrison 2007). Islamic leadership model can lead to the formulation of policies affecting entrepreneurship and the right decisions will be made to create a suitable environment for the operation of business enterprises (Pinillos and Reyes 2011). This model is essential and can be of strategic value for creating entrepreneurial policies as it entrusts the leaders with skills of being inclusive in the decisions they make about entrepreneurial ecosystems (Stel 2013). As

there are difficulties and lack of influential factors that motivate the entrepreneurs to establish their business and add economic benefits to the country. The educational infrastructure and the lack of exposure give fewer opportunities to the entrepreneurs to excel their talent by establishing the business in the country. Moreover, the political aspect of the Omani government impacts the entrepreneurship of the country as it has many policies and legislation that are not instrumental in encouraging entrepreneurship in Oman. However, in Oman, there is a lot of scope and opportunities available for the entrepreneurs to establish a business in the country. This will also contribute to the country's economy in turn. Moreover, the businesses would also be able to generate job opportunities and provide employability for the young talents of the country. Henceforth, the Islamic leadership model has been appropriately implemented in the business as it provides an in-depth view and how the culture of the country impacted the entrepreneurial ecosystem in Oman.

The key themes of the adaptive co-management are also applicable in the formulation of a conceptual framework for managing entrepreneurial ecosystems in Oman. These key themes include complex thinking systems; adaptive capacity and resilience; learning, knowledge and social capital; institutional designs; conditions of success and failure; partnerships and power-sharing; and lastly, policy implications (Armitage et al., 2007).

The Adaptive Co-Management Model (ACM) enables in analyzing the role of the managers in managing the factors as well as outlining the impact on the management in the entrepreneurial ecosystem. Therefore, the current study has adapted two themes in the context of the entrepreneurial ecosystem in Oman: the Islamic leadership model and adaptive co-management model. The study is governed by two key factors that are culture and management as they have created a major impact on entrepreneurship. Thus, there is a need to change the culture and management policies which impact entrepreneurship in the country. It is majorly observed that entrepreneurship gets impacted due to the change in the culture. Hence, Omani culture and specific leadership model motivates and allows various entrepreneurs to establish business and create opportunities for future growth.

Additionally, the Adaptive Co-Management Model (ACM) helps in developing the business environment for the management of the organizations. It helps in implementing strategies to abide by the policies and rules that are beneficial for the business and for the future growth of the country. The combination of these critical themes pertaining to adaptive co-management to the main theoretical stipulations of Islamic leadership model can be further conceptualized to formulate a theory for entrepreneurial management. While the Islamic leadership model is conducive to deal with most of the main challenges identified, the study proposes the development of a stronger framework for the effective management of the entrepreneurial ecosystem. This would require to combine the Islamic leadership model with the adaptive co-management concept. The adaptive co-management ACM mainly emphasizes the concepts of learning-by-doing, relationships and the capacity of the communities and resource users (Olsson et al., 2004). In order to have a productive and well-functioning entrepreneurial ecosystem, it is essential to have learning and entrepreneurial knowledge channels as well as collaboration and networking among key stakeholders such as mentors, investors, government agencies and entrepreneurs (Folke et al., 2005). The lack of knowledge, skills and experience was identified as a critical obstacle to the effective management of an entrepreneurial ecosystem. Thus, adopting the ACM concept in the management of the entrepreneurial ecosystem would strategically mitigate by better learning and knowledge sharing systems as well as proper usage of resources, connectivity and networking.

Risk acknowledgement is considered as one of the qualities that prevail in the Omani business environment. Additionally, the GEI (Global Employment Initiative) risk was acknowledged and it was recorded that the development rate is estimated to 14% overall from 2012 to 2017. Moreover, this reflects that there is a lower level of business limitations in Oman and less scope for the entrepreneurs to start their business. As it is noticed that there are no capital or trade controlling systems in Oman. as this does not keep a substance change over nearby money into cash and moving assets to loan found outside. Besides this, it is found the danger arrangement for Oman is at a lower level. Even though the systems administration market in Oman drastically declined from 2015 to 2017, this decrease can adhere to the inaccessibility

of information about the business framework's nature in Oman. By breaking down the individual information of urbanization in Oman, the systems administration level is high and stable, this reflects that Omani administrations become more significant as more individuals start living and working in the focal zone. Start-up opportunities are one of the significant features which are solely due to the level of administration in Oman. All the sub-lists of administration for Oman are solid for 2015. The most grounded sub-list prioritizes Political Stability, followed by Regulatory Quality, Rule of Law, Control of Corruption, and lastly, Government Effectiveness.

Basically, for management of better EE in Oman the government can introduce friendly policies which can be helpful in the growth of enterprises, a; long with the introduction of the better education system which includes training them and providing them with enough skills to function their establishment. Further, the government can work towards building a culture among people so that they can be supportive of the entrepreneurial culture and this can help in increasing the engagement of stakeholders.

#### 8.3.4 Conceptual framework on the management of entrepreneurial ecosystems

The conceptual framework for the effective management of the entrepreneurial ecosystem was developed based on the challenges identified in line with the theoretical stipulations of the Islamic leadership model and the Adaptive Co-Management Model (ACM) concepts. *Figures 26 to 27 illustrate the interconnected nature of the concepts and their principles.*



Figure 26 Concepts for the management of EE in an Arabic culture

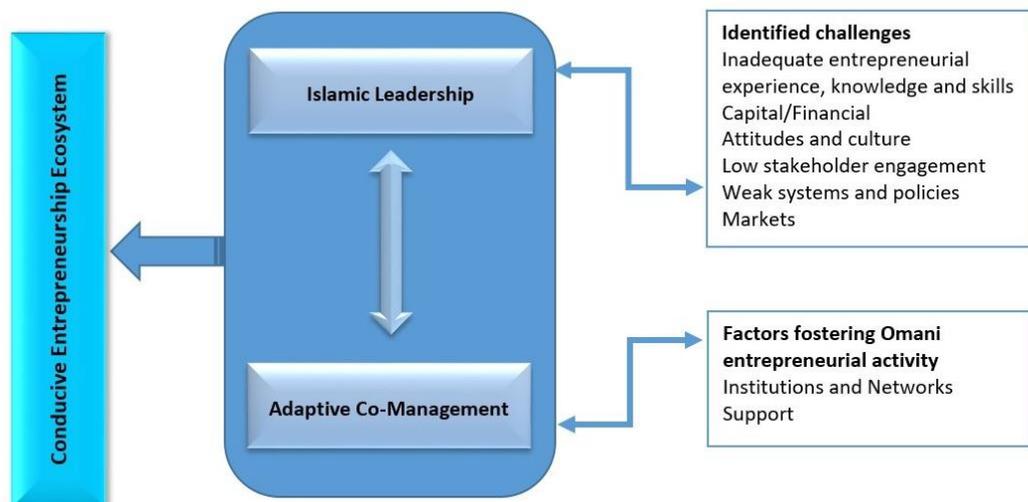


Figure 27 EE in Arabic culture in the context of ACM and ILM

The application of both Islamic Leadership Management (ILM) and Adaptive Co-Management (ACM), both the models, helps in emphasising the value and even enables in minimising the weaknesses of any approach considered for the EE management process. Skills development with the help of inclusion is very limited as it lacks the institutional support demanded skills. However, with the help of the Adaptive Co-Management (ACM), the Omani government informed people stating that learning does not only take place through a class setting but can happen with help

of the workplace and work experiences. The skills and knowledge can be enhanced with the help of the Adaptive Co-Management. Various institutions have also expected to develop policies based on fairness as guided by the Islam religion. The system can attain fairness only through continued engagement among all stakeholders in the policymaking process. Due to Adaptive Co-Management (ACM) engagement has become very easy. ACM not only presents an opportunity for improving decision-making processes but also creates a platform for fostering relationships. Notably, by aiming at better relationships, the institutions can use existing links to enhance participation and effective policies. From the aesthetic point of view, the continuous diversification of thinking can lead to a change in attitudes towards entrepreneurship. However, this should not only be done for the economic benefit of the country but also for building the people's capacity to grow and develop themselves. Linkages are also emphasised with the help of networking as these relationships promote learning and attitude change. The ILM acknowledges the power of active networks. ACM also emphasizes the prominent role of relationships between the stakeholders. As a result, it encourages continued communication for better relationships not only among stakeholders but also within their environments. Entrepreneurs should aim at establishing forums consisting of other stakeholders to share their experiences and evaluate progress. Finally, both ILM and ACM aim at ensuring resource distribution. This is because all resources are meant for the population. Thus, it expected from the population that it must utilize the resources in an optimal manner.

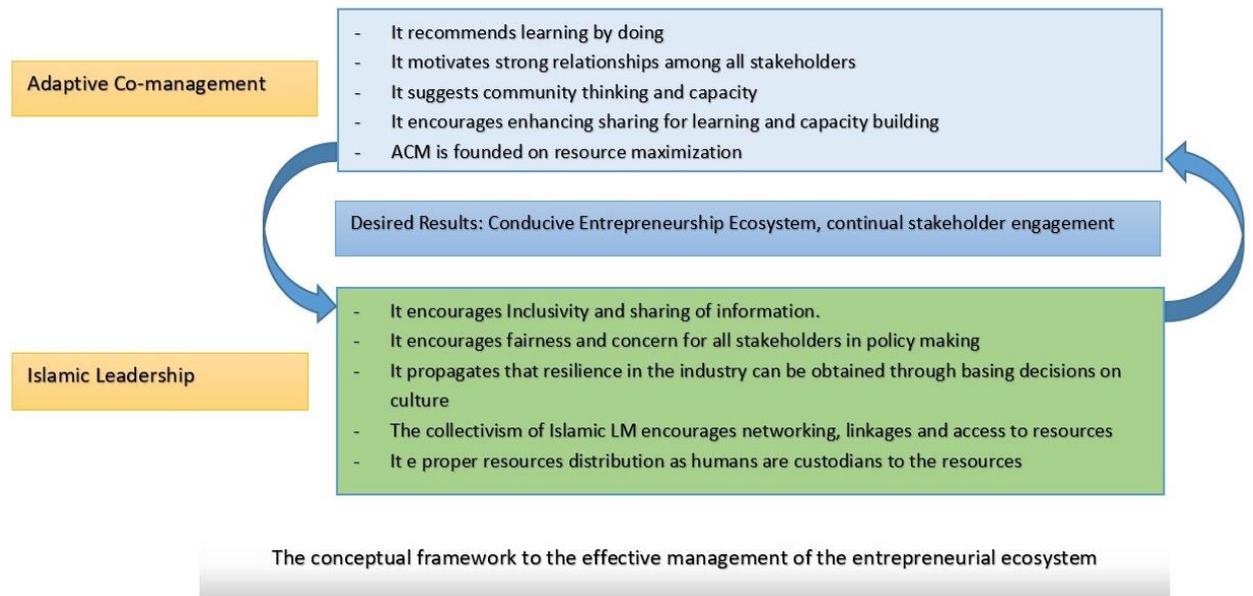


Figure 28 Effective Management of EE in Arabic culture in the context

#### 8.4 Main Conclusions

For accomplishing the goals of the current study, semi-structured interviews were conducted with 36 respondents comprising entrepreneurs, and key actors that were actively involved in Oman entrepreneurship. The main questions were developed based on the research gaps identified. Based on the developed research questions and the grounded theory approach, strategic information was acquired. It was used to enhance the researcher's comprehension of the research issue by moving from the general question to the specific issues (Strauss and Corbin, 1990). The grounded theory was implemented along with the interpretivism paradigm. Interpretivism facilitated to uncover varied ideas and issues emerging from the data that may or may not be specifically concerned with the research question. The interpretivism philosophy allows the research participants to express their opinions freely without any manipulation or direction from the researcher. This helps in maintaining the reliability and validity of the findings. Some elements are typical of an entrepreneurial ecosystem and some are non-performing elements but those are working more efficiently, but it is found that the Omani ecosystem is still finding difficult to balance. This happens because the challenges are more than the factors fostering the growth of the entrepreneurial ecosystem in Oman. More importantly, the challenges identified have a more limiting effect. The lack of entrepreneurial

knowledge and skills can have a more damaging effect than, for example, market openness. This is because, with the right knowledge and skills, entrepreneurs are more likely to create innovative products and come up with sustainable solutions that can solve the issue of lack of market openness.

The qualitative findings show that even though there are some positive factors that support the growth of the entrepreneurial ecosystem, there are even challenges that are faced by entrepreneurs in the country. Some of these challenges negatively impact the efficiency of decisive factors. The qualitative results showcase the strong pillar and entrepreneurial framework components are instrumental to manage the ecosystem more efficiently if it is combined with a group of stakeholders that support these ecosystems. In theory, an ecosystem is a natural system that is formed according to the variables. The ecosystem maintains a particular form of a balance and in most cases, one pillar or component supports the ecosystem more than the others since it is not all the components that can offer the same support because they vary in their capacity.

In most cases, when an entrepreneur designs an innovative product, the product's beauty and its unique feature itself makes it more unique. Therefore, marketing such products becomes very easy. In modern times, customers look for uniqueness and their proper usage. However, this does not mean that entrepreneurship skills and knowledge should be prioritised over the market openness component. The ecosystem must treat all the components with the same importance, and none should be sacrificed over the other. The most important part of this is to have a balance, as this part is still untouched based on the findings of this study. This implies that there are many efforts needed to be considered for creating a good balance.

It is also noted that the participation of the government must be improved and follow-ups must be considered. Moreover, respondents also channelized that there is a need to enhance the involvement of the various stakeholders in the policy and decision-making processes. Findings also illustrated the need for the government and other stakeholders to increase opportunities for entrepreneurs to grow. From the

evidence, it was found that the government of Oman follows a top to bottom approach during policy-making processes. And in the majority of the situations, it fails to undertake the views of the stakeholders. This acts as the rationale behind why there were mixed opinions among different respondents of this study pertaining to the role of government. While it was revealed that the entrepreneurs perceived that the government has been insufficient in carrying out its duties especially in terms of policy making and program implementation. On the contrary, the policymakers perceived that the government of Oman has enough policies and programs in place that support the entrepreneurs. Thus, there was a dilemma between the entrepreneur and the policymakers wherein the entrepreneurs felt that they had been left out on the policy-making and decision-making process and the policymakers felt that the entrepreneurs and other key stakeholders had been involved. The data acquired through the interviews have reflected that the government plays a vital role in entrepreneurial activity. However, it does not provide crucial solutions to the issues encountered by the entrepreneurs as it does not acquire their opinions. Involvement of the entrepreneurs and other stakeholders in the decision-making process will help to ensure that the policies implemented are in alignment to solve their issues in the most appropriate manner. This will also help in reducing the lack of ownership amongst the entrepreneurs which creates distrust amongst the various stakeholders and key actors. Additionally, it will help to ensure and maintain the stability of the entrepreneurial ecosystem.

The key stakeholders involved in each pillar of entrepreneurship were identified and the results portrayed that there has been adequate stakeholder presence in each pillar of the entrepreneurial ecosystem. However, low stakeholder engagement was identified as a significant challenge. This means that the ecosystem is underutilizing the existing stakeholders. The presence of the stakeholders would not translate to effectiveness or growth unless they are engaged. Low stakeholder engagement also reduces efficiency especially in terms of duplication. Lack of coordination between the various stakeholders will lead to instances where one organisation implements a program that is parallel to another, a scenario that would have been avoided if these stakeholders were working together. Thus, a scenario of

increased miscommunication is likely to prevail if there is no engagement of stakeholders at a better level. Another importance of stakeholder engagement is that resources are pulled together, and better ideas/initiatives are the device. This is because each stakeholder brings their input into the table and these inputs are combined into a better product.

The qualitative data obtained from the interview plays a vital role in positioning the various entrepreneurship framework components based on their presence in the ecosystem. The findings show that the support systems, institutions and networks, government policies and government programs lie on the outer part of the map. This means that these components are highly present. In the middle part of the map, the components of finance, physical infrastructure, research & development and cultural and social norms prevailed. The middle-ranked components are those that are moderately present in the ecosystem. In the innermost part, the ecosystem included social entrepreneurship, education and training, commercial and services infrastructure, market openness and implementation mechanisms. As a consequence, it can be asserted that these mechanisms are highly lacking and thereby, needs more focus from the government to maintain stability and attain balance. In the ecosystem, the generated map shows that there is a strong presence of support systems, stakeholders, policies and programs in an effective entrepreneurial ecosystem. Therefore, it is considered a good indicator. However, it is not a good indicator in the Oman ecosystem because the study found that there are weak pillars in the EE in Oman. Low stakeholder engagement and poor implementation were the two weak pillars that majorly disrupted the Entrepreneurial Ecosystem in Oman. This means that the existing programs, policies, stakeholders and support systems are not conducive to meet the desired objectives as they are neither implemented nor put into use. As a result, it would not be wrong to state that these systems are more like “decorations” that are although visible but fail to accomplish the given purpose. On the other hand, it can be stated that the policies and systems are already in place and thereby, needs only effective implementation.

From the findings of the study, the study can address the question of whether bureaucracy, poor implementation of policies and programs and the low stakeholder engagement are the factors that are holding the entrepreneurial ecosystem of Oman back. If these elements like stakeholders, policies, programs are properly implemented then the Oman entrepreneurial ecosystem would be prosperity.

### 8.5 Policy and Practical Implications

The analysis of the entrepreneurial ecosystem of Oman has presented both policy and practical importance in the current study. For instance, one of the motivations for undertaking this study was that the oil reserves in Oman have been declining and the unemployment rate is rising which requires an urgent need for economic diversification and creation of employment opportunities for the upcoming graduates. This analysis of how the entrepreneurial ecosystem in Oman is managed has identified the critical issues in the ecosystem. It has also gathered resourceful information on the existing challenges, opportunities and changes that can be adapted to achieve an effect of entrepreneurial ecosystem management in the country. This, in turn, would enhance the current socio-economic situation in the country. Explicitly, lack of capital and financing is enshrined in the resource distribution principle in which the Islamic model believes that humans are custodians to all-natural resources and thus, banking institutions must ensure that such resources are accessible to everyone. Similarly, the government should also ensure that as the public representative and oversight, the lenders are operating towards the facilitation of wealth acquisition and distribution.

Increasing negative attitudes towards entrepreneurship was also noted as a common challenge to the effective management of the Entrepreneurship Ecosystem in Oman. GEM (2018) noted that poor attitudes towards entrepreneurship are mainly associated with limited information but are experts in managing things. Subsequently, the challenges associated with the attainment of the initial goals, such as starting a venture or acquiring financial funds to start a venture will always undermine the ability to fulfil the desire to start a venture. With the help of the Islamic Model, this process can be overcome by increasing the information and also through sharing. This process

will help in developing skills and will help in building capacity through mentorship. Networking within the society can also help to improve existing perceptions about seeking loans for entrepreneurship and even starting an actual venture as a career. Nonetheless, changes in attitudes are also associated with cultural beliefs and foundations within the Omani society. Therefore, the Omani culture has to be adequately diversified, not only based on inclusion but also in ideology. While the government is encouraging a shift from oil to entrepreneurship, the efforts can only be practical if the government is also diversifying the perceptions of the residents in Oman. This is because they can be more interested in entrepreneurship as an income generation activity. A culture of resilience in business can also be enhanced by providing additional support such as training as done by Riyadh and mentorship. In fact, by incorporating a culture of mentorship, the leaders can encourage the locals to encourage themselves and their children to grow into the existing entrepreneurial culture and ventures.

This study is also significant in shedding light on the role of SMEs in Oman, which is presently neglected. However, SMEs are a valuable aspect of economic growth and poverty reduction. Studies show that SMEs equally provide employment and income generation opportunities in a country similar to their counterparts, i.e., large firms. Thus, they are quite crucial for balanced economic growth and development (Mathew, 2009; Bilal and Al Mqbali, 2015). However, within the Omani business environment, more emphasis is on the large firms while SMEs have been less supported despite their role in tapping and developing the unskilled human resources for the advancement of the economy and the society in general (Bilal and Al Mqbali, 2015). Therefore, this study was undertaken to highlight the crucial role of SMEs in the development of private sectors.

Finally, low stakeholder engagement can be improved by human resources management. As a result, every stakeholder should be allowed to be part of the human resource's management process. While the government may have to oversee the majority of the activities undertaken by all other stakeholders must influence other audiences. Further, this influence can be defined and can be said that it supports

collectivism and fairness. In the process, resources allocation will be based on the need to grow all stakeholders for better relationships and overall growth in the entrepreneurial sector. Another motivation for this study was the lack of reliable information that can be implemented to improve the entrepreneurial ecosystem in Oman. This study has indeed acquired strategic information from established and reliable sources which is instrumental for formulating appropriate policies for a better entrepreneurial ecosystem in Oman. The sources of data, specifically the informants, are the people who are actively engaged in various areas of specialisation within the Oman ecosystem, and they have provided beneficial information that can be used to make policy changes.

On a practical level, the study makes significant contributions to the development of the youth entrepreneurship capacity. Additionally, it also helps towards the formation of an Omani business model for entrepreneurship that can assist the youth in engaging in entrepreneurship activities and utilising their skills to earn a living. This study considers the prospect of entrepreneurship as an alternative form of employment for youth. Hence, it strategically analyzed the complexity of processes, government jobs, financing issues, laws and policies governing entrepreneurship, and the significance of successful stories and role model entrepreneurs in enhancing the Omani entrepreneurial ecosystem. The study also generates information that can be used to make significant policy contributions towards the development of mechanisms of enhancing entrepreneurship among youth in Oman that are collaborative and effective.

The study has identified that Oman has some programs and policies, so if these policies and programs are implemented properly then it will help in contributing to the prosperity of entrepreneurship in the country. However, these programs and policies have been marked by poor implementation and bureaucracy, making them ineffective. In this regard, the study makes a policy recommendation that the government should review its procedures, systems and the way of doing business. The qualitative findings showed that the large bureaucracies not only discourage potential

entrepreneurs from engaging in entrepreneurship but also increases the cost for the existing entrepreneurs.

One of the ways through which the bureaucracy issue can be solved is by shortening the waiting time for processing government-related cases. In some western countries like Sweden, the government has passed a bill that requires all the government offices to process cases and applications presented to them within a specific timeline. Perhaps the policymakers in Oman can adapt and implement similar laws which will ultimately benefit the economy of the country. The other way to solve the bureaucracy issue is to automatise all the government applications and procedures as well as set up online application options. This would save much time for both the applicants and the employees alike. Currently, the entrepreneurs have to get permits from different departments and ministries, which not only wastes time but also is frustrating.

The challenge of poor implementation can be resolved by initiating performance cards and reports for the government offices. One of the ways this can be executed is that all the government departments should be ISO certified. The department mandated to observe the activities of the government offices should also be empowered. Moreover, it is also essential to train the government officials for better efficiency. The other policy-related challenge was the stakeholder engagement, where the findings found that the government does not actively engage the stakeholders in the decision-making process. In this regard, this study recommends more stakeholder engagement as this would not only enhance efficiency but would also create more resources and opportunities.

The study identified the lack of knowledge and skills as one of the main challenges in the Oman ecosystem. In this regard, there is also a need for investing more funds towards research and development as well as education and skills development. In line with this, the study recommends for more entrepreneurship-related education from the primary to the higher education levels of study. There is also a need for investing in science and technology, as the number of engineers and

scientists in the country are limited. This can be done through the increase of funds towards the education sector in the upcoming budget.

#### 8.6 Academic and Theoretical Contributions to the Study

The academic and theoretical contributions of the study are highlighted in the below mentioned points:

- This study has various theoretical and practical contributions. One of the critical purposes of this study is to examine how entrepreneurial ecosystems shape entrepreneurship. Similarly, the study even explores the implications of the leadership approaches used in entrepreneurship policy and decision-making processes. In doing this, the current study has contributed to the theoretical framework on the role of the unique Arabic culture and Islamic religion in the entrepreneurial ecosystems.
- In addition, the study contributes to a variety of academic theories and models such as the Islamic leadership model and the Adaptive Co-Management Model. Moreover, the study also reviews the role culture in the success of an entrepreneurial ecosystem (Isenberg, 2011). The adaptive co-management model is useful in analysing the ecosystem dynamics and governance systems, while the Islamic leadership model is explored as an alternative approach to the effective management of entrepreneurial ecosystems within the Arabic culture.
- Besides identifying and fulfilling the identified research gaps, this study has other practical significance. For instance, it has been identified that the oil reserves in Oman have been declining and the unemployment rate is rising, citing the need for economic diversification and creation for employment opportunities for the upcoming graduates. As a result, the analysis of the entrepreneurial ecosystem in Oman is expected to identify and develop resourceful information on the existing challenges and changes that can be adopted to achieve the desired entrepreneurial ecosystem in the country. This would ultimately enhance the current socio-economic situation in the country.

- The study also makes significant contributions towards the development of the entrepreneurship capacity and formation of an Omani business model. In addition, the study also understands entrepreneurship which can assist the entrepreneurs in engaging in entrepreneurship activities and utilising their skills to earn a living. This study considers the prospect of entrepreneurship as an alternative form of employment for youth. Thus, it analyses the complexity of processes, government jobs, financing issues, laws and policies governing entrepreneurship, and the significance of successful stories and role model entrepreneurs in enhancing the Omani entrepreneurial ecosystem. The study also generates information that can be used to make significant policy contributions towards the development of mechanisms of enhancing entrepreneurship that is collaborative and effective in Oman.
- This study is also significant in the manner that it outlines the role of SMEs in Oman, which has been a neglected yet valuable aspect of economic growth and poverty reduction. Studies show that SMEs equally provide employment and income generation activities in a country similar to large firms, and thus, are quite crucial for balancing economic growth and development (Mathew, 2009; Bilal and Al Mqbali, 2015). However, within the Omani business environment, more focus has been put on large firms while SMEs have been less focused. SME have been less supported despite their role in tapping and developing the unskilled human resources for the advancement of the economy and the society in general (Bilal and Al Mqbali, 2015). Therefore, undertaking this study is essential as it encourages more support for SMEs and the development of private sectors.
- One of the critical goals of this study was to examine how entrepreneurial ecosystems shape the entrepreneurship process and to conceptualise a theoretical framework based on the identified research gaps. The study also explores the implications of the various leadership approaches that are used in entrepreneurship policy and decision-making processes. In doing this, the current study contributes to the conceptual framework that explores Islamic leadership model and the Adaptive Co-Management (ACM) concept as an

alternative to the effective management of an entrepreneurial ecosystem in Arabic culture.

- A study that evaluates the entrepreneurial ecosystem in Oman is both timely and significant for various reasons. In the light of the identified research gaps, this study endeavours to generate data and useful information that can be used by various stakeholders, both practitioners and academicians, in creating a conducive entrepreneurial ecosystem in Oman. Therefore, research exploring the entrepreneurial ecosystem in Oman will be instrumental in going further to provide possible solutions to various problems identified.
- The Islamic leadership model further extends the discussion on the role of culture and religion, on the management of entrepreneurial ecosystems (Ramadani et al., 2017). The Islamic leadership model directs that particular considerations, such as community engagement and contributions, should be prioritised when formulating policies relating to the management of EE (Itani et al., 2011). The theory further accentuates that various cultural beliefs and personal interests affects the ability of political leaders to make the relevant policies. Thus, ILM ensures that the entrepreneurial ecosystem is suitable for creation of new businesses and improvement of existing businesses (Khalil and Olafsen 2010). However, if the Islamic principles of inclusiveness are applied, these inadequacies in making policies can be reduced and the right policies can be implemented to enable potential entrepreneurs to perform their entrepreneurial duties in an effective manner (Bruton, Ahlstrom and Li 2010).
- The study also recommends that while formulating the policies about entrepreneurial ecosystems policies, leaders should not be allowed to make decisions based on their positions (Mohammed et al., 2011). Preferably, the contributions to the policies should be made from various stakeholders such as entrepreneurs, several professionals who understand the entrepreneurial environment and several leaders whose contributions are all incorporated into the new entrepreneurial policies (Day and Harrison 2007). Islamic leadership model can lead to the formulation of policies that are productive for entrepreneurship and the right decisions will be made to create a suitable environment for the operation of business enterprises (Pinillos and Reyes

2011). This model is essential in creating entrepreneurial policies because it provides leaders with skills of being inclusive in the decisions they make about entrepreneurial ecosystems (Stel 2013).

- The theoretical prepositions of Adaptive Co-Management help in creating knowledge on the dynamics and governance systems as this helps effectively in the adapting entrepreneurial ecosystems even process of the management simultaneously (Plummer et al., 2012; Fabricius and Currie, 2015; Olsson et al., 2010). The ACM model is essential in the organization as this helps in learning and developing entrepreneurial knowledge channels. Moreover, collaboration and networking among key factors such as mentors, investors, government agencies and entrepreneurs to have a productive and well-functioning entrepreneurial ecosystem (Folke et al., 2005). The adaptive co-management model also informs people about various approaches that should be prioritised for effective management of entrepreneurial ecosystems. These models involve the promotion of shared goal, responsibility, vision and problem identification as this model offers them a common focal area among all actors and interest parties. Further even allows for high degree of interaction, collaboration and dialogue among actors at various levels. Furthermore, it allows for a degree of autonomy among different actors at different levels and it promotes knowledge sharing and learning (Armitage, Berkes and Douleday, 2007).
- This study stands out from previous studies that have analysed how the entrepreneurial ecosystem is managed. A review of previous studies shows that the majority of the existing studies have heavily relied upon quantitative methods such as surveys in the analysis of how the entrepreneurial ecosystem is managed. The reliance on quantitative methods limits the researcher's opportunity to interact or dialogue with the participants and gain a more in-depth insight into the social phenomenon under study as well as unearth underlying issues. Moreover, quantitative information sheds light or acquires opinions on issues that are already known by the researchers. However, through the adoption of a grounded theory methodology and the interpretivism philosophy, the study used a qualitative approach. This

facilitated the study to undertake an in-depth exploration of the matter and led to the generation of new business knowledge.

- In addition, this study is one of a kind because it uses a grounded theory approach. This is because it offers the opportunity to contribute to the conceptual framework by exploring the Islamic leadership model and the adaptive co-management concept as an alternative to the effective management of the entrepreneurial ecosystem in an Arabic culture. This is also one of the critical contributions of this study. An analysis of previous studies also shows that most of the previous studies have used various tools in their data collection. However, none of the previous studies has relied on GEM's NES tool in the analysis of how the entrepreneurial ecosystem is managed, despite it being one of the world's most reputable and reliable institutions in terms of entrepreneurial studies. It has a reputation of providing high quality and reliable information. In that sense, this study stands out from the rest that has been undertaken in this topic.
- This study also contributes to the knowledge of the Islamic leadership model. This concept is still new and has not been widely used. With many Islamic countries in the MENA region and beyond, the application of the Islamic Leadership model is still a unique and timely idea. This is because this concept can be used to solve some of the existing problems in the management of entrepreneurial ecosystems in an Arabic socio-ecological context.

### 8.7 Study limitations and Directions for Future Research

This study has several limitations in terms of scope, methodology and geography. In terms of the scope, the study analyses the management of the entrepreneurial ecosystem in Oman. The socio-ecological structures of the Omani EE are very similar to those of the other countries within the MENA region. For instance, most of the countries in the MENA region have similar governance structures and the typical Arabic cultural dimension. In this regard, the findings achieved in this study can be replicated within the MENA region and other Arabic countries with governance and cultures that are similar to those of Oman. Even though the country's specific socio-economic and political structure also limits the study from being generalised to other

countries, significant lessons can be drawn from the study. Further studies can focus on entrepreneurial ecosystems of other countries or regions such as MENA. As a result, the current study recommends to conduct a comparative study that strategically compares the ecosystems of an Islamic and non-Islamic country or region i.e., Oman and USA or MENA and EU regions. This would help in determining whether the ecosystems change if the country uses an Islamic leadership model as compared to those that do not use an Islamic leadership model.

The study has also identified that the poor implementation concepts like low stakeholder engagement and bureaucracy are the critical sources of the inefficiency in the management of entrepreneurial ecosystems in Oman. One of the most significant recommendations would be examining how the adoption of a fully-fledged Islamic leadership model can help deal with these challenges. In this study, the use of Adaptive Co-Management concept also makes it more unique. Hence, the study recommends to conduct future research on exploring ACM in other aspects of EE, besides how they are managed. Moreover, the study is mainly based on the grounded theory which includes the Islamic leadership model and the adaptive co-management and the impact on the culture and management of the entrepreneurial ecosystem in Oman.

Even though the methodology adopted in this study has significant strengths, there were certain methodological limitations regarding the process of collecting and analysing the data for this exploration. The first methodological limitation of this study is that it used a cross-sectional design, which allows data to be collected within a specific short period (Sullivan and Calderwood, 2016). While this was done due to the time and budget limitations, the study affirms that a longitudinal study would have been a better design because it allows to observe changes over time (Rindfleisch et al., 2008). Given that 'management' is a time-dependent process that does not occur overnight, but instead, it progresses and changes with time, a longitudinal design would have allowed me to observe how the entrepreneurial ecosystem is managed over some time. However, such a design could not be applied because of the constraints on the budget and time. In line with this limitation, the current study

recommends to conduct a future research on the analysis of the management of EE using a longitudinal design as this would reveal whether the manner at which EE is managed changes over time.

The second methodological limitation is based on the biases. The selection of the study participants was made using a purposive sampling criterion, which could pose some unknown biases. It is most likely that some key informants were left out given that the participants were chosen through recommendations and their public standing. Even though I ensured that the participants represented all the different stakeholders such as government officials, entrepreneurs, role models and mentors, the media, non-profit organisations, local leaders, etc., it is also likely that some key groups I was not aware of.

The other possible bias may come from the coding and response process. Therefore, the current thesis explored how the Entrepreneurship Ecosystem is managed using the stories of the key actors that are actively engaged in the Omani EE. However, in some cases, after conducting the analysis, sense making and rationalisation could lead to the modification or elimination of information as this process is relevant to the study (Loftus and Hoffman, 1989). In addition, this process could lead to errors in the manner at which the research participants remember some historical events. To avoid such limitations, I encouraged the participants to provide narratives that involve their current engagements in the EE instead of relying on past activities and events.

Another equally possible bias is the social desirability bias, which is defined as a bias that occurs when the research participants answer questions in a way that they regard would be viewed as favourable by others (Podsakoff et al., 2003). To avoid such bias, I explained the interviewees that their responses would be confidential, anonymous, and with limited (Kaiser, 2009). This encouraged the participants to offer their views openly and truthfully. The coding system used in this study also poses some biases that usually occur when the political and personal experiences of the researcher affect the manner at which data are coded and analysed. Several authors argue that the coding bias is tough to prevent mainly in an interpretive approach because the

researcher is regarded as part of the research process. In this study, measures were undertaken so as to not deviate or lose the sight of the intact narratives provided by the interviewees, and I was careful not to sway the respondents to particular opinions.

Another methodological limitation loosely related to the biases is the validity and reliability issues. Amongst qualitative researchers, the term 'reliability' refers to the extent of measuring consistency between alternative researchers as well as the degree at which the research study can be replicated (Bryman, 2012). The term 'validity' refers to the extent of the study finding truthfulness and whether the data is a reflection of the reality. The establishment of both the terms validity and reliability in qualitative research can be considered as the challenging task. But there are various ways through which researchers can establish validity and reliability in their studies (Whittemore *et al.*, 2001). Some of these ways of establishing credibility and validity in qualitative research include: ensuring that whether the data collected is from credible sources or from the non-cited area. Further, the findings of the research are a true reflection of the study respondents' experiences and opinions; making sure that the integrity of the study research is concrete. Furthermore, it is a reflection of repetitive and recursive validity checks as this helps in ensuring the research process consists of critical appraisal evidence (Whittemore *et al.*, 2001).

In this study, these criteria of establishing validity and reliability were observed by ensuring the data was authentic and trustworthy through qualitative rigour. Measures such as choosing reliable sources of data and presenting the actual experiences and opinions of the respondents as they presented them were observed. The study also followed using the three coding systems, that is, open coding, selective coding and theoretical coding paradigm of the Glaserian grounded theory (Glaser, 1992). The procedures set out by Glaser (1992) were followed, and this enhanced the use of the Glaserian grounded theory approach.

Moreover, the study also recommends conducting future research by replicating the current study by altering the qualitative methodology to a quantitative one. The replication of the study was given a critical consideration, as it is one of the

ways of ensuring that qualitative data is authentic and trustworthy (Mezias and Regnier, 2007). In qualitative research, replication is not just repeating the same study using the same population, but rather, it is the re-analysis of the data collected using other methods of data measurement and analysis. BY extending the conceptual framework of the research findings through the use of methods that are different from those used in the original study and using empirical generalisation by repeating the study using a different population to see how the results differ across populations (Tsang and Kwan, 1999).

The other limitations of this study are intertwined in the research process itself and include the challenges that I faced when undertaking the study. The difficulty in accessing the key policymakers and low response rates were significant limitations, which were mainly because of the very a smaller number of people involved in the development of entrepreneurial policies in the country. There were also some geographical challenges as I had difficulties contacting the entrepreneurs that were located outside Muscat (the capital) due to their small numbers and the need for travel sometimes for long distances, some involving more than 500 kilometres. The other limitation was that the language barrier as most of the primary data was collected in Arabic and had to be translated into English. The interview guides were translated from English to Arabic. The limitation with these translations of content from one language to another posed a threat of wrong translations and misunderstandings that could lead to the loss of the meaning at certain times. To avoid this, I used a transcriber who was well versed with Arabic and English languages. The notes taken during interviews proved useful too. Therefore, the study has several scopes to explore in the context of the impact of other elements on the entrepreneurial Ecosystem. As the present study has adopted a culture and management aspect which makes the investigation scope of the study more limited. Therefore, in this context the further study can help in examining and investigating the in-depth in the entrepreneurial ecosystem that is affected by the other elements like government policies, educational system and infrastructure, skills and knowledge about technology in the business scenario of Oman.

Therefore, different theories and models can explain and provide the insights of developing a different aspect which causes the issues in the entrepreneurial ecosystem. This will even measure processes that need to be considered for having a positive business environment. As it helps in creating various opportunities for the entrepreneurs, will allow them to show their skills and knowledge in the dynamic market scenario.

## 8.8 Conclusion

Both necessity and ideological trends promote entrepreneurship in Oman. The findings show that despite pertinent efforts undertaken by the government of Oman to improve the entrepreneurial ecosystem of the country, the policies and programs devised are far from ideal and stakeholders are not engaged in the policy and decision-making process. This research concludes that the objectives of the study have been satisfactorily achieved based on the findings acquired through the data and discussions made in the previous chapters. The study has shown that even though there are some positive factors that support the growth of the entrepreneurial ecosystem, there are many challenges that are detrimentally affecting the efficiency facing entrepreneurship in the country. Those willing to learn more about the Omani entrepreneurial ecosystem can learn a lot from these findings. In the next sections, the reference materials and appendices are presented.

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