The Culture of Entrepreneurship:
A study of the entrepreneurial motivation and attitudes towards business creation in the UAE in comparison to the US and Brazil

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This work is dedicated to my family and friends, especially my husband who has been my biggest supporter and mentor, and my mother who have always prayed for my success as well as my sister for her continuous encouragement. Thank you.
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THE CULTURE OF ENTREPRENEURSHIP: A STUDY OF THE CULTURAL DIMENSION OF ENTREPRENEURSHIP IN THE UNITED ARAB EMIRATES IN COMPARISON TO THE UNITED STATES OF AMERICA AND THE FEDERATIVE REPUBLIC OF BRAZIL.

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<td>United Arab Emirates</td>
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<td>United States of America</td>
<td>USA</td>
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<td>The British Virgin Island</td>
<td>BVI</td>
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<td>Middle East and North Africa</td>
<td>MENA</td>
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<td>Gulf Cooperation Council</td>
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<td>Global Entrepreneurship &amp; Development Institute</td>
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<td>Global Entrepreneurship Monitor</td>
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<td>Gross Domestic Product</td>
<td>GDP</td>
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<td>Small and Medium Enterprises</td>
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<td>Initial Public Offering</td>
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<td>Venture Capitalist</td>
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<td>UAE National</td>
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<td>World Economic Forum</td>
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ABSTRACT

This study demonstrates the cultural dimension and the surrounding environment of different entrepreneurs selected from three countries, the United States of America, the Federative Republic of Brazil, and the United Arab Emirates. The general objective is to understand the difference in the entrepreneurial motives and spirit towards venture creation from the three different countries. After conducting field research and collecting the required data, a deep analysis was conducted to draw a comparison between the three cultures from an individual's point of view, to help shape a set of proposed recommendations, which could be used to improve the current culture of entrepreneurship in the UAE.
1. INTRODUCTION

Entrepreneurship is an important element in driving a country's economic growth, fostering innovation, encouraging trade, creating jobs and promoting productivity. To enable entrepreneurship in a country, certain elements should exist. These include a conducive regulatory framework, a favorable educational system, a solid infrastructure, market access, cultural support, mentors, as well as a financial and human capital, which collectively make up an ecosystem (WEF, 2014). There have even been indexes for the aforementioned areas that provide comparative rankings such as the Global Entrepreneurship Index (GEI), released annually, that uses a point system to measure the health of the entrepreneurship ecosystems in 120 countries, by ranking the performance of each one of them against each other, to provide an overview of how each country performs in both the domestic and international context.

According to the GEI, the United Arab Emirates (UAE) ranked 1st in the Middle East and North Africa (MENA) region for the year 2015, which is 9 places up from the prior year, and ranked 20th worldwide. The UAE ranked number one among innovation driven economies with most internationalized entrepreneurial activities in 2011, while these rankings demonstrate the strong infrastructure of the country and positions it in a great place as one of the preferred locations for entrepreneurs, yet the country has not been as successful in motivating its UAE Nationals (Emiratis) to look at entrepreneurship as a viable career choice, where the rates for Emirati entrepreneurs were very low. In fact, the UAE along with Russia, are two of the countries that have the lowest entrepreneurial intention rates among 54 countries, as published by the Global Entrepreneurship Monitor Report (GEM) in 2011.

According to the World Economic Forum, the MENA region needs to create 75 million jobs by 2020, an increase of more than 40 per cent over the number of jobs in 2011, just to keep employment close to current levels. In the UAE specifically, unemployment among Emiratis is likely to increase, leading to social problems, particularly among the youth (International Monetary Fund, 2005). Living standards are likely to decline from current levels. The public sector wages bill (including pensions) will eventually become unsustainable without labor reform (International Monetary Fund, 2005). Therefore activating the entrepreneurial spirit and building a sustainable ecosystem may avoid future unemployment challenges and thus is crucial...
for the UAE. "What we need is entrepreneurs, job creators, rather than job-seekers," said Ahmad Bin Byat, Chief Executive of a global investment vehicle and developer Dubai Holding and Chairman of du – a UAE based telecom operator. "The young UAE nationals are being trained to become employees, rather than entrepreneurs. At home and at classroom all they care about is exams and grades. They are part of a system that does not encourage them to sell anything or do anything unconventional, other than looking for jobs, herein lies the problem," he said. Many debates are going around the country to try filling these gaps, but before doing so, we need to understand some of the underlying reasons for this lack of entrepreneurial spirit and motivation, and understand the UAE culture and individuals mindset, to be able to assess whether the culture itself is favorable to entrepreneurship and encourages risk taking like other cultures around the world.

This study demonstrates the cultural dimension and the surrounding environment of different entrepreneurs selected from three countries, the United States of America, the Federative Republic of Brazil, and the United Arab Emirates. The general objective is to understand the difference in the entrepreneurial motives and spirit towards venture creation from the three different countries. After conducting field research and collecting the required data, a deep analysis was conducted to draw a comparison between the three cultures from an individual’s point of view, to help shape a set of proposed recommendations, which could be used to improve the current culture of entrepreneurship in the UAE.
2. OBJECTIVES: GENERAL AND SPECIFIC

2.1 PROBLEM DEFINITION AND RESEARCH OBJECTIVE

The UAE government has attempted in various ways, through direct investments and several initiatives to promote entrepreneurship as a career option, yet there is a significantly low percentage of Emiratis that are self-employed or work in the private sector. According to a report published in 2011 by GEM, only 8 out of every 100 adults in the UAE can be considered early stage entrepreneurs, which is low in comparison to other countries. Positive entrepreneurial activity is directly related to the increase in a country’s overall economic activities since more goods and services are produced, which could lead to an increase in employment, innovation, and competitiveness. In developed countries, Small and Medium Enterprises (SMEs) contribute to more than 50% of Gross Domestic Product (GDP) and over 60%-70% of employment. Government jobs are finite and not enough can be created to sustain the amount of graduates that are looking for employment every year. This is the leading force behind the increasing government involvement in the support and growth of the private sector and more importantly entrepreneurship activities. They look to implement and adopt the required conditions or key success factors directly linked to creation and growth of an entrepreneurial ecosystem in a continuous and sustainable manner. (Méndez-Picazo et al., 2012)

As future unemployment rises among Emirati youth, enterprises such as SMEs and startups will help in job creation as it does in almost all economies. Below Figure 1 showcases the importance of these type of enterprises by demonstrating potential number of jobs created among this segment.
This study aims to provide an understanding of the cultural and environmental dimensions that motivate an entrepreneur to create a new venture. The study was conducted by comparing the cultural attitudes and individual mindsets towards entrepreneurship from each of the countries selected. The ultimate objective of this research is to answer the following question:

Could cultural attitudes towards entrepreneurship be a motivational factor in whether Emiratis embrace entrepreneurship as a viable career choice in the UAE?
2.2 Additional goals are set in order to achieve the final objective for this study include:

a. Support the general concept with a theoretical background to further explain the definition of entrepreneurship, entrepreneur, and elaborate on the entrepreneurial motivation.

b. Demonstrate a detailed picture of the entrepreneurial ecosystem in the UAE as the country in focus.

c. Identify the core reasons that might have led to lack of entrepreneurial motivation among UAE nationals and propose a set of recommendations to improve the entrepreneurial ecosystem in the UAE.
3. LITERATURE REVIEW

A significant amount of literature has been published on the complex phenomenon of entrepreneurship as well as the other concepts to be discussed. However, this study will focus on examining the personal motivation of an individual's decision to become an entrepreneur and create a venture as well as understanding the variation in these motives as it differs from culture to culture. A comparison between the three countries selected will be conducted to help demonstrate the differences. In this section, a review of previous studies will be shown with detailed explanations on each of the following concepts, including entrepreneurship, entrepreneur, and the entrepreneurial motivation.

3.1 ENTREPRENEURSHIP

The term entrepreneurship is a word that has come to be used loosely nowadays. Thomas R. Eisenmann, Professor of Business Administration at the Harvard Business School, defined entrepreneurship from different perspectives stating that for some, it refers to venture capital-backed startups and their kin; for others, to any small business. For some, “corporate entrepreneurship” is a rallying cry; for others, an oxymoron (Jan, 2013). However, the word entrepreneurship was defined by Professor Howard Stevenson, who is considered to be the godfather of entrepreneurship studies at the Harvard Business School, as “the pursuit of opportunity beyond resources controlled” (Stevenson 1983, 1985, 1990). While Wiklund (1999) considers entrepreneurship as taking advantage of opportunity by novel combinations of resources in ways which have impact on the market. Hisrich and Peters (1991) defined it as the process of creating something different with value by devoting the necessary time and effort; assuming the accompanying financial, psychological, and social risks; and receiving the resulting rewards of monetary and personal satisfaction. Given the endless definitions available for the word entrepreneurship nowadays, it is almost impossible to find a single simple definition that will satisfy everyone. Therefore, it makes much more sense to go with the most relevant definition that could fit the context of each use or study, which in this specific case and for simplification as well as broad application will be the creation of a new venture.
3.2 ENTREPRENEUR

An entrepreneur is defined as the one who creates a new business in the face of risk and uncertainty for achieving profit and growth opportunities and assembles the necessary resources to capitalize on those opportunities. American psychologist David McClelland, the author of the book Human Motivation (1985), characterized entrepreneurs as possessing certain traits including the desire for responsibility, the preference for moderate risk, having high level of confidence, and the desire for immediate feedback. He also highlighted other characteristics such as the high level of energy, being future orientated, having organizational skills, believing in the value of achievement over the value of money, having high degree of commitment, willingness to accept risks, hardworking, action oriented, and flexible.

McClelland also said “if the category we call entrepreneurs includes not only those who seek and find opportunities but also those who make them almost serendipitously from readily available bits and pieces, and moreover, if we include their self-selected stakeholders who help transform the amorphous vision into valuable new ends through commitments contingent on the unexpected, who could we exclude from the category of potential entrepreneurs? The answer simply is: no one.” (David, C. McClelland, Human Motivation, 1985).

3.3 ENTREPRENEURIAL MOTIVATION

McClelland defined motivation in his book as inferences about conscious intents that we make from observing behaviors (David, C. McClelland, Human Motivation, 1985). Fred Luthans defined motivation as “a process that starts with a physiological or psychological deficiency or need that activates behavior or a drive that is aimed at a goal or incentive.” While according to P. Robbins (2010) it is “the willingness to exert high levels of effort toward organizational goals, conditioned by the effort and ability to satisfy some individual need.” On the other hand, Gray and Starke defined motivation as “the result of processes, internal or external to the individual that arouses enthusiasm and persistence to pursue a certain course of action.”

If we sum up the above definitions, motivation could be referred to as individual’s willingness to exercise high level of efforts towards achieving desired goals or satisfying a need.
Therefore, we may define the entrepreneurial motivation as the process that stimulates and motivates the entrepreneur to exercise higher level of efforts towards achieving the desired entrepreneurial goals. The entrepreneurial motivation could be an internal or external driver that could create a need to complete a voluntary behavior as entrepreneur.

It has been suggested that the factors that influence an entrepreneur's decision to start a business—the venture creation decision—vary across countries (Muzka, de Vries, & Ullmann, 1991; Shane, Kolvereid, & Westhead, 1991). A clear understanding of the factors affecting the venture creation decision across cultures would be important to policy makers, to practitioners, and to researchers (Mitchell, Smith, Seawright, & Morse; 2000). Entrepreneurial behavior is necessarily based on a propensity to act (Shapero & Sokol; 1982), which is directly influenced by motives and desirability for venture creation based on one's values and beliefs as well as the surrounding environment that would allow them to excel. Major values and beliefs include perceived opportunity, confidence in one's abilities, fear of failure, and knowing another entrepreneur (Arenius and Minniti, 2005).

Other researchers in the entrepreneurship field have identified a number of psychological traits that may affect the decision of a new venture creation. For instance, need for achievement (Begley & Boyd, 1986; Hornaday & Bunker, 1970), risk-taking (Begley, 1995), desire for independence (Cromie, 1987; Boswell, 1973), internal locus of control (Shapero, 1975; Caird, 1991), self-efficacy (Baron & Markman, 1999a; Robinson et al., 1991), and overconfidence (Gartner & Thomas, 1989; Cooper et al., 1988). Of these factors, only need for achievement, risk-taking propensity, and locus of control of the individual in question seem to be the most salient traits that are used to distinguish entrepreneurs from non-entrepreneurs (Shane, 2003) and might have some validity (Gartner, 1985). While non-psychological factors include low income, level of unemployment, being married, education levels, and the career experience.

When McClelland explained the concept of human motivation in his book, he also argued to understand the factors that would drive an individual to be motivated towards something, by saying that "is it important to recognize at the outset that there are several kinds of answers to the question why, only some of which deal with the problem of motivation. A complete answer to the question why must include all the determinants of behavior, not just the motivational ones. To distinguish among the determinants of the behavior, it is useful first to realize that any behavioral outcome is a function of determinants in both the person and the
environment" (David, C. McClelland, Human Motivation, 1985). This statement can be applicable to the entrepreneurial motivation, which is not only driven by the individual’s intent to create a venture, but also by the surrounding environment and culture that would motivate him or her to do so. McClelland has also emphasized that “doing something better” is the natural incentive for the achievement motive (David, C. McClelland, Human Motivation, 1985).
4. The UAE’s Entrepreneurial Ecosystem

The major metaphor for fostering entrepreneurship as an economic development strategy is what is known as the “entrepreneurship ecosystem” (Daniel Isenberg, Harvard Business Review, 2014). Based on the literature review in the preceding section, both entrepreneurship and the entrepreneurial motivation may be indirectly affected by the ecosystem in place. Having certain entrepreneurial traits could be embraced by the culture and surrounding environment. In figure 2 below, the World Economic Forum (WEF) identifies key elements of the entrepreneurial ecosystem, which will be used as a tool to analyze the current entrepreneurial ecosystem in the UAE.

Figure 2 – Entrepreneurial Ecosystem

(Source: WEF, 2014)

4.1 Accessible Markets

The UAE, has been able to leverage their strategic geographic in the crossroads between east and west to became one of the largest re-export hubs in the world. Most notable multinational corporations chose to open and operate their regional offices from there. The UAE maintains a position as the major trade and investment hub for a large geographic region, which includes not only the MENA region, but also South Asia, Central Asia, and Sub-Saharan Africa. According to the World Trade Organization, the UAE’s total merchandise imports accounted for USD 251,000 million and total merchandise exports USD 379,000 million (WTO, 21
While the total commercial services imports is USD 69,957 million and total of commercial services exports USD 16,411 million (WTO, 2013), which demonstrates the active trade activities occurring in the country reflecting the potential market opportunities for entrepreneurs.

4.2 Human Capital / Workforce

Having the flexibility to hire as needed is something critical to SMEs and especially startup businesses. Current labor laws in the UAE cause significant bottlenecks for entrepreneurs as highlighted in a survey conducted by Booz & Company in 2010 where over 95 percent of respondents said “conditions imposed on certain professions” and “conditions imposed on nationalities” were the two main labor issues they face (Booz & Company, 2011). SMEs and startups face two main obstacles, 1) the restriction on hiring certain employees with a skillset that is not available in the country, 2) finding the qualified local talent who are not incentivized to move from high salaried government jobs to work for SMEs and startups.

The ease of human capital movability is another critical way SMEs and startups reduce their overall costs. In the European Union SMEs are encouraged to work in key markets by subcontracting and outsourcing, while in the MENA region as a whole, there is a lack of market movability as a result of 1) a lack of supply chain opportunities for business growth, and 2) a lack of unified polices to allow for that. However, the Gulf Cooperation Council (GCC), as opposed to the wider MENA region, are slightly different whereas common policies in favor of doing business are established, which makes the UAE in specific, a great place to start a business. Another factor of movability is worker mobility issues, i.e. a work visa system that stipulates that workers jumping ship and trying to switch jobs cannot do so without leaving the country for a set period of time and then entering again. In many other vibrant startup ecosystems it is very evident that many individuals for instance programmers, go from one startup to another in a relatively short period of time ensuring there is always a moving talent pool of working level individuals learning skills and then sharing with others.
4.3 Funding & Finance

Access to capital is an important element to the life of creating ventures and brings together the entrepreneurial ecosystem. Different sources of funding are available to entrepreneurs in an established ecosystem. VC firms as well as many Angel Investors, or syndicates of such, are attracted to places that provide a healthy amount of “deal flow” and so usually have a presence in many of the ecosystems alongside the entrepreneurs. Other forms of financing are government program funds or grants, bank finance, and other forms of equity or debt finance. Many types of instruments and arrangements are available including the popular convertible note structure and other more specific deals that term sheets in today’s environment are usually made up of. Many of these sources and options are available in the UAE. Three examples that cover the main ones are as follows:

1. Government programs such as Khalifa Fund with over AED 500 million that has been established to stimulate local entrepreneurship, provides a 7-year interest-free loan, training, advisory, and after-funding support. They provide loans of up to $550,000 per business they choose to invest in, based on a certain amount of criteria that startup should fit within. In recent months they have also began selectively offering convertible notes to some businesses.

2. Banking services are also readily available. Some of them such as Gulf Finance, customize their product offerings to fit the deficiencies in the current regulatory framework, such as the lack of an insolvency law. They provide loan packages specifically designed for SMEs, including interest-only and secure-finance, which prevents jail time for bounced checks that regularly happens in the UAE.

3. Equity investment exists in a variety of ways in the UAE, either via international corporations offering investments through special units launched to support startups such as Intel Capital. Or via regional incubators like Flat6Labs which was recently launched in Abu Dhabi as a global hub for digital innovation that will support a generation of entrepreneurs from the UAE and abroad to launch digital businesses.
that could be scalable to regional and global markets. Many international VC’s are looking at startups in the Middle East and many organic home grown VC’s are emerging as well. There are a variety of Angel Investors since there is a large amount of high net worth individuals that are always looking for ways to put their money to work and diversify their investment asset classes.

4.4 Support Systems / Mentors

Networks are important associations that help in connecting entrepreneurs with various stakeholders that they may benefit from, including people from the business world and consultants that offer advice and mentorship. The UAE has a number of such networks established via incubators and some international programs such as Plug and Play and Endeavor.

A relatively new concept that has been adopted in several places after successful implementation in veteran innovation ecosystems has been Incubators and Accelerators. These entities with associated programs are facilities, usually large shared office spaces that sometimes tend to take on very dynamic or warehouse type settings, are areas that startup businesses can set up. They do so at relatively low costs comparatively to traditional office spaces and have the added benefits of shared services and other incentives that are provided to them by the owners of the facility. The proximity to other startups within the same space also creates an opportunity for synergies to be developed and the natural product of learning and supporting one another. Programs and mentors are usually available and many have adopted challenges that pit startups against each other in pitch competition type settings with Venture Capitalists (VC) and Angel investors present to select who they would like to invest in. Some of these Incubators and Accelerators condition a startup who wants to operate within their premises to allow them to take an equity stake in the company in return for helping them incubate and providing the resources mentioned. The UAE has a growing number of incubators including the renowned Dubai Silicon Oasis that acts as a technology incubator focusing on companies in the web and ICT sector. Others include in5, turn8, i360, and many more. SeedStartup, a Dubai-based accelerator program focuses on digital media web, mobile, software startups, typically investing up to $20,000 for a 20% equity stake, while offering a three month mentorship-focused accelerator program.
Moreover, the Dubai Enterprise Center (DEC), which is another business incubation center that is based on international best practices, provides entrepreneurs with a range of targeted resources and services. Finally, the Mohammed Bin Rashid Establishment for Young Business Leaders (SME), is a government incubator and SME support program that offers incubation, mentoring, and funding. The 10,000 square foot facility offers its services to Emirati entrepreneurs, with a condition that they spend at least 70% of their time working in the dedicated offices offered to launch their business, and that is another way of ensuring commitment to the start-up they are working on.

4.5 Government & Regulatory Framework

Since the UAE’s independence in 1971, the country has undergone an incredible transformation, in a relatively short period of time. This has been achieved by a structured economic diversification strategy that was implemented gradually since the discovery of oil. The focus was on sustainability and ensuring that the country would not be solely reliant on oil revenues, prone to volatile shifts in demand, to fulfill its aspirations. Non-hydrocarbon sectors like manufacturing, industrial, transportation, real estate, tourism, and finance, all of which demanded significant infrastructure investment financed both by oil revenue and increasing amounts of foreign direct investment became the focal areas, and both the government and private sector began to successfully delve into new sectors. This was followed by more high tech and capital intensive investments and manufacturing like semiconductor fabrication and aerospace composites.

The UAE currently enjoys one of the highest standards of living in the world with a GDP per capita in excess of US$43,000 (World Bank, 2014), which has risen sharply over the last decade as rising oil prices and foreign investment fueled rapid economic development. The UAE government’s proactive efforts in attracting foreign direct investment (FDI) inflows has driven the country’s rapid economic development. This injection of foreign capital was also accompanied by a significant influx of expatriates both skilled and unskilled. Demographically this caused the balance today to be a staggering majority of the 9 million population (UAE
National Bureau of Statistics, 2014) to include more than 88 percent expats leaving the local population under 1 million Emirati's (UAE National Bureau of Statistics, 2014). This demographic dynamic provides for some of the cultural impacts as it relates to the topic at hand, and while diversity is generally a good thing, needs to be considered as a factor in a country’s entrepreneurship scene. A significant amount of the country’s economic activity is now driven by foreign companies and foreign individuals but when it comes to Emirati’s the majority (over 85%) work for the government or a government related enterprise.

Over the years, the government has realized the need to invest more in developing human capital to equip Emirati’s with the required capabilities to drive the country’s future developments in various fields. Along with the investment in people by virtue of having free education and healthcare that extended to higher education and also abroad, there were a number of long-term plans which were drafted across the country, on both country and city levels such as the Abu Dhabi 2030 Vision, the Dubai 2020 plan, and the federal vision 2021. Thorough depictions of where the country wanted to be on those respective dates, and systematic strategies of how to get there from a present time make up these documents ensuring a targeted objective and alignment across the public and private sector towards that common goal. All of these plans included strategies and initiatives aimed to further diversify and build a knowledge based economy. In dubbing 2015 the “year of innovation” the UAE leadership and government obviously see the tremendous value in nurturing and helping to enable entrepreneurship as another area for the economy to diversify even further to ensure a sustainable future economy.

According to the World Bank, SMEs contribute to around 45% of employment in emerging economies and 33% of GDP. Having recognized the importance of SMEs and startups in enabling the economy and contributing to its prosperity, the UAE government has been aggressively promoting entrepreneurship in the country. One indication of the UAE’s interest in promoting economic development comes from the report published by the World Bank in 2014 where the country ranked 23rd out of 189 in terms of the ‘ease-of-doing-business’ globally, putting it at 1st in the MENA region. The current entrepreneurial ecosystem in the UAE receives the support of almost 40 government bodies including Abu Dhabi Chamber of Commerce, Dubai Chamber of Commerce, Khalifa Fund, Mohammed Bin Rashid Establishment for SME Development, Injaz, Sharjah Tatweer Forum, Mubadala, and TwoFour54.
One of the most likely reasons that the majority of Emirati's work for the government or a state owned enterprise, is the job security it provides and the high salaries offered. In many cases, it is not uncommon to find Emirati's elect to remain unemployed and enjoy the benefits of the many social welfare benefits that are afforded to any local which puts a burden on the economy. When oil prices where high, the government might have been able to afford that financial burden, but with the recent drop in oil prices, and a growing Emirati population, this model is proving to be less sustainable. So the government is stepping up efforts to incentivize the private sector to hire Emirati's by introducing programs that support companies to provide higher salaries as well as build out a system that helps appeal to entrepreneurial instincts of Emirati's. Being a wealthy country and having utilized oil to generate an income to enable diversification and in the process create jobs, the UAE realizes that there are only so many sectors or jobs that can be government supported and created. Thus entrepreneurship is something that needs to begin to become an option for young individuals and get built into their characters. Therefore, certain steps must be taken to enhance future entrepreneurship opportunities, as public jobs will start declining.

The country ranked 19th in the World Economic Forum's 2013-2014 Global Competitiveness Index, and as mentioned before, 23rd on the World Bank's 2013 Doing Business report, improvements of five and three places respectively from the previous year. Multinational companies are drawn to the UAE for many reasons, including but not limited to: political stability, economic opportunities, population diversity, GDP growth, efficient capital markets, and no corporate or personal taxes which all make the UAE very attractive to foreign investors. Foreign Direct Investment has risen significantly year on year for the past decade. The UAE is well-known for its supportive business climate and ability to attract companies, whether it be dedicated industrial clusters that are also free trade zones, or onshore establishments with the ability to cater to a vibrant market with plenty of disposable income amongst its residents. The regulatory framework is obviously an important factor in stimulating the economy. The right balance is always sought but rarely practiced in many countries and it is difficult to make all stakeholders happy. However when it comes to business generally in the UAE, regulations are pretty conducive and always positively evolving. However, when it comes to SME’s, and in
particular startups or entrepreneurs there is certainly a lot that can be done to enhance this aspect in order to reach an optimal level of efficiency and even practicality. Governments need to establish flexible and relevant policies that address market failures, allowing for an environment where SMEs can succeed. (Al-Yahya & Airey, 2013)

The following are a few specific areas were some reform may help in making it more attractive for entrepreneurs in the UAE.

II. Ease of doing business

The actual process of setting up a company should be simplified for entrepreneurs to stimulate volume of business creation in the country. The British Virgin Islands (BVI) and Singapore are two great examples of countries where the process of setting up a company is as seamless as can be, taking only up to a few hours or days with much of the process being shifted online, making it much easier for entrepreneurs. Although the UAE is ranked relatively high in the Ease of Doing Business Report, there is much room for improvement in the process to make it simpler by benchmarking other advanced examples such as BVI and the Singaporean models. Another issue is the lack for a business license for home businesses whereas most countries with a vibrant entrepreneurship ecosystem embrace the concept of a “Lean Startup” which includes amongst many other things, the need to control expenses. A lot tend to start in their houses (or as common in Silicon Valley, their garages).

III. Bankruptcy laws

According to Bloomberg, 8 out of 10 entrepreneurs fail within the first 18 months of starting a business. While some venture capitalists would argue that they prefer investing in an entrepreneur who has failed in the past, as the
lessons learned are usually ones that come in handy, many countries look at failure in a different way. In the UAE, the lack of an appropriate bankruptcy law, put entrepreneurs and investors in a position to rather shy away from taking the risks and personal and financial liabilities associated with starting a business. A prominent economist and former governor of the Lebanese Central Bank who is now based in Dubai, Dr. Naser Saidi once said, “Effective insolvency systems, based on developed legal frameworks, relying on a sound judicial system and on the availability of lawyers and accountants experienced in insolvency proceedings, play a critical role for reorganization & restructuring, for the orderly exit of insolvent corporations and for the efficient reallocation of resources.” (Saidi, 2011). The UAE as well as the MENA region overall lack an effective bankruptcy law, which leads to the low number of business creation due to the long and unclear process.

IV. Company law

Company registrations and legal structure represent the foundation of a healthy business that protect founders and investors. Class of securities for example, where a startup is able to issue different types of stocks, plays an important role for startups especially the ones looking to raise funds through equity investments or provide employees or supporters with shares in return for “sweat” equity. Being able to issue shares with rights including board seats, control spend, rights for future investments are typically a requisite for any venture capital investment. Currently, only one class of share is allowed in the UAE, unless the company is setup offshore in a free zone, which offer some of these rights. Another holdup in the current company law is having stock options, which is the ability to offer an optional purchase for future stocks in the company. This mechanism is used as an incentive to attract talent, retain employees and stakeholders, by allowing them to capitalize on the potential success of the company without spending a fortune. The inability to do these types of things puts the UAE at a disadvantage in trying to attract
entrepreneurs as it leaves them with little flexibility and options in initial financing of their venture.

V. Tax

The tax-free environment offered in the UAE works in favor of growing the entrepreneurship and the SME scene. While lucrative, it does not outweigh the importance of all the other aforementioned factors that need some work.

VI. Infrastructure

Good infrastructure is a very important factor, and enabler for economic growth. It is a direct enabler in many cases to the potential and successes of companies. Whether it be good buildings, offices, proximity to service providers, ports, rail, airlines, roads, telecommunications, and even schools and hospitals, all contribute to the health of an ecosystem and the attraction as well as retention of talent that directly or indirectly utilize these for the work they are involved in. SMEs and Startups also benefit greatly from places with first class infrastructure and so this becomes a pivotal point in deciding to establish within certain jurisdictions. The UAE’s infrastructure is very well developed, and constantly improving to achieve the standards set by the “UAE Vision 2021” National Agenda, which aims at positioning the UAE as one of the best in the world in terms of quality of infrastructure. Current infrastructure development plans include an investment of US$1.63 billion to be allocated across the country for projects such as road networks and federal buildings (UAE Ministry of Economy, 2014).

a. Transportation

The UAE is continuously investing in developing and improving its transportation system. Both at the federal and individual emirate levels, major rail, shipping, and air projects have been announced throughout the
country to support the country’s economic development plans and objectives over the next several years. Some of the major projects include an $11 billion federal rail project called Etihad Rail, upgrading and expanding current seaports and airports, and expanding international airports as well as the fleets of two major airlines in Emirates Airlines and Etihad Airways that are also ranked in the world’s top 5 carriers (UAE Ministry of Economy, 2014). The UAE holds the 1st place (out of 138 countries) in the Availability and quality of transport infrastructure, as published in 2014 The Enabling Trade Index (WEF, 2015).

b. Telecommunication

The UAE has two main telecom providers, “Etisalat” and “du”, both supported by the government as well as public shareholding. Many achievements have been noticed in the telecommunication sector in the UAE. Etisalat for example, offers the fastest mobile megabits per second in the world (UAE Interact, 2015). While according to a couple of World Economic Forum (WEF) reports, the UAE has ranked number 23 for the year 2015, in the Networked Readiness Index (NRI), as well as number 23 for the year 2014, in terms of the availability & use of ICTs, as published in the Global Enabling Trade Report. In addition, UAE companies are actively involved in satellite telecommunications regionally and globally as Etisalat’s reach now spans to many countries around the world and is a true telecom powerhouse. In summary, the UAE has a solid telecommunication infrastructure that is leveraged by advanced information and communication technologies to ensure economic growth and productivity.

VII. Clusters

Clusters are firms and organizations working in similar sectors or activities within close proximity, oftentimes optimizing the ability to leverage
shared services. They have been defined by Porter (1998) as a geographical concentration of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions in a particular field that compete but also co-operate. (Potter & Miranda, 2009)

The economic benefits of clusters from a local, regional or international perspective, comes from the specialization aspect where like-minded people or entities can co-exist leading to cooperation, higher productivity, economies of scale, cooperative advantage and knowledge sharing, (Potter & Miranda, 2009). The cluster effect is quite conducive to innovation and entrepreneurship. It enables productivity growth and efficiencies not only through the advantages listed above but through the indirect spill benefits. This includes many factors such as knowledge transfer through human capital movability. (Glävan, 2008).

Whether formed officially through government intervention or unofficially through companies, clusters is an important way to foster entrepreneurship. The UAE has been a successful example in creating a number of clusters, including the likes of Dubai Media City, Dubai Internet City, twofour54, and Dubai Silicon Oasis. Such examples indicate the progressive initiative taken by the government to build clusters, however, these clusters are usually looked at as real-estate investments and mainly as a way to approach global companies to setup in the region, rather than a way to enable the growth of startups and SMEs. These typically take the form of a free-zone that further incentivizes companies to locate within them to reap the benefits associated. This model has been perfected across many industries in the UAE for a long time and thus is one that the innovation and entrepreneurship clusters have been able to benchmark and tweak to get the best set up.
4.6 Education & Training

The UAE looks at Healthcare and Education as two very important areas that are not to be compromised in quality. Education in particular is a very important element in advancing any country’s economy, and creating a talent pool that can sustain projects and programs as well as add value to the government. The focus on entrepreneurship will no doubt start with ensuring that the education system continuously evolves to account for the fast pace in which technology changes and keep the general pace with countries that lead in creating entrepreneurs. Its easy to see the importance of good educational infrastructure and curricula located in close proximity to most innovative ecosystems and entrepreneurial clusters. An established educational system may increase the creation of new venture with higher success probabilities. (Sowmya & Majumdar, 2010) (Fayolle et al., 2006)

4.6.1 Formal Education as it pertains to Entrepreneurship

"The greatest use that can be made of wealth is to invest it in creating generations of educated and trained people" said late president Sheikh Zayed Bin Sultan Al Nahyan, founder of the UAE. One of the country’s highest priorities has always been the education of Emiratis in general. However, formal entrepreneurial education is relatively new in the country and the MENA region overall, as it was recently introduced via university programs and training institutes. Such programs focus on basic business concepts like drafting business plan, financial skills, marketing strategies development, as well as other general management skills and tools to launch a business successfully. Therefore, the UAE and the MENA region are still behind at fostering and educating youth at an early stage. (Booz & Company, 2011)

4.6.2 Informal Education as it pertains to Entrepreneurship

Informal education include seminars, networking events, mentorship opportunities, and any other type of knowledge transfer that an entrepreneur have the ability to access. In some occasions we are seeing some incubators based in the UAE partnering with incubators in established places like Silicon Valley and sending their entrepreneurs on exchanges to benefit from immersion in those ecosystems. Great insights and latest trends are gained via these types
of engagements, and could lead to many partnership and business opportunities. These informal educational channels are very powerful tools to equip aspiring entrepreneurs with real-life experiences lessons learnt from successful entrepreneurs. The UAE has been witnessing an increase in entrepreneurship events in the recent years. The country has hosted and sponsored many of these events so far, including Abu Dhabi Entrepreneurship Forum 2013, and Innovation and Entrepreneurship Forum 2013, held under the World Entrepreneurship Forum, not to mention the various local and regional events organized by international companies, incubators, and accelerators. ArabNet for instance, is a hub for Arab digital professionals and entrepreneurs to connect and learn from each other. A series of events run across the region, including Beirut, UAE, and Saudi Arabia, to grow the web and mobile industry, it also act as a platform to showcase and launch start-ups. Another great example is Wamda, which is a media platform designed to empower entrepreneurs by hosting community events aimed at bringing entrepreneurs together with industry experts and investors to discuss specific start-up challenges.

4.7 Major Universities as Catalysts

Educational institutions such as a Stanford University and the University of California, Berkeley have helped shape the culture of entrepreneurship and continue to play a key role in the growth of entrepreneurial activities in the Silicon Valley area. The same can be seen in different states such as Massachusetts, where MIT and Harvard contribute significantly to the ecosystem in the Boston area. Universities are key players in advocating and promoting the role of entrepreneurship, help in the idea formation process, as well as connecting graduates with startup businesses.

Major UAE universities such as American University of Sharjah, Khalifa University, Abu Dhabi University, Zayed University, New York University, MIT’s partnership with the Masdar Institute, and Higher Colleges of Technology, are the most active players of supporting entrepreneurial activities. “Our entrepreneurship curriculum teaches students and business executives the theory and concepts of entrepreneurship from the perspective of the practitioner,” says Dr. Robert E. Grosse, Dean of the School of Business Administration (SBA) at the American University of Sharjah.
4.8 Cultural Support

The cultural dynamic is an important factor that determines the type of environment the entrepreneur will operate within, and it is a key element affecting the entrepreneur's decision to locate in a certain city. More importantly, the cultural dynamic does not get enough attention and emphasis as one of the key reasons a local individual becomes an entrepreneur and their willingness to create a venture. Entrepreneurial traits are perceived differently from culture to culture. Being your own boss for instance, is often looked at as a strong and respected social status. Failure on the other hand, usually perceived negatively in many cultures, as failing is considered shameful for individuals and their families. The UAE has a conservative society in general, so the idea of venture creation and owning a business is welcomed but mostly as a second job that can be taken care of during free times or weekends. The main motive behind launching such entrepreneurial activities on the side is usually driven by opportunities available as shown in the following Figure number 3, which demonstrates the classification of motives among Emirati entrepreneurs.

Figure 3 – Entrepreneurial Motives

<table>
<thead>
<tr>
<th>Year</th>
<th>Purely Opportunity Motive</th>
<th>Partly Opportunity Motive</th>
<th>Necessity Motive</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>73.4%</td>
<td>13.1%</td>
<td>13.5%</td>
</tr>
<tr>
<td>2007</td>
<td>90.0%</td>
<td>10.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2009</td>
<td>93.2%</td>
<td>4.7%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2011</td>
<td>63.8%</td>
<td>18.2%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Total Adult Population</td>
<td>69%</td>
<td>18.4%</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

(Entrepreneurship: An Emirati Perspective, 2013)

Furthermore in the following Figure 4, we notice that the majority of Emirati entrepreneurs hold full time employment in addition to their entrepreneurial activities, in comparison to other nationalities residing in the UAE. Previous research has also stated that over eight in ten Emirati entrepreneurs are employed in a full-time job in addition to their startup
activities (Entrepreneurship: an Emirati Perspective, 2014). Building a high-growth and high-impact enterprise requires more than full-time commitment on the actual venture, therefore, it is extremely difficult for Emirati entrepreneurs to do so when they are employed full-time elsewhere.

Figure 4 - Employment in Addition to Own Business

![Bar chart showing employment in addition to own business](Entrepreneurship: An Emirati Perspective, 2013)

The demonstrated unwillingness to commit or appetite to take risks among Emiratis is mainly driven by two aspects. Firstly, the comfortable lifestyle and general lack of an urgency or “hunger” in having a venture that in many individuals in other countries need rather than want. Most Emirati’s are well taken care of with the social benefits available and the security of a well-paying government job. The same attitude is also applicable to joining a start-up as it would be unrealistic for those start-ups to match the lucrative salaries paid by the government. Part of this issue goes back to the way those individuals were brought up, where most parents encourage having a safe and prestigious government job. Secondly, the high level of fear an individual
would have of failure and the personal liability that’s associated since there is no insolvency law, coupled with the stigma of shamefulness that is attached to failure make Emiratis apprehensive about taking such a risk. A complete shift in the attitude towards entrepreneurship needs to take place in order to create a culture that embraces failure as part of the learning process which should be acceptable in society.

Being in a culture that fosters entrepreneurship and encourages it as a desirable career choice makes it much easier for entrepreneurs to succeed and drive higher rates of entrepreneurial activity in the country. In the US for example, the culture of failure is not looked at negatively, in fact some Venture Capitalists prefer to invest in an entrepreneur who has gone through the experience of failing once and demonstrates that he had lessons learned that were acquired and will be avoided in the next venture. Obviously the fact that there is a clear process for bankruptcy and limiting personal liability also helps alleviate the risks of an entrepreneur in the US starting a risky venture.
5. METHODOLOGY

5.1 Primary Sources

Interviews: a number of entrepreneurs were interviewed from the three aforementioned countries. The sample group was comprised of 16 entrepreneurs or startups operating in any of the three countries, and were randomly selected. All interviews were semi-structured, containing a script of questions that were occasionally directed in order to enrich the outcome of the study and ensure that all information provided was accurate. The interview form is in Appendix 1. Interviews were conducted in person or over the phone during the period from June 15, 2015 and August 15, 2015 and they took an average of 50 minutes each.

Table 1 - Distribution of interviewees by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAZIL</td>
<td>25%</td>
</tr>
<tr>
<td>UAE</td>
<td>50%</td>
</tr>
<tr>
<td>USA</td>
<td>25%</td>
</tr>
<tr>
<td>ALL</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 2 – Interviewees Gender Distribution

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAZIL</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>UAE</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>USA</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>ALL</td>
<td>11</td>
<td>5</td>
</tr>
</tbody>
</table>

5.2 Secondary Sources

- Government publications
- Earlier research
- News articles
- Published Reports
6. RESULTS

After analyzing the interviews, and comparing each group, it is clear that the main cultural factors that feed into the current lack of entrepreneurial motivation among Emirati nationals in the UAE are a result of the following four main areas:

A. High dependency and security of well-paying no risk government jobs.
B. Family, environmental, and cultural upbringing.
C. Desperation and hunger vs. hobby
D. The mindset and fear of failure

In the following sections, I will elaborate more on each one of these areas and demonstrate some of the interview results that support these findings.

6.1 Dependency on government jobs

One of the key challenges is that the security and generous benefits afforded to Emirati's working in the public sector are difficult to give up for the insecurities and risks commonly associated with the entrepreneurial process. The convenience of having very appealing government jobs created for UAE nationals, where these jobs offer extremely attractive packages including high salaries and irresistible benefits, makes the entrepreneurial career choice nearly impossible to even consider. Emiratis are happy in their comfort zone and do not see the need to leave all that's offered to them by the government to start a risky adventure on their own. That said, a big number of these professionals decide to start a venture on the side, in addition to whatever full time job they have, and this is mostly the case with the younger generation.

If we take a young Emirati national as an example, and looked for the existing incentives that would motivate this individual to invest time, money, and effort, into creating a new venture without guaranteeing it will succeed and with all the risks associated, what would have him/her opt for choosing that over the job security, salary, and comfort of full time employment by the government. This type of a scenario is what brings us to the question, why? Why would this
person take this very high risk? A conclusion that the incentive is weak for Emirati nationals to create ventures and consider entrepreneurship as viable option could be the reason. Below is a figure demonstrating the current status of the entrepreneurs interviewed in each country, and it is clear that the majority of Emirati entrepreneurs have full time jobs, mainly government jobs, and here is where one of the first big differences appear between the three cultures. When looking at the entrepreneurs from Brazil and the US on the other hand, you will notice that among the people interviewed, there was zero percent additional jobs to their startups in both countries.

The Entrepreneurship: An Emirati Perspective book, showed that 82.5% of Emirati entrepreneurs have other employment in addition to their entrepreneurial activity. During the interview sessions, one of the Emirati entrepreneurs said “My team at work have been extremely supportive, as I was part of an incubator run by Khalifa Fund for Enterprise Development and needed to be out of the office an hour earlier than official working hours three times a week over a period of five months. Despite that, it was still challenging managing both, however, the thing that got me through it is the vision I had for my startup and the mindset I put myself in to be able to work during the night and over weekends to ensure things are going
and when asked if he would ever consider leaving the current job to fully focus on the startup, the same entrepreneur said “I would still like to be involved in my startup as much as possible, however, I do not see myself focusing on it full time. Mainly because I would like to be able to start other ventures alongside”. On the other hand, an entrepreneur from the US said “my startup feels like having three jobs at the same time! So there is definitely no room for a full time job if I wanted to have a successful business”, and the same notion was applicable to Brazilian entrepreneurs who are currently operating successfully by focusing entirely on their startup only. Among the Emirati entrepreneurs interviewed, there was only one who had committed to his startup solely. He had realized the amount of time it takes to build a company, a few months down the road, and decided to leave the full time government job and grow the business. Ever since, this entrepreneur has had his first startup fail, successfully started and prematurely sold his second, used the funds and outside investors to start a third which is in its 4th year and is currently seeking Series A investment, which is the first round of financing for a new business venture after seed capital, and it is the first time that a company ownership is offered to external investors (Investopedia, 2003).

In other words, entrepreneurs need to dedicate full time commitment to create a venture and scale it to become a successful business. In the case of Emirati entrepreneurs, it is difficult to launch startups on the side that could be attended to only on weekends or free times. This demonstrates the clear misconception that Emiratis have towards the concept of entrepreneurship in the first place, as it is looked as a hobby to a certain extent rather than a career choice.

6.2 Family, environmental, and cultural upbringing

The way entrepreneurs are brought up at home plays a big role in driving their future values and beliefs towards entrepreneurship as a career choice. For examples, if the family encourages risk taking and nurtures the notion of business creation from a very young age, the entrepreneur will have better chances in taking serious steps towards an entrepreneurial career. In addition, the results of the interviews, as demonstrated in table 3, have shown the following data about the families of aspiring entrepreneurs, which states that most current entrepreneurs come from
families of entrepreneurs, even if it was at least one person in the family that had affected their choices and inspired them at a younger age to take the same path.

<table>
<thead>
<tr>
<th>Entrepreneurs in family</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRAZIL</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>UAE</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>USA</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3 – Entrepreneurship in the family

Family is one of the reasons that would drive the entrepreneurial motivation or shut it down. It is clear that no matter what nationally you are from, the family upbringing is the same everywhere by being a crucial element that shapes the entrepreneurial personality and paves the way for successful future entrepreneurs.

During the interviews, one of the Brazilian entrepreneurs said “my family supported me a lot and my grandfather was the first entrepreneur in my family”, the same entrepreneur went on to say “when I was young, I was talking to my father about my future and I said I would like to be rich, so my father said listen to me carefully, if you want to be rich, you need to be an entrepreneur. And ever since, I have kept this phrase in my mind and decided to follow his advice. Especially that he himself was always an entrepreneur and taught me how to assume and manage risks”. While one of the American entrepreneurs said that her mother believed in her and encouraged her to become an entrepreneur and prefer she take the entrepreneurial route rather than have a traditional job by working for a company. One of the Emirati entrepreneurs said “my family is well known for creating businesses from scratch and turning them into multimillion-dollar revenue generating businesses. For example, my family started a hotel management company and started by managing one hotel in 1991, today the company manages 56 properties in the middle east and the company is valued over 1 billion dollars”.

43
Family is one of the reasons that drives the entrepreneurial motivation or shuts it down. It is clear that no matter what culture or nationality a person is, family upbringing is always a crucial element that shapes the entrepreneurial personality and paves the way for successful future entrepreneurs.

6.3 Desperation and hunger vs. hobby

When it comes to the motives as to why a person makes the decision to create a venture, this element also varies across cultures and there are several motives that are common in each place generally. In the US for instance, entrepreneurs are motivated by different things that usually include the “need” to make a venture work, their relentless passion towards an idea and their willingness to stop at nothing in trying to realize the dream. Some of them reach a stage where they feel they are at the point of no return and have no choice but to try and make a venture that looks like it has all odds stacked against it, work. Others enjoy the thrill, the learning experience, potential upside, and even sometimes the thought of possible fame or notability that could come of them personally. Ego plays a big role and whether risky or not, for the most part beyond a certain stage of financing, these ventures are taking calculated risks rather than gambles in earlier stages. A lot of it also has to do with the fact that in the US there are a significant number of individuals that prefer to work independently and “be their own boss”. The corporate structure does not appeal to them, and many individuals look at the examples of the college dropout who either from their garage, or living out of their car, started a company or sold it for billions or took it all the way to an Initial Public Offering (IPO), which is the first sale of stock by a private company to the public (Investopedia, 2003). These situations become inspirational parts of people who look at entrepreneurship as their way out of a traditional nine to five job with the need for them to build tenure and move up the ladder before making a small fortune. They certainly do not possess the comfort of a good paying secure government job that pays great salaries. Some are also motivated by the need to accomplish and achieve things, and not the money necessarily. Those individuals enjoy the challenge of figuring out problems and
innovating then subsequently seeing the fruits of their labor demonstrated by users and adopters of their inventions.

In the UAE on the other hand, entrepreneurs make the decision to start a venture in a relatively passive rather than proactive manner, by “imitating” to fill a gap and morphing an existing proven technology that has worked elsewhere rather than inventing something new. They are reactionary businesses that usually fill voids that they identify first. Very few come up with something new and fresh that is not only targeted for their domestic or regional consumption but also global distribution. Being that most attend to their ventures in their free time, it would be difficult to run a worldwide operation or outsource and maintain positive economics and cash flow to sustain the growth. The other issue that skews many of the statistics that we see regarding entrepreneurship in the UAE is the fact that some of the ventures that go into the surveys consist of general businesses or SME’s such as the government employee that brought a food franchise or even made their own rendition of such. That is not the type of business that would necessarily qualify as entrepreneurship in other parts of the world. It is a side business at most. The following table in Figure 6, which were findings from the Entrepreneurship: An Emirati Perspective book, demonstrates the lack of innovation and high level of competition among Emirati entrepreneurs in the UAE.

**Figure 6 - Emirati businesses offering the same products & services**

<table>
<thead>
<tr>
<th>Year</th>
<th>Many</th>
<th>Few</th>
<th>Some</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>36.7%</td>
<td>46.0%</td>
<td>17.3%</td>
</tr>
<tr>
<td>2007</td>
<td>65.3%</td>
<td>30.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2009</td>
<td>62.0%</td>
<td>26.9%</td>
<td>11.1%</td>
</tr>
<tr>
<td>2011</td>
<td>60.2%</td>
<td>30.8%</td>
<td>9.0%</td>
</tr>
<tr>
<td>TAP 2011</td>
<td>63.3%</td>
<td>31.3%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

*(Entrepreneurship: An Emirati Perspective, 2013)*
The book also indicated that the primary motive for every two out of three Emirati’s to start new ventures in 2011 was a desire to increase personal income. Therefore, taking advantage of an existing opportunity to earn extra money on the side of their full time jobs is one of the biggest motivations for Emirati entrepreneurs. In the case of Brazil however, it was a mixture of motives, some wanted to seek independence, while to others it was a basic need as simple as providing a better life for their families.

6.4 The mindset and fear of failure

“We have nothing to lose” was the answer from all entrepreneurs interviewed from the US. Obviously there is a lot to lose in most cases. Personal investments into the business, time, health, other people’s investments, and a host of other things. But what they were referring to was the fearlessness from the point of personal prosecution and possibility of going to jail or being shamed in society. This notion and comfort provides the entrepreneur with the willingness to take calculated risks and try new things. And in some cases if they have gone through the experience of failing in a previous attempt, they are stronger and now armed with the lessons learned from that endeavor that enables them to confidently forge ahead with their ventures. A similar attitude is applicable to the Brazilian entrepreneurs as well, and in a lot of cases it’s the necessity aspect that generates the hunger to help make their ventures work.

On the contrary, when we look at the UAE, fear of failure plays a massive role in the lack of entrepreneurial spirit in the country. As specified in the Entrepreneurship: An Emirati Perspective book, one in three Emirati’s indicated that fear of failure would prevent them from starting a business. Fear of failure and anxiety resulting from working under pressure meet the expectations that are set directly or indirectly by families, friends, investors and society overall. Given the small size of the UAE, the community is interconnected where everyone knows one another or their relatives to a certain extent, and so appearing as a failure in front of a criticizing surrounding is extremely difficult and shameful. One of the entrepreneurs said “my family members thought I should give up within six months if I didn’t gain enough traction. For them, failure wasn’t part of the process, it would simply mark the end. Where once I failed my grandfather said to me this is enough and maybe it’s time to give up on this idea of starting a business”. Being part of this stringent environment makes it
difficult for aspiring entrepreneurs to succeed. Changes must take place towards the fear of failure mindset and younger generations should be taught to embrace failure as a learning opportunity and part of an overall experience on the way to success.
7. CONCLUSION

In the onset of this research the intent was to understand whether cultural attitudes towards entrepreneurship in the UAE motivated an Emirati to embrace entrepreneurship as a viable career choice. Entrepreneurial motives are defined by the surrounding culture that is either in favor of entrepreneurship or not, and this has a direct impact and effect on the entrepreneurial "spirit" in the country. Comparisons drawn between the three cultures of the US, Brazil, and the UAE puts things into perspective when trying to understand an individual’s motivation to create a venture. It is clear that culture plays significant role in the decision making process of an individual. Creating a culture that fosters entrepreneurship and encourages risk taking is the ideal environment to nurture aspiring entrepreneurs.

After conducting the field research, it became prevalent that within the cultural element where four key factors that affected entrepreneurial aspirations and motivation within Emirati’s and those were: dependency on government jobs, family, environmental and cultural upbringing, desperation and hunger vs. hobby, and the mindset and fair of failure. Each factor represents a main set of barriers to, or enablers for the entrepreneurial spirit depending on the culture. Cultures that view entrepreneurship favorably encourage risks, embrace failure, and motivate venture creation. On the other hand, the entrepreneurial spirit is more challenging to attain in the cultures that do the opposite. To nurture a healthy sustainable entrepreneurial ecosystem in a certain country, a lot of work needs to be done to make sure there is a healthy foundation to the ecosystem, which in this case is the culture. The possible consequences of not improving the current culture towards entrepreneurship in the UAE could lead to slower growth and lot of missed opportunities.

Immediate action should be taken to help pave the way for future generations of Emirati’s and it would be wise to start with education, not only in schools where it is certainly important to have teachers and curricula that shows the positive side of entrepreneurship and looks at exercises that would help inspiring positively the youth in this regard, but also educating the parents and older segment of society simultaneously to be more embracing to the realities of risk taking, failure, lessons learned, and venture development. These actions will naturally end up working their way and transcending into government and policy that will inevitably ease
regulation, and make it more favorable. Things like the insolvency law will be a natural change that the government will be willing to embrace once they see that the vast number of successful ventures that will be started will outweigh any negative implications that could come out of having such a law by people who may abuse it. That positive effect will generate a great impact and help to sustainably drive the economy forward as such. In the following section, a set of recommendations will be presented, that can be used as a guideline of some of the things that would help carry out the actions required to improve the current culture towards entrepreneurship and motivate the next generation of aspiring entrepreneurs in the UAE.
8. RECOMMENDATIONS

This section includes a set of proposed recommendations that could be presented to policy makers and business leaders in the UAE. Adopting an entrepreneurial culture, strengthening the regulatory framework, and investing in entrepreneurship education are examples of the overall solution. Below are key recommendations:

8.1 Create a new culture towards entrepreneurship. Arguably entrepreneurship is not something people are born with, but it is a skillset coupled with the right mindset which is usually nurtured from a very early age. According to many of the readings in McClelland’s book, the concept of entrepreneurship was one that was attributed to a form of reasoning and referred to as a skill that could be taught. The concept of entrepreneurship, is not merely a career choice, or a fallback plan but rather an economic and social enabler that helps elevate a society’s status as an innovative place and catalyzes the economy. Today’s youth are tomorrow’s leaders, we need to give them the opportunity to rise to their full potential, take risks, embrace failure, and challenge the established cultural norms. This could be done by leveraging the role of governments and NGOs to use their influence to continuously promote the concept of entrepreneurship. By simply shedding light on key figures, role models, and leaders to encourage the concept in general, naturally, people will begin looking at entrepreneurship through a different lens. The following recommendations are linked directly to this key aspect in supporting the achievement of a possible change in culture towards entrepreneurship. The attitudes of society towards entrepreneurship, the process of entrepreneurship, and the individual as an entrepreneur are all part of how interlocked the entrepreneurial ecosystem as is demonstrated in Figure 7.
8.2 **Increase media coverage.** Media plays a vital role in creating awareness and spreading certain concepts through society. Utilizing the role of media in the UAE is crucial to change the culture towards entrepreneurship. This could be done via multiple media channels. Television represents a powerful media tool that can be pivotal in cultivating an entrepreneurial culture. Television shows such as The Entrepreneur and Shark Tank, which are very popular in the American culture, help promote the concept among the general public, students, and parents to inspire and create awareness on entrepreneurship. Social media is also crucial and if effectively leveraged can achieve a significant positive impact among youth. Other media tools that could be utilized include movies, documentaries, or cartoons to promote not only the glowing success made by successful entrepreneurs but also discuss openly the challenges and failures that are part of the learning experience. Promoting positive societal attitudes towards entrepreneurship by launching public awareness campaigns for a better understanding of entrepreneurship,
spreading good practices, and showcasing at major events such as the UAE Entrepreneurship Week, can all add to the creation of a stronger entrepreneurial culture.

8.3 **Invest more in education.** Engraving the concept of entrepreneurship as a viable, attainable, and admirable option in the minds of younger generations is a key component for the success of this ecosystem. But educating students and youth generally starts with informed and supportive teachers, and families. In the formal education settings such as schools and universities, there is a need to ensure that teachers are educated about the overall concept of entrepreneurship and actively introduce relevant curriculum. Enabling teachers with the right environments and resources and ensuring both financial and non-financial incentives are built into the teacher’s professional development would go a long way in nurturing students and cultivating an environment that will lead to the adoption and embracement of the entrepreneurial culture from a young age. As main implementation agents for entrepreneurship education, teachers should be encouraged and motivated to develop entrepreneurship learning tools and tap into national funding opportunities. In college or vocational schools, programs should address labor market changes as well as the diversification of the UAE economy and identify segments of the population that are likely to be self-employed or involved in small businesses and support them from an early stage and not lose out on the opportunity. In universities, entrepreneurship education and new venture creation programs should not be limited to students in business or social sciences, but should tap the entrepreneurial potential of all students to increase their employability and to promote innovation. Entrepreneurship education cannot just be focused on specific demographics but each societal group needs specific programs and initiatives tailored to their needs. Entrepreneurship should be integrated into the education system rather early, and from primary school, activities should be developed to stimulate active involvement of pupils, personal initiative, creativity, and risk taking. Programs in secondary education should aim to promote economic awareness and introduce entrepreneurship education with role model based case studies, simulation and mini-enterprises, through experiential learning, mentorship and even include a financial course that touches at a high level on the fundamentals of money management, investment principles, interest, shares, and the like. The level of
such courses would and should not be overly complex or more difficult than the typical secondary education economics or pre-calculus courses that are standard. The UAE education system (across all levels) should incorporate active teaching methods and develop a closer relationship with society. Governments both at the federal and city levels should create a framework that allows the private sector to engage with educational institutions in defining, delivering, and evaluating education or training programs to ensure a hands on approach is used in learning, which will inevitably lead to idea creation and valuable lessons. Teaching professionals across UAE educational sector should be encouraged to understand why entrepreneurship is important, and how education could play a major role.

8.4 Mitigate the fear behind failure. Reformation in the regulatory enablers of a sustainable entrepreneurial environment are necessary and long overdue in the UAE. The lack of a proper mechanism that allows for a company to file for bankruptcy and have their principals protected from personal liability is a critical aspect in ensuring effectiveness and minimizing the “lost entrepreneurship potential”. An insolvency law brings with it certain risks that the government will need to mitigate through thorough oversight to ensure abuse of the law by criminals taking advantage of them are punished in accordance. The benefits of having a strong bankruptcy law helps many companies, big and small, in society, to provide them with a second chance or allow them to systematically shut down and minimize the damage to the extent possible.

8.5 Build a platform for knowledge transfer. Nothing inspires an individual more than mentorship and looking up to and learning from role models they perceive as successful. There is no shortage of stories from successful entrepreneurs who were inspired by engagements such as seminars, speeches, online videos with motivational speakers, and the like. The MENA region has many successful examples of entrepreneurs that are always looking to give back to society, and these individuals should be taken advantage of positively, by creating forums that offer knowledge transfer opportunities that aspiring entrepreneurs can learn in. However, expanding the network to cover a broader reach of
entrepreneurs from around the globe, will expand the knowledge shared. For instance, inviting Arab entrepreneurs that have migrated and succeeded abroad as well as international successful entrepreneurs from around the world to share their knowledge and expertise in developed markets will further grow, and solidify the knowledge transfer aspect of the ecosystem.

8.6 Embrace intrapreneurship in government organizations. Establishing an enterprise is not the only form of entrepreneurship within the context of the GEM study, another important type of entrepreneurial activity which is recognized and measured by the GEM survey is employee entrepreneurship better known as the concept of “intrapreneurship”. As economies and existing companies mature, organic growth occurring within organizations is often led by current employees with new ideas and project initiatives. These ideas can be developed within the existing structure of the organization, or can mean opening a new division or even company within an existing firm. Considering the significant number of entrepreneurs who have a full-time job in the public sector, there are ways in which entrepreneurial employees within the UAE public sector can be encouraged and supported to develop breakthrough ideas on the job. Experienced government workers, with strong and established networks, would make an ideal pool of potential high-impact entrepreneurs who could contribute to the diversification of the economy and expand the role of the private sector in the UAE economy. Research in the entrepreneurship field has found that start-ups which become dominant players often have strong early-stage relationships with established organizations, fitting the profile of many mid-level to senior-level government employees. However, high-growth and high-impact enterprise formation and development require more than full-time commitment, which would seem to be difficult if the entrepreneur, were also employed full-time. Intrapreneurship is important for government organizations and established private sector firms, as it indicates a dynamic, committed and skilled workforce. Given that the majority of Emiratis work in the public sector, increased efforts should be made to motivate and cultivate a culture of intrapreneurship and innovation as entrepreneurial activities among employees may be one important step towards independent entrepreneurship. Emiratis
work experience in the public sector can serve as a breeding ground for entrepreneurs to flourish if provided more conducive innovative environments where innovation is encouraged and incentivized. One consideration is to develop a program for Emirati government employees to take an entrepreneurship leave, similar to an education leave, to reduce the high level of risk associated with leaving a secure and well-paid government job to start a new venture. This type of sabbatical program can also be applied by the private sector as a way to incentivize and recognize innovation and entrepreneurial pursuits.

Gradually, such programs will start building momentum and strengthen the entrepreneurial ecosystem, spirit, and culture for future economic growth and sustainability.
9. LIMITATIONS, CONTRIBUTIONS AND FUTURE RESEARCH

9.1 METHODOLOGICAL LIMITATIONS

This study covers a limited number of interviews. If the sample size was larger, the results could have been more comprehensive and accurate.

9.2 THEORETICAL CONTRIBUTIONS

This study addresses the entrepreneurial motivation in the UAE from a different perspective, by assessing the mindset and attitudes of entrepreneurs in the UAE and compare them to entrepreneurs in the US and Brazil. It also draws a better picture of what drives the lack of entrepreneurial motivation among Emiratis in specific.

9.3 FUTURE RESEARCH

Future research is required to expand and test the results of the study. A larger sample size is also required for a better and more accurate results. A detailed study on each of the recommendations proposed can help formulate future strategies to strengthen the UAE’s entrepreneurial ecosystem, and align efforts among the different Emirates in the country for a more sustainable economy.
10. BIBLIOGRAPHY


Shapero, A. *Entrepreneurship and economic development*.


Stevenson, Howard H. "A Perspective on Entrepreneurship." Harvard Business School Background Note 384-131, October 1983. (Revised April 2006.)


Appendix 1 - Interview Guide

Section One – Profile Info.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Marital Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nationality:</td>
<td>Years of Experience:</td>
</tr>
<tr>
<td>Gender:</td>
<td>Level of Income:</td>
</tr>
<tr>
<td>Age:</td>
<td>Highest Degree:</td>
</tr>
</tbody>
</table>

Section Two – Detail Questions

1. What business did you start and is it your first? (Please give brief overview).

2. Do you have another full-time job? If yes, please specify if your job in the government or private sector.

3. Why did you start a business? What motivated you to start?

4. Why did you choose to be an entrepreneur?

5. How did you family and friends react to your idea of starting a business? Support or not? Are you the first entrepreneur in your family?

6. Please mention top three challenges faced when you started up your business? Did you have a mentor?
Appendix 2 - Map of the UAE

(Wikipedia, 2015)
Appendix 3 - Abu Dhabi 2030 Vision

Pillars of the Abu Dhabi Policy Agenda Vision

- A large empowered private sector
- The creation of a sustainable knowledge-based economy
- An optional transparent regulatory environment
- A continuation of strong and diverse international relationships
- Emirato resource optimization
- Premium education, healthcare and infrastructure assets
- Complete international and domestic security
- Maintaining Abu Dhabi's values, culture and heritage
- A significant and ongoing contribution to the federation of the UAE

"The vision for Abu Dhabi consists of a secure society and a dynamic open economy"

Source: The Emirate of Abu Dhabi Policy Agenda 2007-08

Priority Areas:
- Economic Development
- Social & Human Resources Development
- Infrastructure Development and Environment Sustainability
- Government Operations Optimization
2015 will be a ‘Year of Innovation’

The National staff
November 30, 2014

ABU DHABI // The Cabinet met in a 500-year-old castle on Sunday to approve the designation of 2015 as the Year of Innovation, in a plan to make the UAE a world innovative leader.

At its special meeting in Fujairah’s historic fort, the Cabinet directed all federal government bodies to boost cooperation and to revise their policies to develop a nurturing environment for innovation.

"Announcing 2015 as the Year of Innovation comes to support federal government efforts, attract national skills, increase distinguished research, as well as boost efforts to build a national cadre who are able to lead our future in this field towards more progress, prosperity and innovation," said Sheikh Khalifa, the President.

The first phase of the strategy includes 30 national initiatives to help the UAE reach the top global benchmarks for innovation.

Sheikh Khalifa praised local government efforts in adopting innovation for sectors including renewable energy, transport, technology, water and space.

"We live today in a world witnessing rapid changes and continuous developments, full of opportunities, discoveries and inventions," he said.

"We must prepare and equip our generations in such a manner that they fit in the world in which we live, ensure their position among nations, and make a prosperous future for us similar to our present."

Sheikh Mohammed bin Rashid, Prime Minister and Ruler of Dubai, said the initiative should be seen as an opportunity for the nation to unite its efforts to boost its capabilities for innovations.

"Today, more than any other time, we need to boost innovation among young people, build nurturing environments in our society, and encourage our schools and universities to equip our youth with skills in research and discovery methodologies," Sheikh Mohammed said.

"We want our public and private sectors to explore new horizons to develop our economy. Innovation is our only way to build a great history of the UAE.

"The future will be for those who adopt innovation."

He said the Cabinet had convened in Fujairah rather than Abu Dhabi or Dubai to show that all emirates were important in this united country.

"We convene today in a 500-year-old castle," Sheikh Mohammed said.

Our vision is setting the foundation to build a future that will be for hundreds of years to come.
Dr Ahmad Belhoul, chief executive of Abu Dhabi's sustainable energy investment company Masdar, welcomed the announcement.

"Today's announcement is far-sighted and will help unlock greater social and economic value for the UAE," Dr Belhoul said.

"Masdar is committed to implementing the Federal Innovation Strategy across the various priority sectors, be it renewables, transport, water or education.

"Through Masdar City, Masdar is fostering a culture built on innovation, where the Masdar Institute is investing in cultivating talent of the future, while over 190 companies have chosen the Incubator to launch their innovative entrepreneurial businesses.

"Looking to 2015, we will redouble our efforts in growing this innovation ecosystem for the wider benefit of the UAE."
Appendix 5 - Doing Business 2015 data summary

<table>
<thead>
<tr>
<th>REGION</th>
<th>Middle East &amp; North Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCOME CATEGORY</td>
<td>High income</td>
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<tr>
<td>POPULATION</td>
<td>9,346,129</td>
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<tr>
<td>GNI PER CAPITA (US$)</td>
<td>38,620</td>
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<tr>
<td>CITY COVERED</td>
<td>Dubai</td>
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</table>

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>DB 2015 Rank</th>
<th>DB 2014 Rank</th>
<th>Change in Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a Business</td>
<td>58</td>
<td>40</td>
<td>-9</td>
</tr>
<tr>
<td>Dealing with Construction Permits</td>
<td>4</td>
<td>4</td>
<td>No change</td>
</tr>
<tr>
<td>Getting Electricity</td>
<td>4</td>
<td>3</td>
<td>-1</td>
</tr>
<tr>
<td>Registering Property ✅</td>
<td>4</td>
<td>4</td>
<td>No change</td>
</tr>
<tr>
<td>Getting Credit ✅</td>
<td>89</td>
<td>99</td>
<td>+10</td>
</tr>
<tr>
<td>Protecting Minority Investors ✅</td>
<td>43</td>
<td>102</td>
<td>+59</td>
</tr>
<tr>
<td>Paying Taxes</td>
<td>1</td>
<td>1</td>
<td>No change</td>
</tr>
<tr>
<td>Trading Across Borders</td>
<td>8</td>
<td>9</td>
<td>+1</td>
</tr>
<tr>
<td>Enforcing Contracts</td>
<td>121</td>
<td>121</td>
<td>No change</td>
</tr>
<tr>
<td>Resolving Insolvency</td>
<td>92</td>
<td>88</td>
<td>-4</td>
</tr>
</tbody>
</table>

*=Doing Business reform making it easier to do business. X=Change making it more difficult to do business.
Click here to see all reforms made by United Arab Emirates.

(World Bank, 2015)
Appendix 5 – UAE Compared to MENA region and the World

Global Entrepreneurship and Development Index

(Global Entrepreneurship & Development Institute, GEDI, 2015)
Appendix 5 – Entrepreneurship Performance of the UAE Compared to the US & Brazil

(Graphic representation of the comparison between the UAE, United States, and Brazil on various entrepreneurship performance indicators. The graphic shows the relative strengths and weaknesses across different dimensions such as Opportunity Perception, Startup Skills, Risk Acceptance, Networking, Cultural Support, Opportunity Startup, Technology Absorption, Human Capital, Product Innovation, Process Innovation, High Growth, Internationalization, and Risk Capital.

(GLOBAL ENTREPRENEURSHIP & DEVELOPMENT INSTITUTE, GEDI, 2015)
## NATIONAL KEY PERFORMANCE INDICATORS

### Cohesive Society and Preserved Identity

<table>
<thead>
<tr>
<th><strong>INDICATOR</strong></th>
<th><strong>DEFINITION</strong></th>
<th><strong>SOURCE</strong></th>
<th><strong>2012 RESULTS</strong></th>
<th><strong>2021 TARGETS</strong></th>
<th><strong>KEY SPONSOR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness Index</td>
<td>An indicator that measures the opinion of individuals about standards of living and life satisfaction, using a survey to assess the extent that individuals feel happy and satisfied with their lives. It includes factors such as income level (GDP per capita), average healthy life expectancy, social support, generosity, absence of corruption, and freedom to make life choices.</td>
<td>United Nations Sustainable Development Solutions Network, Gallup World Poll</td>
<td>Rank 20 (2014)</td>
<td>Among the top 5 countries</td>
<td>Emirates Competitiveness Council</td>
</tr>
<tr>
<td>National Identity Index</td>
<td>A composite indicator that measures the sense of belonging and national identity of UAE nationals. This index expresses the sense of pride that citizens feel belonging to the UAE and how it is expressed (NPI specific to UAE)</td>
<td>United Arab Emirates University</td>
<td>90.8% (2014)</td>
<td>100%</td>
<td>Ministry of Culture, Youth, and Community Development</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>A composite indicator that expresses the well-being of nations on three dimensions: age (life expectancy at birth), educational attainment (literacy and enrollment rate in primary, secondary and tertiary education), and the standard of living (GDP per capita).</td>
<td>United Nations Development Programme</td>
<td>Rank 40 (2014)</td>
<td>Among the top 10 countries</td>
<td>Emirates Competitiveness Council</td>
</tr>
<tr>
<td>Social Cohesion Index</td>
<td>A composite indicator that measures the level of national and social cohesion among the people in the UAE based on the following themes: family cohesion, education, culture, equality, justice, security, national participation and belonging (NPI specific to UAE)</td>
<td>Higher Committee for National &amp; Social Cohesion</td>
<td>86% (2013)</td>
<td>Work in Progress</td>
<td>Higher Committee for National and Social Cohesion</td>
</tr>
<tr>
<td>Family Cohesion Index</td>
<td>A composite indicator that measures the social bond between family members. Its main perspectives cover: relations between parents, parents’ relations with children, relations among children, relations with bigger families, upbringing of new generation (NPI specific to UAE)</td>
<td>Ministry of Social Affairs</td>
<td>86.4% (2013)</td>
<td>95%</td>
<td>Ministry of Social Affairs</td>
</tr>
<tr>
<td>Number of Olympic medals won</td>
<td>An indicator that measures achievements and the number of medals collected in the Olympic and Paralympic championships in various sports.</td>
<td>General Authority for Youth and Sports</td>
<td>13 (up to 2012)</td>
<td>20</td>
<td>General Authority for Youth and Sports</td>
</tr>
<tr>
<td>INDICATOR</td>
<td>DEFINITION</td>
<td>SOURCE</td>
<td>2012 RESULTS</td>
<td>2021 TARGETS</td>
<td>KEY SPONSOR</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Judicial System Efficiency</td>
<td>A composite indicator that measures the effectiveness of enforcing contracts within the &quot;Doing Business&quot; report, using a survey implemented by the World Bank on (3) perspectives: Time needed to resolve a commercial case from its initiation to its resolution, the number of procedures required, and the cost as percentage of the total value of the lawsuit.</td>
<td>World Bank</td>
<td>Rank 121 (2015 report)</td>
<td>Among the top 10 countries</td>
<td>Ministry of Justice</td>
</tr>
<tr>
<td>Reliability of Police Services</td>
<td>An indicator that measures the opinion of various segments of society about the ability to rely on police services to enforce law and order in the country.</td>
<td>World Economic Forum</td>
<td>Rank 7 (2014-2015 report)</td>
<td>Rank 1</td>
<td>Ministry of Interior</td>
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<tr>
<td>Sense of Security</td>
<td>This indicator measures the sense of security among residents through a questionnaire. The questionnaire covers different segments of society and different geographic locations (NKPI specific to UAE).</td>
<td>Ministry of Interior</td>
<td>92.4% (2014)</td>
<td>100%</td>
<td>Ministry of Interior</td>
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<tr>
<td>Road Traffic Death Rate per 100 Thousand Population</td>
<td>An indicator that measures the number of deaths resulting from road accidents per 100,000 population annually.</td>
<td>Ministry of Interior</td>
<td>6.31 deaths per 100,000 population (2014)</td>
<td>3 deaths per 100,000 population</td>
<td>Ministry of Interior</td>
</tr>
<tr>
<td>Average Response Time to Emergencies</td>
<td>An indicator that measures the time it takes to respond to emergencies in all regions of the UAE, from the time an emergency is reported to the time a patrol arrives at the scene. The response time includes: receiving the emergency call, identifying and classifying its priority, determining its geographical location, moving the patrol, and reaching the location.</td>
<td>Ministry of Interior</td>
<td>Work in Progress</td>
<td>4 minutes</td>
<td>Ministry of Interior</td>
</tr>
</tbody>
</table>
## Competitive Knowledge Economy

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>DEFINITION</th>
<th>SOURCE</th>
<th>2012 RESULTS</th>
<th>2021 TARGETS</th>
<th>KEY SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Oil Real GDP Growth</td>
<td>An indicator that measures the real annual economic growth of all sectors except oil. It is one of the most important macroeconomic indicators and reflects the overall state of the national economy over consecutive years. GDP includes the total value of annual production of goods and services.</td>
<td>National Bureau of Statistics</td>
<td>5.4% (2013)</td>
<td>5%</td>
<td>Ministry of Economy</td>
</tr>
<tr>
<td>Gross National Income (GNI) per Capita</td>
<td>This indicator measures the average income per person in a country. GNI includes the value of all the services and products that have been produced in the country (i.e. GDP) in a given year, in addition to the country's net income from abroad (such as dividends and interest).</td>
<td>World Bank</td>
<td>Rank 6 (2012)</td>
<td>Among the top 10 countries</td>
<td>Ministry of Economy</td>
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<tr>
<td>Net inflow of Foreign Direct Investment as % of GDP</td>
<td>An indicator that measures foreign direct investment (FDI) as a percentage of GDP. FDI is defined as the amount of net inflow of investment required to achieve a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term and short-term capital, as shown in the balance of payments.</td>
<td>United Nations Conference on Trade and Development (Untcad)</td>
<td>2.66% (2014)</td>
<td>5%</td>
<td>Ministry of Economy</td>
</tr>
<tr>
<td>Global Competitiveness Index</td>
<td>A composite indicator that measures the competitiveness of countries based on (12) perspectives: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation.</td>
<td>World Economic Forum</td>
<td>Rank 12 (2014-2015 report)</td>
<td>Among the top 10 countries</td>
<td>Emirates Competitiveness Council</td>
</tr>
<tr>
<td>Share of UAE Nationals in the workforce</td>
<td>An indicator that measures the share of UAE nationals employed out of the total workforce (expatriates and nationals), across all sectors (KNPI specific to UAE)</td>
<td>The National HR Development &amp; Employment Authority (Tonmia)</td>
<td>5.0% (2014)</td>
<td>8%</td>
<td>The National HR Development &amp; Employment Authority (Tonmia)</td>
</tr>
<tr>
<td>Ease of Doing Business Index</td>
<td>A composite indicator that measures government procedures around business activity. It is based on (10) sub-indicators: starting a business, obtaining construction permits, registering property, obtaining credit facilities, protection of investors, payment of taxes, cross-border trading, enforcing contracts, resolving insolvency, and obtaining electricity.</td>
<td>World Bank</td>
<td>Rank 22 (2015 result - 2015 report)</td>
<td>Rank 1</td>
<td>Emirates Competitiveness Council</td>
</tr>
<tr>
<td>Emiratization Rate in the Private Sector</td>
<td>An indicator that measures the share of UAE nationals employed in the private sector, as a proportion of the total private sector workforce (expatriates and nationals), (KNPI specific to UAE)</td>
<td>Ministry of Labor</td>
<td>1.0% (2014)</td>
<td>5%</td>
<td>Ministry of Labor</td>
</tr>
<tr>
<td>INDICATOR</td>
<td>DEFINITION</td>
<td>SOURCE</td>
<td>2012 RESULTS</td>
<td>2021 TARGETS</td>
<td>KEY SPONSOR</td>
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<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------</td>
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</tr>
<tr>
<td>SME Contribution to Non-Oil GDP</td>
<td>An indicator that measures the share of GDP produced by small and medium-sized enterprises.</td>
<td>National Bureau of Statistics</td>
<td>60% (2011)</td>
<td>70%</td>
<td>Ministry of Economy</td>
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<tr>
<td>Global Entrepreneurship and Development Index (CEDI)</td>
<td>An indicator that measures 3 sub-indices: entrepreneurial attitudes (the general disposition of a country's population toward entrepreneurs, entrepreneurship, and business start-ups), entrepreneurial activity (the startup activity in the medium- or high-technology sector initiated by educated entrepreneurs in response to business opportunities in a somewhat competitive environment), and entrepreneurship aspiration (the efforts of the early stage entrepreneur to introduce new products and services, develop new production processes, penetrate foreign markets, substantially increase the number of firm employees, and finance the business with either formal or informal venture capital, or both).</td>
<td>Global Entrepreneurship and Development Institute</td>
<td>Rank 20 (2015 result-report)</td>
<td>Among the top 10 countries</td>
<td>Ministry of Economy</td>
</tr>
<tr>
<td>Global Innovation Index</td>
<td>A composite index that measures the performance of innovation in countries. Innovation inputs are measured based on institutions, human capital and research, infrastructure, market sophistication, and business sophistication, while innovation output is measured by knowledge and technology outputs, and creative outputs.</td>
<td>INSEAD</td>
<td>Rank 36 (2014 result-report)</td>
<td>Among the top 10 countries</td>
<td>Ministry of Economy</td>
</tr>
<tr>
<td>Share of &quot;Knowledge Workers&quot; in the labor force</td>
<td>An indicator that measures the share of highly skilled workers, workers in high-level professions, and workers classified under the International Standard Classification of Occupations (ISCO - 08) of the total workforce. These jobs include: legislators, managers, business executives, and specialists and technicians in the scientific, technical and humanitarian fields (i.e. the top levels of the classification of occupations).</td>
<td>Ministry of Labor</td>
<td>22.76% (2014)</td>
<td>40%</td>
<td>Ministry of Labor</td>
</tr>
<tr>
<td>Research and Development Expenditure as % of GDP</td>
<td>An indicator that measures of the total domestic expenditure on research and development (in the public, academic, and private sector), as a percentage of GDP.</td>
<td>National Bureau of Statistics</td>
<td>0.5% (2012)</td>
<td>1.5%</td>
<td>Ministry of Higher Education and Scientific Research</td>
</tr>
<tr>
<td>INDICATOR</td>
<td>DEFINITION</td>
<td>SOURCE</td>
<td>2012 RESULTS</td>
<td>2021 TARGETS</td>
<td>KEY SPONSOR</td>
</tr>
<tr>
<td>----------------------------</td>
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</tr>
<tr>
<td>Average TIMSS score</td>
<td>An indicator that reflects the nation’s ranking and score in the TIMSS test, which measure the math and science skills of students in grades 4 and 8.</td>
<td>International Association for the Evaluation of Educational Achievement</td>
<td>Rank 23 of 42 (2011 report)</td>
<td>Among the top 15 countries</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Upper Secondary Graduation Rate</td>
<td>An indicator that measures the percentage of national students graduating from secondary education out of the population in the age group of 18 years (measured as the number of graduates, regardless of age, divided by the population aged 18 years).</td>
<td>Ministry of Education and National Bureau of statistics</td>
<td>86.16% (2014)</td>
<td>90%</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Enrollment Rate in Preschools (public and private)</td>
<td>An indicator that measures the percentage of children between the age of 4 and 5 who are enrolled in preschools on the first day of the academic year (This indicator emphasizes the importance of providing children with a good foundation at an early age)</td>
<td>Ministry of Education and National Bureau of statistics</td>
<td>87.95% (2014)</td>
<td>95%</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Average PISA Score</td>
<td>An indicator that reflects the country’s ranking and scores in the PISA exam, which measures the reading, mathematics and science skills of 15 year old students.</td>
<td>Organization for Economic Co-operation and Development</td>
<td>Rank 46 of 65 (2012 Report)</td>
<td>Among the top 20 countries</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Percentage of students with high skills in Arabic, according to national tests - UAE NAP</td>
<td>An indicator that measures the share of ninth grade students with high skills in the Arabic language (reading, writing, spelling) according to national tests. The indicator covers students in public and private schools applying the Ministry of Education curriculum (UKP specific to UAE)</td>
<td>Ministry of Education</td>
<td>58.85% (2014)</td>
<td>90%</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Percentage of Schools with High Quality Teachers</td>
<td>This indicator measures the percentage of schools that meet certain quality standards of teachers based on a clear system of measurement and evaluation.</td>
<td>Ministry of Education</td>
<td>Work in progress</td>
<td>100%</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Percentage of Schools with Highly Effective School Leadership</td>
<td>This indicator measures the percentage of schools that achieve high scores on effective school leadership based on the school accreditation system.</td>
<td>Ministry of Education</td>
<td>26% (2013)</td>
<td>100%</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>Enrollment Rate in Foundation Year</td>
<td>This indicator measures the share of students who have to undergo foundation year (a program usually focusing on strengthening Arabic, English, Math and IT) out of the total students enrolled in the universities in the same year.</td>
<td>Ministry of Higher Education and Scientific Research</td>
<td>78% (2014)</td>
<td>0%</td>
<td>Ministry of Higher Education and Scientific Research</td>
</tr>
</tbody>
</table>
## Sustainable Environment and Infrastructure

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>DEFINITION</th>
<th>SOURCE</th>
<th>2012 RESULTS</th>
<th>2021 TARGETS</th>
<th>KEY SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality Index</td>
<td>An indicator that measures the quality of air in terms of supplying daily information on pollution and the negative effects it may have on human health. The indicator measures the (4) main air pollutants: nitrogen dioxide, carbon monoxide, sulphur dioxide, ozone.</td>
<td>Ministry of Environment and Water in Coordination with the National Center for Meteorology &amp; Seismology</td>
<td>65.98% (2014)</td>
<td>90%</td>
<td>Ministry of Environment and Water</td>
</tr>
<tr>
<td>Percentage of treated waste of total waste generated</td>
<td>This indicator measures the percentage of treated waste out of the total generated waste (solid municipal waste) using various treatment methods (recycling, incineration, waste-to-energy, chemical treatment, reuse, except for the landfill), in line with the methodology used by the OECD.</td>
<td>Ministry of Environment and Water in Coordination with National Bureau of Statistics</td>
<td>32.1% (Estimate Figure 2011)</td>
<td>75%</td>
<td>Ministry of Environment and Water</td>
</tr>
<tr>
<td>Share of Clean Energy Contribution</td>
<td>This indicator measures the contribution of clean energy sources (renewable, nuclear) to the total energy mix.</td>
<td>Ministry of Energy</td>
<td>0.2% (2014)</td>
<td>24%</td>
<td>Ministry of Energy</td>
</tr>
<tr>
<td>Water Scarcity Index</td>
<td>This indicator represents water overuse by measuring fresh water usage (including and surface water, renewable water and fossil water) as a percentage of overall renewable water in the UAE. The result is weighted to take into account desalination and waste water treatment.</td>
<td>Ministry of Energy</td>
<td>Ratio of 7.9 (2014)</td>
<td>Ratio of 4.0</td>
<td>Ministry of Energy</td>
</tr>
<tr>
<td>Networked Readiness Index (Telecommunication &amp; IT sectors)</td>
<td>A composite indicator that measures the readiness of a country to capture opportunities provided by information and communication technology to increase competitiveness based on (4) perspectives: Environment (the regulatory environment for information and communication technology and the environment for business and innovation), Readiness (infrastructure for information and communication technology and availability of expertise / skills), Usage (use of ICT by individuals, businesses, and government), Impact (the economic and social impact of information and communication technology).</td>
<td>World Economic Forum/Global IT Report</td>
<td>Rank 23 (2014 result - 2015 report)</td>
<td>Among the top 10 countries</td>
<td>Telecommunications Regulatory Authority</td>
</tr>
<tr>
<td>Quality of Air Transport Infrastructure</td>
<td>An indicator that measures the overall level of infrastructure at airports in the country and its adherence to international standards, using a global survey.</td>
<td>World Economic Forum (Global Competitiveness Report)</td>
<td>Rank 2 (2014 - 2015 Report)</td>
<td>Rank 1</td>
<td>General Civil Aviation Authority</td>
</tr>
<tr>
<td>INDICATOR</td>
<td>DEFINITION</td>
<td>SOURCE</td>
<td>2012 RESULTS</td>
<td>2021 TARGETS</td>
<td>KEY SPONSOR</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Logistics Performance Index</td>
<td>A composite indicator that measures the quality of infrastructure support for logistics activities based on a global survey on the performance of logistics in (6) perspectives: the effectiveness of border and customs management in terms of simplicity and speed, the quality of trade and transport infrastructure, the ease of shipping at competitive prices, the efficiency and quality of logistics services, the ability to track and trace cargo, and arrival of cargo to destinations on time.</td>
<td>World Bank</td>
<td>Rank 27 (2014 result-2014 report)</td>
<td>Among the top 10 countries</td>
<td>Federal Transport Authority- Land &amp; Maritime</td>
</tr>
<tr>
<td>Quality of Overall Infrastructure (such as transportation, electricity and telephone lines)</td>
<td>A composite indicator that measures the overall level of infrastructure based on (2) perspectives: the infrastructure for transport and the infrastructure for electricity and telecommunication. The first perspective assesses the overall level and quality of road networks, air transport infrastructure and port infrastructure, while the second perspective assesses the quality of electricity supply and telecommunication infrastructure.</td>
<td>World Economic Forum (Global Competitiveness Report)</td>
<td>Rank 3 (2014-2015 report)</td>
<td>Rank 1</td>
<td>Emirates Competitiveness Council</td>
</tr>
<tr>
<td>Online Services Index</td>
<td>This indicator measures the evolution of e-government services (i.e., smart services) in terms of availability, quality and diversity of channels and the use of the public for these services.</td>
<td>United Nations E-Government Survey</td>
<td>Rank 12 (2014 result-2014 report)</td>
<td>Rank 1</td>
<td>Telecommunications Regulatory Authority</td>
</tr>
<tr>
<td>Time to obtain a Loan/ House from the Government for UAE Nationals</td>
<td>This indicator measures the extent to which the country meets the housing needs of UAE nationals by measuring the waiting time between the date of application for a loan/house and the date of the final approval.</td>
<td>Sheikh Zayed Housing Programme</td>
<td>Work in progress</td>
<td>2 years from application date</td>
<td>Sheikh Zayed Housing Programme</td>
</tr>
</tbody>
</table>

(UAE Vision, 2011)
## COMPONENTS OF ENTREPRENEURIAL ECO-SYSTEM PILLARS

### Accessible Markets
- Domestic Market – Large Companies as Customers
- Domestic Market – Small/Medium Companies as Customers
- Domestic Market – Governments as Customers
- Foreign Market – Large Companies as Customers
- Foreign Market – Small/Medium Companies as Customers
- Foreign Market – Governments as Customers

### Human Capital/Workforce
- Management Talent
- Technical Talent
- Entrepreneurial Company Experience
- Outsourcing Availability
- Access to Immigrant Workforce

### Funding and Finance
- Friends and Family
- Angel Investors
- Private Equity
- Venture Capital
- Access to Debt

### Support System
- Mentors/Advisors
- Professional Services
- Incubators/Accelerators
- Network of Entrepreneurial Peers

### Regulatory Framework and Infrastructure
- Ease of Starting a Business
- Tax Incentives
- Business-Friendly Legislation/Policies
- Access to Basic Infrastructure (e.g. water, electricity)
- Access to Telecommunications/Broadband
- Access to Transport

### Education and Training
- Available Workforce with Pre-University Education
- Available Workforce with University Education
- Entrepreneur-Specific Training

### Major Universities as Catalysts
- Major Universities Promoting a Culture of Respect for Entrepreneurship
- Major Universities Playing a Key Role in Idea-Formation for New Companies
- Major Universities Playing a Key Role in Providing Graduates for New Companies

### Cultural Support
- Tolerance of Risk and Failure
- Preference for Self-Employment
- Success Stories/Role Models
- Research Culture
- Positive Image of Entrepreneurship
- Celebration of Innovation

(Source: WEF, 2014)
## Appendix 8 – Entrepreneurial Ecosystem Heat Map by Regions

<table>
<thead>
<tr>
<th>Pillar</th>
<th>US - Silicon Valley</th>
<th>US - Other Cities</th>
<th>North America</th>
<th>Europe</th>
<th>Aus/NZ</th>
<th>Asia</th>
<th>MEA</th>
<th>South/Central America and Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible Markets</td>
<td>92%</td>
<td>83%</td>
<td>85%</td>
<td>72%</td>
<td>69%</td>
<td>68%</td>
<td>68%</td>
<td>62%</td>
</tr>
<tr>
<td>Human Capital Workforce</td>
<td>93%</td>
<td>87%</td>
<td>90%</td>
<td>81%</td>
<td>81%</td>
<td>73%</td>
<td>50%</td>
<td>71%</td>
</tr>
<tr>
<td>Funding and Finance</td>
<td>91%</td>
<td>76%</td>
<td>82%</td>
<td>57%</td>
<td>69%</td>
<td>44%</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Mentors/Advisers/Support Systems</td>
<td>91%</td>
<td>72%</td>
<td>78%</td>
<td>52%</td>
<td>58%</td>
<td>38%</td>
<td>36%</td>
<td>35%</td>
</tr>
<tr>
<td>Regulatory Framework/Infrastructure</td>
<td>67%</td>
<td>57%</td>
<td>62%</td>
<td>54%</td>
<td>54%</td>
<td>39%</td>
<td>55%</td>
<td>42%</td>
</tr>
<tr>
<td>Education and Training</td>
<td>80%</td>
<td>62%</td>
<td>70%</td>
<td>60%</td>
<td>38%</td>
<td>34%</td>
<td>32%</td>
<td>27%</td>
</tr>
<tr>
<td>Major Universities as Catalysts</td>
<td>88%</td>
<td>67%</td>
<td>75%</td>
<td>52%</td>
<td>42%</td>
<td>30%</td>
<td>23%</td>
<td>27%</td>
</tr>
<tr>
<td>Cultural Support</td>
<td>90%</td>
<td>64%</td>
<td>75%</td>
<td>33%</td>
<td>35%</td>
<td>26%</td>
<td>45%</td>
<td>18%</td>
</tr>
<tr>
<td>Average Score</td>
<td>86%</td>
<td>71%</td>
<td>77%</td>
<td>58%</td>
<td>56%</td>
<td>44%</td>
<td>45%</td>
<td>41%</td>
</tr>
</tbody>
</table>