

QATAR NATIONAL REPORT 2018



Global
Entrepreneurship
Monitor



QDB

بنك قطر للتنمية
QATAR DEVELOPMENT BANK







FOREWORD

The Global Entrepreneurship Monitor (GEM) research program serves as the world's foremost source of information on entrepreneurial activities and metrics. The uniqueness in its cross-national collaborative approach and collection of datasets distinguishes it from other entrepreneurial research programs. The data collected through the Adult Population Survey (APS) and National Expert Survey (NES) is centrally coordinated and subjected to a range of quality checks to ensure that GEM data is of the highest quality and integrity.

The surveys generate relevant primary information capturing different aspects of entrepreneurship and provide harmonized measures about individuals' attributes and their activities in different phases of business venturing (from nascent to start-up, established business and discontinuation). It also identifies ambitious entrepreneurs and business owners who aspire to grow.

Every year GEM publishes the survey results obtained for entrepreneurial developments across the globe. These results are later used to identify initiatives and make evidence-based policy recommendations to improve the overall entrepreneurial activities in an economy. Furthermore, the cross-country comparisons and GEM indices enable us to discover effective policies which were implemented in other similar countries.

Qatar Development Bank (QDB) has been the primary government entity endowed with the responsibility of promoting entrepreneurship and small and medium enterprises (SMEs) in Qatar. This represents the third consecutive edition of GEM in Qatar supported by QDB, and an attempt to capture the entrepreneurial activities since 2016.

The 2018 GEM report outlines the social and cultural context of entrepreneurship in Qatar. The report not only reflects the positive entrepreneurial environment in Qatar, but also illustrates the extent to which entrepreneurs are accepted and supported in the country. Qatar has been ranked the first in the National Entrepreneurship Context Index (NECI). There has been considerable improvement in the twelve framework conditions according to the national experts. The outstanding performance of Qatar reflects a strong entrepreneurial spirit amongst its population, and a supportive entrepreneurial ecosystem.

Qatar has the highest entrepreneurial employee activity in the MENA region. The nascent entrepreneurship rate has increased incrementally from 2016 to 2018,

while the rate of business discontinuation has steeply declined during previous years. Interestingly, the early-stage entrepreneurial activity is equally strong amongst men and women.

There has been an increase in innovativeness and technology usage among early-stage Qatari entrepreneurs and established business owners.

The improved performance of Qatar, as evidenced in GEM 2018 survey, is a direct outcome of initiatives and measures taken at all levels of the ecosystem. These include economic reforms related to labour laws, privatization, special economic zones, and higher foreign ownership limits. Both public and private organizations are cohesively working towards creating a sustainable ecosystem by stimulating entrepreneurial ideas in young Qatari minds, and helping them to transform their business ideas into reality. This would ultimately contribute to economic diversification and sustainable economic development outlined in Qatar National Vision 2030.

I would like to personally thank all those who participated in the study for their valuable contribution, and I invite readers to go through the report and learn more about entrepreneurial activity in Qatar.

Abdulaziz bin Nasser Al-Khalifa
Chief Executive Officer



CONTENTS

FOREWORD	02
CONTENTS	04
LIST OF FIGURES	06
LIST OF TABLES	08
EXECUTIVE SUMMARY	10
KEY FINDINGS FROM THE APS	12
KEY FINDINGS FROM THE NES	17
1. INTRODUCTION	18
1.1 INTRODUCTION TO GEM	18
1.2 SCOPE OF REPORT	18
2. SOCIETAL ATTITUDES TOWARDS ENTREPRENEURSHIP IN QATAR	20
2.1 SOCIETAL VALUES ABOUT ENTREPRENEURSHIP BY GENDER AND NATIONALITY	21
2.2 REGIONAL COMPARISON	22

3. ENTREPRENEURIAL AND BUSINESS ACTIVITY	24
3.1 ENTREPRENEURIAL ACTIVITY IN QATAR	24
3.2 ESTABLISHED BUSINESSES IN QATAR	26
3.3 INNOVATION	26
3.4 TECHNOLOGY USAGE	27
3.5 INTERNATIONAL ORIENTATION	27
3.6 BUSINESS DISCONTINUANCE IN QATAR	28
3.7 JOB CREATION EXPECTATIONS	28
3.8 MOTIVATIONS	29
<hr/>	
4. WHO ARE QATAR'S ENTREPRENEURS	30
4.1 GENDER PROFILE OF ENTREPRENEURS	31
4.2 AGE PROFILE OF ENTREPRENEURS	32
4.3 EDUCATION PROFILE OF ENTREPRENEURS	34
<hr/>	
5. QATAR'S ENTREPRENEURIAL FRAMEWORK CONDITIONS	36
<hr/>	
6. COMPARATIVE INTERNATIONAL DATA	40
<hr/>	
7. METHODOLOGY AND DEFINITIONS	62
7.1 GEM INDICATORS	62
7.2 GEM CONCEPTUAL FRAMEWORK	63
7.3 HOW GEM MEASURES ENTREPRENEURSHIP	64
7.4 GEM METHODOLOGY	64

LIST OF FIGURES

FIGURE 1: GEM ECONOMIES BY GEOGRAPHIC REGION AND INCOME LEVEL, 2018	19
FIGURE 2: INDUSTRY DISTRIBUTION OF TEA, 2017-2018	26
FIGURE 3: MARKET INNOVATION AMONG EARLY-STAGE ENTREPRENEURS AND ESTABLISHED BUSINESS OWNERS, 2017-2018	26
FIGURE 4: AGE OF TECHNOLOGIES USED BY EARLY-STAGE ENTREPRENEURS AND ESTABLISHED BUSINESS OWNERS, 2017-2018	27
FIGURE 5: INTERNATIONAL ORIENTATION OF ENTREPRENEURS IN EARLY STAGE AND ESTABLISHED BUSINESS, 2017-2018	27
FIGURE 6: REASONS FOR BUSINESS EXIT IN QATAR, 2017-2018	28
FIGURE 7: EXPECTED NUMBER OF EMPLOYEES IN FIVE YEARS AMONG EARLY-STAGE ENTREPRENEURS	28
FIGURE 8: ENTREPRENEURIAL MOTIVATION FOR TEA IN QATAR, 2017-2018	29

FIGURE 9: NECI – SCORE AND GLOBAL RANKING OF MENA COUNTRIES, 2018	36
<hr/>	
FIGURE 10: EXPERT RATING OF THE ENTREPRENEURIAL FRAMEWORK CONDITIONS, 2018	37
<hr/>	
FIGURE 11: THE GEM CONCEPTUAL FRAMEWORK	64
<hr/>	
FIGURE 12: GEM ENTREPRENEURSHIP INDICATORS	65
<hr/>	

LIST OF TABLES

TABLE 1:	SOCIETAL VALUES ABOUT ENTREPRENEURSHIP IN QATAR, 2017-2018	20
TABLE 2:	SOCIETAL VALUES ABOUT ENTREPRENEURSHIP IN QATAR BY NATIONALITY AND GENDER, 2018	21
TABLE 3:	SOCIETAL VALUES ABOUT ENTREPRENEURSHIP COMPARED TO OTHER MENA COUNTRIES, 2018	22
TABLE 4:	ENTREPRENEURIAL ACTIVITY AT EACH PHASE, 2016-2018	24
TABLE 5:	ENTREPRENEURIAL ACTIVITY AT EACH PHASE COMPARED TO OTHER MENA COUNTRIES, 2018	25
TABLE 6:	ENTREPRENEURIAL ACTIVITY AT EACH PHASE COMPARED TO OTHER MENA COUNTRIES (CONT'D), 2018	25
TABLE 7:	ENTREPRENEURSHIP CHARACTERISTICS BETWEEN QATARI AND NON-QATARI, 2018	30
TABLE 8:	ENTREPRENEURSHIP CHARACTERISTICS BY GENDER, 2018	31
TABLE 9:	TEA RATE BY AGE GROUP, 2018	32
TABLE 10:	AGE GROUPS AND ENTREPRENEURIAL INDICATORS IN QATAR, 2018	33
TABLE 11:	ENTREPRENEURSHIP ACTIVITY BY EDUCATION LEVEL, 2018	34

TABLE 12: RATINGS OF THE 12 NATIONAL ENTREPRENEURIAL FRAMEWORK CONDITIONS IN QATAR, 2016–2018	38
TABLE 13: SOCIETAL VALUES OF ENTREPRENEURSHIP, GEM 2018	40
TABLE 14: SELF-PERCEIVED ENTREPRENEURIAL OPPORTUNITIES, CAPABILITIES, FEAR OF FAILURE, 2018	42
TABLE 15: TYPE OF ENTREPRENEURIAL ACTIVITY, 2018	44
TABLE 16: TYPE OF ENTREPRENEURIAL ACTIVITY (CONT'D), 2018	46
TABLE 17: ENTREPRENEURIAL MOTIVATION FOR TEA, 2018	48
TABLE 18: JOB CREATION EXPECTATION FOR TEA, 2018	50
TABLE 19: INNOVATION LEVEL, INTERNATIONALIZATION FOR TEA, 2018	52
TABLE 20: GENDER DISTRIBUTION OF TEA, 2018	54
TABLE 21: GENDER DISTRIBUTION OF TEA, OPPORTUNITY TEA AND NECESSITY TEA, 2018	56
TABLE 22: TEA BY AGE GROUP, 2018	58
TABLE 23: NATIONAL ENTREPRENEURSHIP CONTEXT INDEX (NEC) AND ITS 12 COMPONENTS, 2018	60

EXECUTIVE SUMMARY

The Global Entrepreneurship Monitor (GEM) research consortium tracks rates of entrepreneurship across multiple phases in many economies every year, making it the world's most authoritative comparative study of entrepreneurial activity in the general adult population. GEM has mapped out entrepreneurship rates in 49 economies in 2018. This is the fourth year Qatar has tracked entrepreneurship across multiple phases and assessed the characteristics, motivations, and ambitions of entrepreneurs.

The Qatar National Report 2018 provides a comparison to the previous years' results; the Middle East and North Africa (MENA) economies, including Egypt, Iran, Lebanon, Morocco, Kingdom of Saudi Arabia (KSA), Sudan, Turkey and the United Arab Emirates (UAE); and the 49 participating global economies.

This report draws on the findings from two surveys:

- **Adult Population Survey (APS):** A survey of 2,573 Qatar residents aged between 18 and 64 years. Respondents were randomly chosen with a representation of all nationalities and gender.
- **National Expert Survey (NES):** Comprises of surveys conducted with 54 carefully chosen Qatari 'entrepreneur experts' across twelve framework categories (see Chapter 7), which represent the most important components of the entrepreneurship ecosystem.



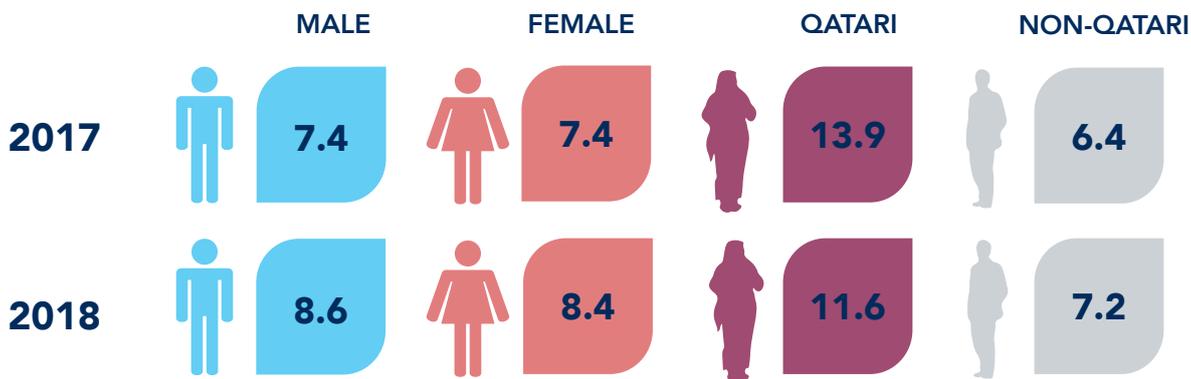


KEY FINDINGS FROM THE APS

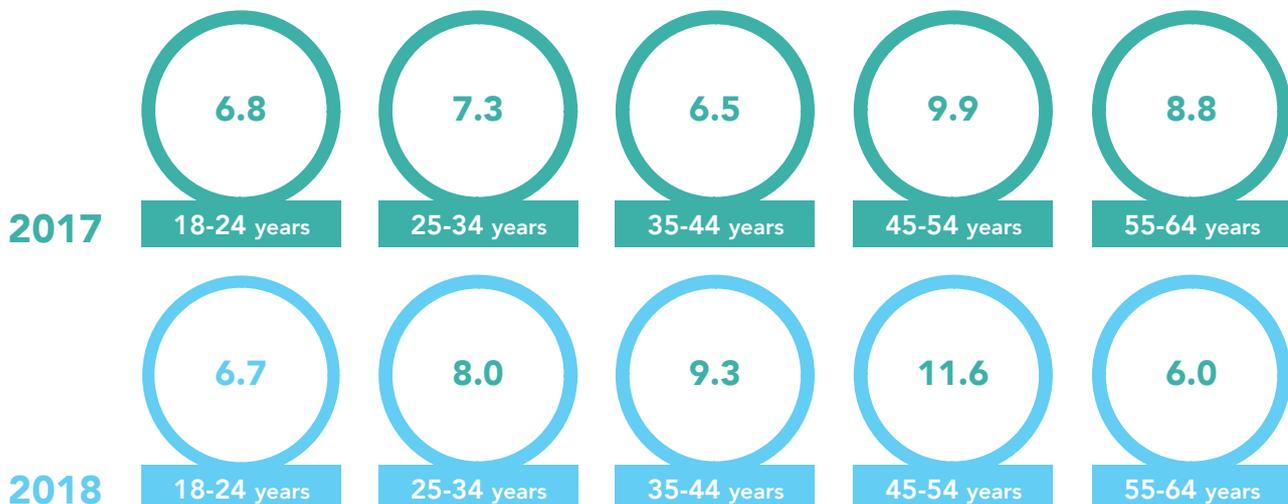
TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY (TEA)



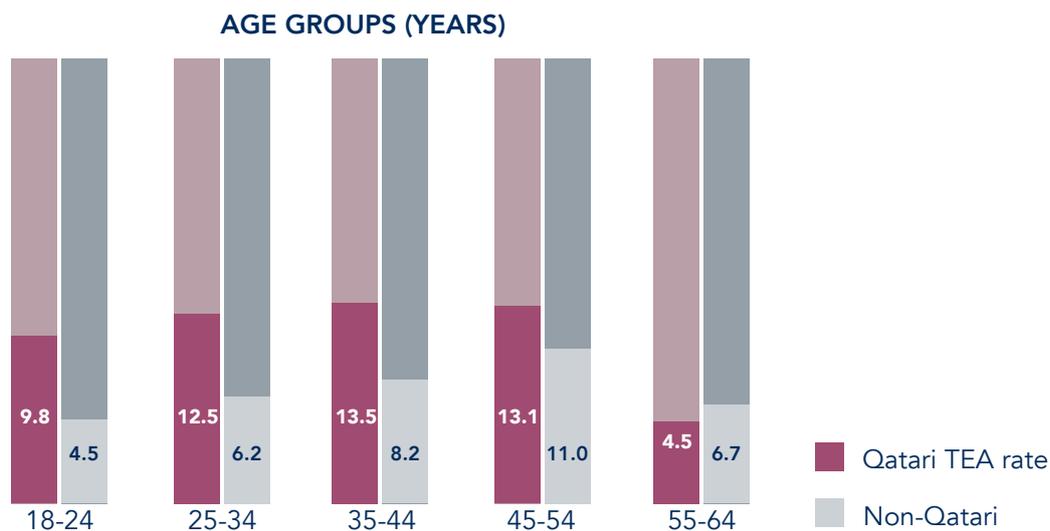
TEA BY GENDER, NATIONALITY AND AGE GROUP



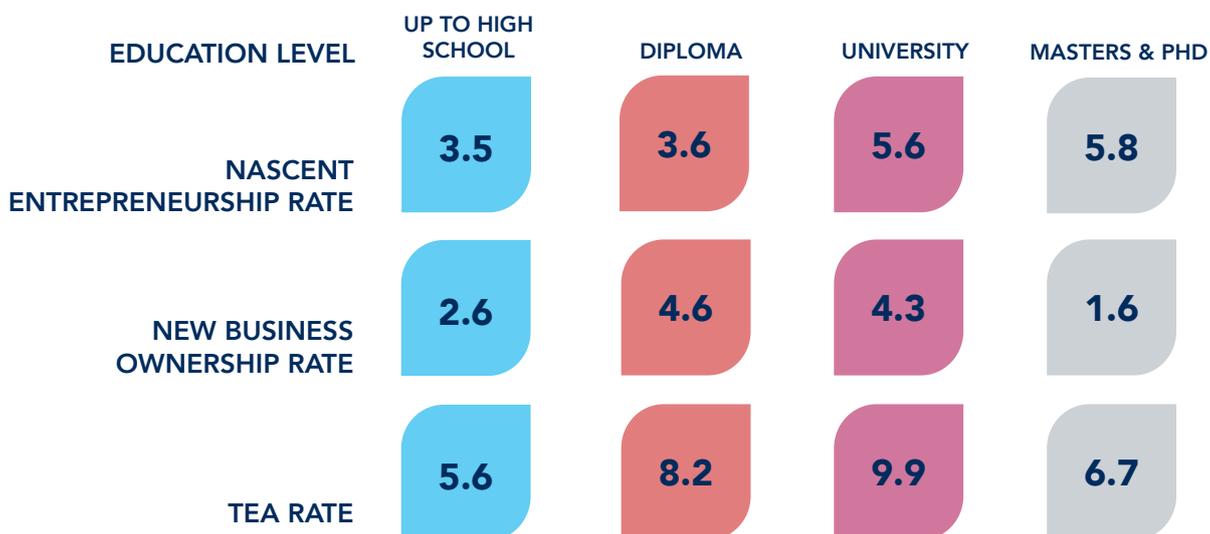
AGE GROUP



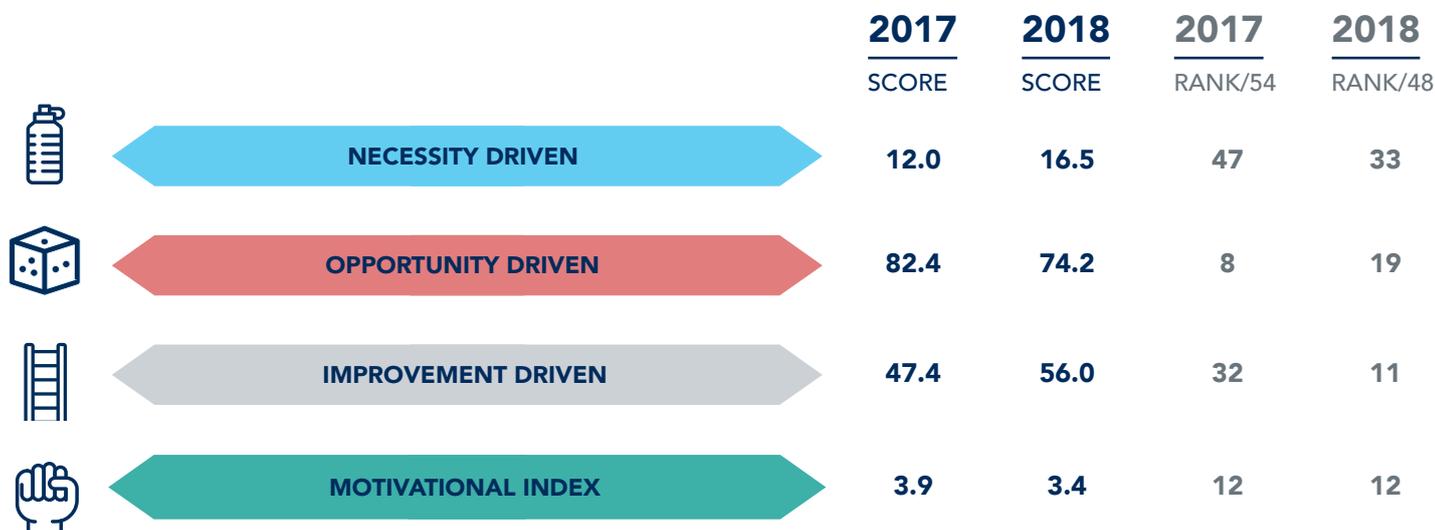
TEA RATE BY AGE GROUP AND NATIONALITY, 2018



ENTREPRENEURSHIP ACTIVITY BY EDUCATION LEVEL, 2018



MOTIVATION FOR TEA



T – indicates that the ranking is the same for two or more economies

SOCIETAL VALUES ABOUT ENTREPRENEURSHIP

		<u>2017</u> SCORE	<u>2018</u> SCORE	<u>2017</u> RANK/52	<u>2018</u> RANK/47
	ENTREPRENEURSHIP AS A GOOD CAREER CHOICE	65.9	68.2	18	15
	HIGH STATUS FOR SUCCESSFUL ENTREPRENEURS	77.3	76.7	10	12
	MEDIA COVERAGE ON ENTREPRENEURSHIP	54.0	64.2	34	19

SELF-PERCEPTION ABOUT ENTREPRENEURSHIP

		<u>2017</u> SCORE	<u>2018</u> SCORE	<u>2017</u> RANK/54	<u>2018</u> RANK/48
	PERCEIVED OPPORTUNITIES	45.6	54.2	25	17
	PERCEIVED CAPABILITIES	41.1	52.3	43	18T
	FEAR OF FAILURE	41.9	32.6	15	29T
	ENTREPRENEURIAL INTENTIONS	15.7	29.1	29	15T

T – indicates that the ranking is the same for two or more economies

INNOVATION LEVEL, INTERNATIONALIZATION – PERCENTAGE OF TEA AND JOB EXPECTATION

		2017	2018	2017	2018
		SCORE	SCORE	RANK/52	RANK/47
	JOB EXPECTATIONS (+6 JOBS IN FIVE YEARS)	45.0	26.7	1	14
	INNOVATION (PRODUCT/ SERVICE IS NEW)	37.9	26.9	8	23
	INTERNATIONALIZATION (25%+ INTERNATIONAL SALES)	41.6	41.8	6	7

PHASE AND TYPES OF ENTREPRENEURIAL ACTIVITY

		2017	2018	2017	2018
		SCORE	SCORE	RANK/54	RANK/48
	NASCENT ENTREPRENEURSHIP RATE	4.7	5.0	33T	26
	NEW BUSINESS OWNERSHIP RATE	2.8	3.6	42	32T
	ENTREPRENEURIAL EMPLOYEE ACTIVITY (EEA)	7.4	6.3	42	10T
	ESTABLISHED BUSINESS OWNERSHIP RATE	1.3	4.2	54	40T
	BUSINESS DISCONTINUATION RATE	5.8	3.0	17	33

T – indicates that the ranking is the same for two or more economies

ENTREPRENEURSHIP CHARACTERISTICS BETWEEN QATARI AND NON-QATARI, 2018

Entrepreneurial activity	Qatar overall	Nationality	
		Qatari	Non-Qatari
Nascent entrepreneurship rate	5.0	6.5	4.5
New business ownership rate	3.6	5.6	2.7
Early-stage entrepreneurial activity (TEA)	8.5	11.8	7.2
Entrepreneurial employee activity (EEA)	6.3	9.5	5.1
Established business ownership rate	4.2	7.9	2.7
Discontinuation of businesses	3.0	4.9	2.2
Self-perceptions about entrepreneurship			
Perceived opportunities	54.2	67.5	48.7
Perceived capabilities	52.3	52.6	52.2
Fear of failure	32.6	28.1	32.3
Entrepreneurial intentions	29.1	47.7	24.8
Societal values about entrepreneurship			
Entrepreneurship as a good career choice	68.2	80.2	63.5
High Status for successful entrepreneurs	76.7	89.4	71.7
Media attention for entrepreneurship	64.1	83.7	56.4
Easy to start a business	51.1	77.5	40.5
Businesses that primarily aim to solve social problems	46.7	68.5	36.2

KEY FINDINGS FROM THE NES

NATIONAL ENTREPRENEURSHIP CONTEXT INDEX (NECI) 2018



ENTREPRENEURIAL FRAMEWORK CONDITIONS

		2017	2018
	ENTREPRENEURIAL FINANCE	4.4	5.8
	GOVERNMENT POLICIES: SUPPORT AND RELEVANCE	5.7	6.9
	GOVERNMENT POLICIES: TAXES AND BUREAUCRACY	5.1	6.4
	GOVERNMENT ENTREPRENEURSHIP PROGRAMS	5.3	6.6
	ENTREPRENEURSHIP EDUCATION AND TRAINING AT SCHOOL STAGE	4.3	6.8
	ENTREPRENEURIAL EDUCATION AND TRAINING AT POST-SCHOOL STAGE	5.0	7.3
	RESEARCH AND DEVELOPMENT TRANSFER	4.4	6.4
	COMMERCIAL AND LEGAL INFRASTRUCTURE	5.1	6.3
	INTERNAL MARKET DYNAMICS	5.2	8.0
	INTERNAL MARKET BURDENS OR ENTRY REGULATIONS	4.3	7.2
	PHYSICAL INFRASTRUCTURE	6.4	5.9
	CULTURAL AND SOCIAL NORMS	4.8	6.8

1. INTRODUCTION

1.1 INTRODUCTION TO GEM

There is widespread agreement among academics and policymakers that entrepreneurs, and the new businesses they establish, play a critical role in economic prosperity. They support and promote entrepreneurship, business growth and innovation in geographic regions. GEM contributes to this recognition with longitudinal studies and comprehensive analyses of entrepreneurial attitudes and activities across the globe.

The GEM survey was conceptualized to understand the interdependency between entrepreneurship and economic development, to:

- uncover factors that encourage or hinder entrepreneurial activity, especially those related to societal values, personal attributes, and the entrepreneurship ecosystem
- provide a platform for assessing the extent to which entrepreneurial activity influences economic growth within individual economies
- uncover policy implications for enhancing entrepreneurial capacity in an economy

Since its inception in 1999 by scholars at Babson College and London Business School, GEM has developed into one of the world's leading research consortia concerned with improving one's understanding of the relationship between entrepreneurship and national development. In the twenty years since its inception, GEM has surveyed over 2.9 million adults in 112 countries, covering all geographic regions and economic levels. Information on the methodology and conceptual framework of GEM can be found in **Chapter 7: Methodology and Definitions** of this report.

1.2 SCOPE OF REPORT

This report details a comparative evaluation of GEM measures of entrepreneurial attitudes, activity and aspirations in Qatar for 2018 based on the findings obtained from the following two studies:

- **APS:** The results are obtained from a random, representative sample of 2,573 telephonic and face-to-face surveys of Qatar residents, between 18 and 64 years of age.
- **NES:** The results comprise of 54 surveys of pre-approved entrepreneurship and government experts in Qatar. The national experts provided their qualitative and quantitative feedback on 12 major components of the Entrepreneurial Framework conditions.

In 2018, 49 economies including Qatar participated in the GEM APS and NES studies. The economies that participated in the 2018 GEM edition are shown in Figure 1 below. The countries have been grouped according to their geographic location and level of income. Qatar's results in this report are compared to other participating countries in the MENA region, namely; Egypt, Iran, KSA, Lebanon, Morocco, and UAE.

FIGURE 1: GEM ECONOMIES BY GEOGRAPHIC REGION AND INCOME LEVEL, 2018



*Included in National Entrepreneurship Context Index (NECI) only
 Source: Global Entrepreneurship Monitor, 2018/2019 Global Report

2. SOCIETAL ATTITUDES TOWARDS ENTREPRENEURSHIP IN QATAR

Entrepreneurial attitudes and perceptions play an important role in creating an entrepreneurial culture, which contributes to the overall entrepreneurial ecosystem. Societal attitudes can have a significant influence on potential entrepreneurs in an economy. GEM assesses the extent to which adult population (aged

between 18 and 64 years) perceive entrepreneurship to be a good career choice, and whether they believe that entrepreneurs have a high social status. The assessment also includes the extent of positive representations of entrepreneurs in the media. The results obtained are summarized in **Table 1**.

TABLE 1: SOCIETAL VALUES ABOUT ENTREPRENEURSHIP IN QATAR, 2017-2018

In Qatar ...	2017	2018
Most people would prefer that everyone had a similar standard of living	57.0	65.7
Most people consider starting a new business a desirable career choice	65.9	68.2
Those successful at starting a new business have a high level of status and respect	77.3	76.7
You will often see stories in the public media or internet about successful new businesses	54.0	64.2
It is easy to start a business	39.4	51.1
You will often see businesses whose primary objective is solving social problems	40.0	46.2

The 2018 results indicate an overall improvement in societal attitude among people towards entrepreneurship in Qatar, compared to 2017. Almost two-thirds of Qatar's adult population (65.7%) believe that most people would want a similar standard of living for all and that starting a new business is a good career choice (68.2%). Despite the ease of getting a public paid job, there is an increase of 2.3% in the desire of entrepreneurship amongst the surveyed indicating that Qatar's adult population continues to show positive perceptions of entrepreneurship in general. Although most people

believe that entrepreneurs enjoy a high social status and respect (76.7%), the perception has not changed since 2017 (77.3%). A considerable proportion of the Qatari population has the opinion that public media along with the internet provide good coverage of successful new businesses (64.2%), adding to their global publicity. More than half of the surveyed population agree that it is easier to start a new business venture in Qatar now, compared to 2017; however, only 46.2% stated that businesses primarily aim to solve social problems (see **Table 1**).

2.1 SOCIETAL VALUES ABOUT ENTREPRENEURSHIP BY GENDER AND NATIONALITY

The assessment of individual perceptions of societal values about entrepreneurship shows that several differences in societal values related to entrepreneurship exist among the adult population of Qatar, with respect to gender and nationality. The difference in scores arising from a difference in nationalities is more significant than that due to the difference in genders (Table 2). The Qataris contain a significantly higher percentage of the adult population (77.0%) who prefer a similar standard of living, compared to the non-Qatari population (61.1%). Majority of Qatar's

adult population prefers entrepreneurship as a career choice compared to other sources of employment. They also strongly believe that successful entrepreneurs hold a high social status and are respected, and are also popular figures in public media and social media. For a business start-up, opportunities, entrepreneurial skills, and various organizational supports play a crucial role. 77.5% of Qataris agree on the relative ease of initiating a business venture in Qatar, thus indicating the existence of an encouraging entrepreneurial ecosystem in Qatar.

TABLE 2: SOCIETAL VALUES ABOUT ENTREPRENEURSHIP IN QATAR BY NATIONALITY AND GENDER, 2018

In Qatar ...	Overall Qatar	Nationality		Gender	
		Qatari	Non-Qatari	Male	Female
Most people would prefer that everyone had a similar standard of living	65.7	77.0	61.1	65.4	66.8
Most people consider starting a new business a desirable career choice	68.2	80.2	63.5	67.0	72.7
Those successful at starting a new business have a high level of status and respect	76.7	89.4	71.7	76.7	76.8
You will often see stories in the public media or internet about successful new businesses	64.2	83.7	65.1	63.5	67.0
It is easy to start a business	51.1	77.5	40.5	51.6	48.9
You will often see businesses whose primary objective is solving social problems	46.2	68.5	36.2	45.7	48.5

Qatari women, in general, hold a more positive outlook towards entrepreneurship, than Qatari men. Compared to men, women are more likely to opt for entrepreneurship, although they believe that starting a business in Qatar

is considerably challenging. More Qatari women than men feel that businesses cater to social causes, and entrepreneurship is an avenue to gain social status and respect, thus overall social empowerment (see Table 2).

2.2 REGIONAL COMPARISON

Table 4 compares the societal entrepreneurship values in Qatar with that of other MENA countries participating in GEM APS 2018. From a regional perspective, Sudan and Turkey, record the highest percentage of adults who are willing to consider entrepreneurship as a good career choice (around 80%). Comparatively, Qatar displays a lower percentage of this societal value and ranks closer to Saudi Arabia and UAE. Iran displays the lowest percentage of adults (39.3%) considering entrepreneurship to be a good career choice, among the participating MENA countries.

Due to the relative social and economic prominence of entrepreneurs in Qatar, more than 75% of the surveyed Qatari population relates an entrepreneur with high social status. Surprisingly, despite Iran's adverse outlook towards entrepreneurship as a good career choice (39.3%), the nation displays a strong belief among its nationals that, successful entrepreneurs achieve high social status (80.5%). Sudan (85.3%) and Egypt (82.6%), record the highest percentage of the adult population who correlate entrepreneur with high status.

TABLE 3: SOCIETAL VALUES ABOUT ENTREPRENEURSHIP COMPARED TO OTHER MENA COUNTRIES, 2018

	Good career choice		High status to successful entrepreneurs		Media attention for entrepreneurship		Easy to start a business	
	Score	Rank/47	Score	Rank/47	Score	Rank/47	Score	Rank/47
QATAR	68.2	16	76.7	12	64.2	19	51.1	16
EGYPT	74.0	10	82.6	5	68.1	14T	61.5	7
IRAN	39.3	45	80.5	7T	50.8	37	12.7	42
LEBANON	-	N/A	-	N/A	-	N/A	-	N/A
MOROCCO	61.1	28	68.3	31	52.2	35	26.8	29T
SAUDI ARABIA	66.8	18	78.2	10	71.4	11	64.8	6
SUDAN	79.4	7	85.3	1	70.8	12	53.6	12
TURKEY	80.8	5	66.1	35	52.6	34	28.9	28
UAE	71.7	12	69.4	28	72.5	9	59.7	8

T – indicates that the ranking is the same for two or more economies

Entrepreneurship and the media are uniquely correlated. Creation, innovation, and novelty of thought not only form the foundation of entrepreneurial activities but are also drivers in the success of media businesses. On the other side, media facilitates entrepreneurship by promoting the entrepreneurial phenomenon, its spirit, values, and practices. UAE (72.5%), Saudi Arabia (71.4%), and Sudan (70.8%) display a higher percentage of their population, who positively correlate mediated

attention with entrepreneurship. Qatar scores 64.2% on this societal value, indicating that almost two-thirds of the adult Qatari population acknowledges the increased media attention towards entrepreneurs. In spite of the fact that more than half of the adult population of Qatar sense the ease of starting a new business in their country, Qatar ranks below Egypt, Saudi Arabia, Sudan and UAE on this societal value; while Iran, Morocco and Turkey rank below Qatar.



3. ENTREPRENEURIAL AND BUSINESS ACTIVITY

GEM represents the largest on-going study, which intends to measure the dynamism of entrepreneurial activities globally. GEM conceptualizes entrepreneurship as a continuous process that includes nascent entrepreneurs involved in setting up a business, entrepreneurs who own and manage a new business, and entrepreneurs who own and manage an established business. Thus, it performs an annual assessment of entrepreneurial activity levels in a country. In addition, GEM assesses the rate and nature of business discontinuation.

3.1 ENTREPRENEURIAL ACTIVITY IN QATAR

GEM primarily focuses on the analysis of entrepreneurial attitudes, aspirations, and activities; distinguish the factors, which determine the nature and level of entrepreneurial activity; and identifying the policies, which influence entrepreneurship in an economy. GEM aims to trace an entrepreneur's journey right from the opportunity recognition phase through the business owning and managing phase, until it becomes an established business. Thus, GEM research provides a holistic overview of entrepreneurship in a country.

The key indicator of GEM is the TEA rate, which represents the percentage of the adult population between 18 and 64 years of age, and who are in the process of starting a business, or have already started a business, which is less than 42 months old. The TEA rate categorizes entrepreneurs into two groups: nascent entrepreneurs and new business owners. Nascent entrepreneurs are people who are actively engaged in starting a business or are at a very early stage of starting a new business that is less than four months old; and, have not paid salary for more than three months.

New business owners include those who have started a new business since January 2015 and have paid salary for at least three months. These entrepreneurs at least partly own and manage the new business. Measuring these two types of entrepreneurs is important, as it provides information about the level of early-stage entrepreneurial activities that might be transformed into established businesses.

Table 4 summarizes the early stage business activities in Qatar. The nascent entrepreneurship rate has incrementally increased from 2016 to 2018. Although the new business ownership rate, Early-stage entrepreneurial activity (TEA), Early-stage entrepreneurship rate (TEA) and established business ownership rates showed a considerable decline in 2017 from 2016; they have all significantly improved in 2018.

Interestingly, there has been a steep decline in the rate of business discontinuation from 2016 to 2018, indicating a positive entrepreneurial start-up ecosystem in Qatar. The various government initiatives to support start-up businesses, along with attempts to promote and advance the entrepreneurial culture, in addition to innovation and novelty of products, could have played a crucial role in cultivating the entrepreneurial spirit among local youth.

3.1.1 REGIONAL COMPARISON

Table 5 shows the comparative nascent entrepreneurship rate, new business ownership rate and TEA for the MENA countries, which participated in GEM APS 2018. Qatar has an intermediate nascent entrepreneurship rate between that of Iran and Saudi Arabia, whereas the TEA score of Qatar is between that of Morocco and Iran.

TABLE 4: ENTREPRENEURIAL ACTIVITY AT EACH PHASE, 2016 - 2018

Phase of Entrepreneurial Activity	2016		2017		2018	
	Score	Rank/64	Score	Rank/54	Score	Rank/48
Nascent entrepreneurship rate	4.3	44T	4.7	33T	5.0	26
New business ownership rate	3.6	43	2.8	42	3.6	32T
Early-stage entrepreneurial activity (TEA)	7.8	49	7.4	42	8.5	33
Entrepreneurial employee activity (EEA)	6.4	9	2.5	26	6.3	10T
Established business ownership rate	3.0	58	1.3	54	4.2	40T
Discontinuation of businesses	14	10	5.8	17	3.0	33

T – indicates that the ranking is the same for two or more economies

The new business owner rate of Qatar is in between that of Morocco and UAE. The analysis shows that Qatar is ranked below the median for nascent entrepreneurship rate, new business ownership rate, and TEA.

TABLE 5: ENTREPRENEURIAL ACTIVITY AT EACH PHASE COMPARED TO OTHER MENA COUNTRIES, 2018

	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)	
	Score	Rank	Score	Rank	Score	Rank
QATAR	5.0	26	3.6	32T	8.5	33
EGYPT	4.0	35T	5.9	17T	9.8	27
IRAN	4.1	32T	5.7	21	9.7	28
LEBANON	6.9	19	17.6	2	24.1	4
MOROCCO	3.3	27T	3.5	24	6.7	37
SAUDI ARABIA	5.3	25	6.9	13	12.1	19T
SUDAN	10.3	9T	12.6	6	22.2	6
TURKEY	7.4	14T	7.1	12	14.2	15
UAE	7.1	17T	3.9	27T	10.7	24T

T – indicates that the ranking is the same for two or more economies

Among the MENA countries, Sudan ranks highest for nascent entrepreneurship, followed by Turkey. Lebanon has the highest score for both new business ownership rate and TEA, followed by Sudan.

GEM research also captures the level of early-stage entrepreneurial activities in different economies that might be transformed into established businesses or might be discontinued (**Table 6**). On one hand, Qatar along with UAE secures the highest rank for EEA and on the other hand, Qatar falls below the median score for established business ownership rate.

TABLE 6: ENTREPRENEURIAL ACTIVITY AT EACH PHASE COMPARED TO OTHER MENA COUNTRIES (CONT'D), 2018

	Entrepreneurial employee activity (EEA)		Established business ownership rate		Discontinuation of businesses	
	Score	Rank	Score	Rank	Score	Rank
QATAR	6.3	10T	4.2	40T	3.0	33
EGYPT	2.1	31	4.5	39	7.6	8T
IRAN	0.9	43	12.3	9	6.1	13
LEBANON	1.7	37T	21.6	2	8.0	7
MOROCCO	4.8	17	4.2	40T	10.4	3
SAUDI ARABIA	2.8	28	3.1	45	8.5	5
SUDAN	4.3	19T	10.2	15	17.3	2
TURKEY	3.2	25T	8.7	17	5.2	15
UAE	6.3	10T	2.6	46	5.1	16

T – indicates that the ranking is the same for two or more economies

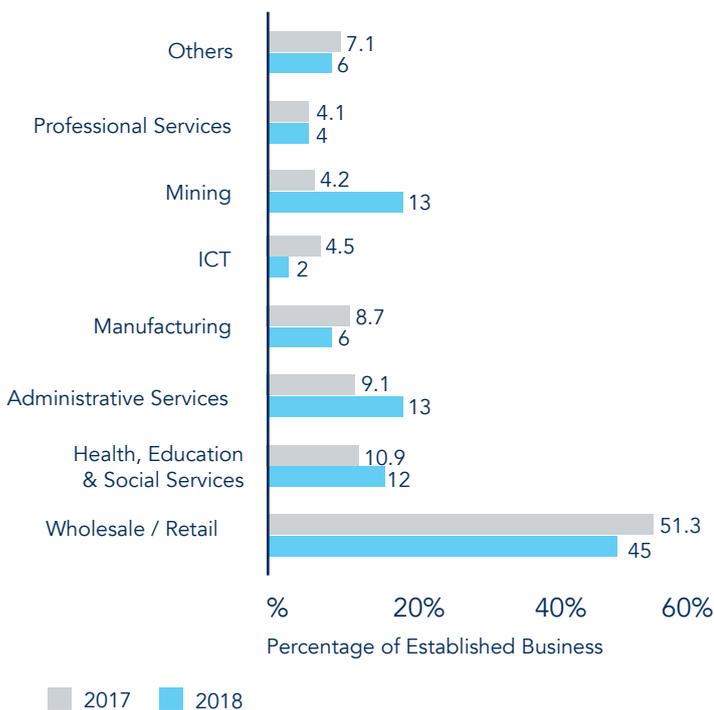
Lebanon has the highest rate of established business ownership rate, followed by Iran. Information on the rate of business discontinuance is a crucial indicator of the sustainability of entrepreneurship in an economy. Interestingly, Qatar has the lowest score for business activity discontinuation, once again indicating a positive entrepreneurial culture and ecosystem in Qatar.

3.2 ESTABLISHED BUSINESSES IN QATAR

Information on the level of established business is imperative, as it provides an indication of the sustainability of entrepreneurship in an economy. Established businesses refers to those who have moved beyond the nascent and early-stage entrepreneurial activities. Such businesses contribute to a nation’s economy through the continual introduction of novice and innovative products and processes and as a source of stable employment. The GEM survey is a real-time snapshot of global entrepreneurial and business activities, it acts as a lens to view the level of mature business activity relative to start-up activity.

Figure 2 illustrates comparative TEA of Qatar in 2017 and 2018. In 2018, the highest TEA of 51.3% is observed in the retail and wholesale sector of Qatar. The TEA in this sector has increased by 6.3% from 2017. The retail and wholesale sector represents consumer services. The increase in Qatari business activities in the consumer services from 2017 to 2018 indicate an overall improvement in the living standard of a nation’s population, and is indeed in accordance to the steady increase in GDP of Qatar from 2017 to 2018. In addition to an increase in consumer services.

Figure 2: Industry Distribution of TEA 2017-2018



3.3 INNOVATION

The concepts of entrepreneurship and innovation are strongly related. Entrepreneurial innovation is often described as the process of unleashing radically different products, services, and processes to the market. Innovation is a key component of entrepreneurship, and innovative entrepreneurs, in general, tend to establish the most successful businesses. The element of innovation is often linked to the financial performance of a company. Thus, business competitiveness also depends on the level of creativity and innovativeness of its entrepreneur. However, innovation goes beyond just creating novice products and services, and may not limit itself to fuelling the industrial revolution but also brings about deep societal change.

GEM measures innovation in businesses by looking at the variable with respect to the entrepreneur’s products or services offerings; the degree of newness they present to customers.

In this section, the presence of innovation component in TEA and established businesses by studying the questions will be analysed; how many (potential) customers would consider the product / service they offer to be new or unfamiliar. A low percentage for the option “none” indicates that more customers consider the product / services to be innovative in the market. The distributions of responses to this question, in 2017 and 2018, are exhibited in **Figure 3**. The results indicate 65% of the early-stage entrepreneurs claim that all or some of their customers consider their activities to be innovative, whereas this percentage is slightly lesser in established firms (49.6%). However, compared to 2017, both early-stage entrepreneurs and established business owners in 2018 report an increase in the innovativeness in product / services they offer.

Figure 3: Market Innovation among Early-stage Entrepreneurs and Established Business Owners, 2017-2018



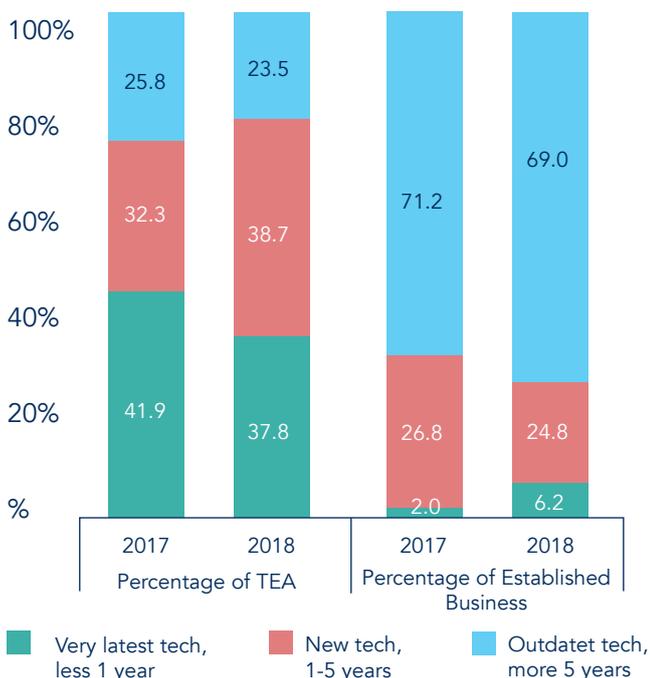
3.4 TECHNOLOGY USAGE

Technology serves as the primary tool to foster and promote the growth of entrepreneurship. With the increase in competitiveness of business environment, it is essential for entrepreneurs to develop relationships with customers and suppliers for easier access to business-related information. Advancements in information technology with simultaneous improvements in communication infrastructure assist SMEs to achieve international growth. It not only allows them to participate in the global market but also makes it possible to sell a range of products and services from any part of the world, around the clock. Use of technologies such as cloud computing, blockchain, biometrics, serverless computing, intellectual property rights, interactive technology, educational and technology marketing is becoming more common. The use of new technologies is also linked to innovation in entrepreneurial businesses. Therefore, it is important that businesses simultaneously have access to technology as well as the capacity to effectively use it.

GEM research estimates the percentage of entrepreneurs that use the latest (< 1 year old), new (1–5 years old), and relatively outdated (> 5 years old) technologies for their business activities. **Figure 4** shows that 38.7% of the early-stage entrepreneurs use the latest technology, in comparison to established businesses in which only 6.2% of the owners use latest technology. The relative use of latest and new technologies is more in TEA than in established business during 2017 and 2018.

Furthermore, the percentage use of outdated technologies for both TEA and established businesses has reduced from 2017 to 2018. In other words, there is an increase in entrepreneurs who tend to keep themselves updated with new or latest technologies.

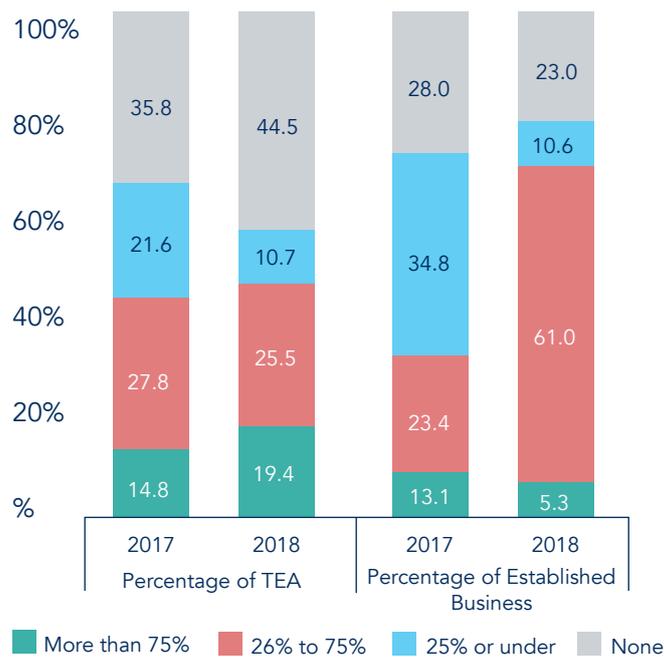
Figure 4: Age of Technologies used by Early-stage Entrepreneurs and Established Business Owners, 2017-2018



3.5 INTERNATIONAL ORIENTATION

In today's global economy, internationalization is an important feature of global firms. They represent nascent and early-stage entrepreneurs who attempt rapid internationalization immediately after the firm's establishment. Additionally, businesses that are well established in domestic markets also tend to become gradually global. GEM evaluates internationalization of early entrepreneurial and established firms, which achieve 25% or more of their sales from international markets. Most nascent entrepreneurs and new business owners in Qatar have an international orientation and attempt to generate some revenues from international customers. Approximately 1 out of 2 early-stage entrepreneurs (55.6%) expect to generate some revenue from overseas customers; while the percentage of internationalization is higher for an established firm, with 76.9% of the owners reporting some revenue generated from sales in the international market (**Figure 5**).

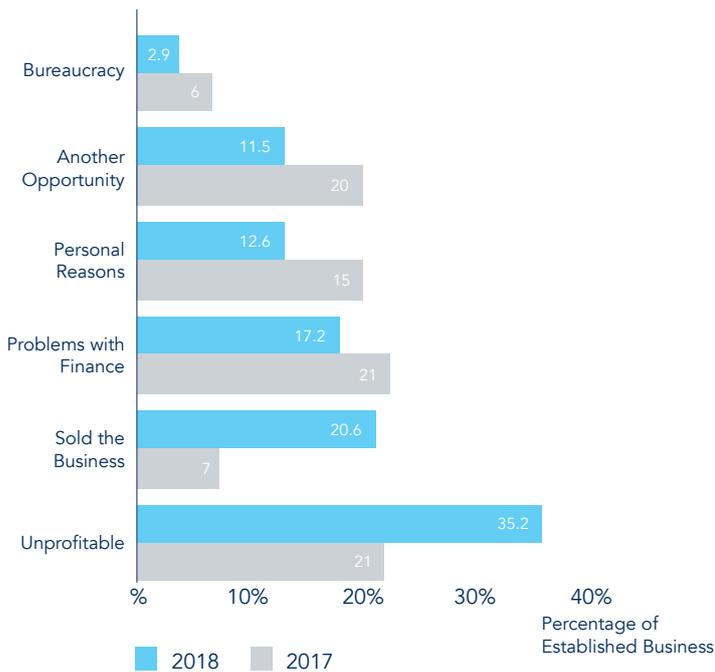
Figure 5: International Orientation of Entrepreneurs in Early Stage and Established Business, 2017-2018



3.6 BUSINESS DISCONTINUANCE IN QATAR

Discontinuation of activities in owning and managing a business are important to entrepreneurship. Information on the rate of business discontinuance is an important indicator of whether entrepreneurship can be sustained within an economy. GEM research captures both the extent of discontinuation and the underlying reasons. Of the several reasons, often, people discontinue their current business only to get involved in a new start-up. The common reasons for business discontinuance or exit in Qatar are summarized in **Figure 6**.

Figure 6: Reasons for Business Exit in Qatar, 2017-2018



In 2018, the greatest reason for discontinuance of business in Qatar is the unprofitability. Although the percentage of business discontinuance due to unprofitability has increased in 2018 compared to 2017, yet this was still one of the major reasons for business exit in 2017. Financing is another difficulty that Qataris businesses face. In 2018, 17.2% of Qataris exit business activity due to lack of financial support, and compared to 2017, this percentage has decreased. Therefore, in 2018, due to financial problems, around one out of six Qatari businesses exit from their business activities.

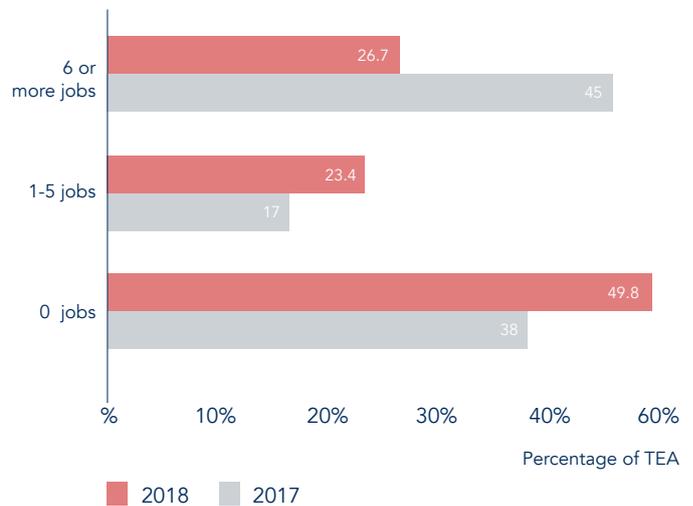
Switching over to another business was more common in 2017, which contributed 20% to the business discontinuance in Qatar. However, this has reduced considerably to 11.5%, indicating the reduction in the business opportunity in Qatar. Interestingly, selling off a business has become much more popular in 2018 compared to 2017, and contributes 20.6% to the business exit in Qatar. In fact, Qatar ranks 3rd highest among the top countries, based on the rate of business discontinuity due to selling off the business. Bureaucratic problems and personal reason are the other problems cited for business discontinuation in Qatar.

3.7 JOB CREATION EXPECTATIONS

Entrepreneurship is closely associated with job creation and economic development. GEM observes that despite the global improvement and stability in entrepreneurship level, prospects of job creation has reduced significantly across all economic development levels. There is a clear relationship between opportunity-motivation levels and job creation prospects. GEM assesses job creation expectations in the coming five years among early-stage entrepreneurs and established business owners.

Figure 7 shows the extent of job creation between 2017 and 2018, in Qatar.

Figure 7: Expected Number of Employees in Five Years among Early-Stage Entrepreneurs, 2017-2018



The overall job creation prospect of early-stage entrepreneurs and established businesses has reduced in 2018 from 2017. Almost one out of two businesses in Qatar was expected to create 6 or more jobs in 2017. However, there is a stark decrease in job creation in 2018. One out of almost 4 businesses is expected to create 6 or more jobs in 2018. This is also reflected in the increase in businesses without job opportunities to 49.8% in 2018 from 38% in 2017. The percentage of businesses which have a scope of creating 1-5 jobs has increased from 17% in 2017 to 23.4% in 2018.

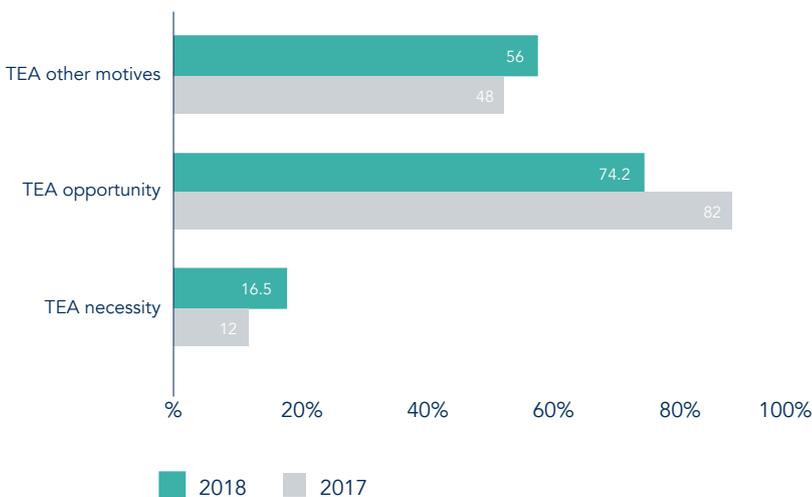
3.8 MOTIVATIONS

Motivation is a key factor that drives an entrepreneur into entrepreneurship; although the motives might vary among individuals, motivation plays a crucial role in determining the quality of business resulting from early-stage entrepreneurial activities. GEM classifies motivation for early-stage entrepreneurial activity based on necessity, opportunity or other reasons. People who have been pushed into entrepreneurship due to lack of other job alternatives can be easily distinguished from those who have entered entrepreneurship because of lucrative business opportunities. GEM research has shown that opportunity-driven entrepreneurs enjoy a higher business success rate compared to those initiated by necessity-driven entrepreneurs. However, in developing countries, the level of necessity-driven entrepreneurship tends to be higher, as other job prospects might be less. **Figure 8** explores the distinction between necessity-driven entrepreneurship (having no alternatives for work), opportunity-driven entrepreneurship (taking advantage of a business opportunity) or entering entrepreneurship due to other opportunities (such as seeking greater independence or income by taking advantage of a business opportunity).

The relative proportion of opportunity-driven versus necessity-driven entrepreneurial activity provides an insight into the quality of the TEA in a country. In Qatar, entrepreneurial activities are motivated by opportunity rather than necessity. The trend is similar for both 2017 and 2018. Percentage of early-stage entrepreneurial activities driven by other motives in Qatar, fall in between those motivated by necessity and opportunity. Therefore, Qatar has more entrepreneurs who are capable of identifying potential niche market or developing a new idea or innovation as part of their employment.

Opportunity-driven entrepreneurs are widely viewed as valuable resources to an economy. This is because they usually make more relevant contributions to the economy in terms of competitiveness, productivity, and innovation. However, motivation for starting the business is not the sole factor for determining the success of a business and its contribution to an economy.

Figure 8: Entrepreneurial Motivation for TEA in Qatar, 2017-2018



4. WHO ARE QATAR'S ENTREPRENEURS

In 2018, Qatari nationals display TEA rate of 6.5% (nascent entrepreneur). In comparison, about 5 in every 100 of non-Qataris is an entrepreneur (**Table 7**). Among the new business owners, Qatari nationals display a TEA rate of 5.6%. Entrepreneurial intentions are much higher among Qatari nationals compared to non-Qataris. When comparing the results based on nationality, the rate of perceived opportunities is higher for Qatari nationals (67.5%) than for expatriates (48.7%).

Furthermore, the rate of entrepreneurial intentions for Qatari nationals is almost double that of expatriates (47.7% and 24.8% respectively). Qatari nationals surveyed in the APS also report higher scores for all three measures when compared with expatriate respondents. More than three-quarters of Qatari nationals (80.2%) believe entrepreneurship is a good career choice compared to 60.0% of expatriates (**Table 7**).

TABLE 7: ENTREPRENEURSHIP CHARACTERISTICS BETWEEN QATARI AND NON-QATARI, 2018

Entrepreneurial activity	Qatar overall	Nationality	
		Qatari	Non-Qatari
Nascent entrepreneurship rate	5.0	6.5	4.5
New business ownership rate	3.6	5.6	2.7
Early-stage entrepreneurial activity (TEA)	8.5	11.8	7.2
Entrepreneurial employee activity (EEA)	6.3	9.5	5.1
Established business ownership rate	4.2	7.9	2.7
Discontinuation of businesses	3.0	4.9	2.2
Self-perceptions about entrepreneurship			
Perceived opportunities	54.2	67.5	48.7
Perceived capabilities	52.3	52.6	52.2
Fear of failure	31.1	28.1	32.3
Entrepreneurial intentions	31.1	47.7	24.8
Societal values about entrepreneurship			
Entrepreneurship as a good career choice	68.2	80.2	63.5
High Status for successful entrepreneurs	76.7	89.4	71.7
Media attention for entrepreneurship	64.1	83.7	56.4
Easy to start a business	51.1	77.5	40.5
Businesses that primarily aim to solve social problems	46.7	68.5	36.2

The Qatari participants obtain a higher score for societal values and self-perception. Compared to the non-Qatari population, Qatari entrepreneurs have higher self-perceptions and societal values (**Table 7**). The Qatari entrepreneurs have a lower fear of failure of 28.1%, compared to 32.3% among non-Qatari entrepreneurs. Interestingly, both Qatari and non-Qatari entrepreneurs have a similar perception of their capabilities.

Table 7 indicates that a higher percentage of Qatar's adult population (80.2%) embrace entrepreneurship as a good career choice, capable of earning them social respect (89.4%) and media attention (83.7%), compared to the non-Qatari population. In addition, the ease of starting a business venture is more among Qatari entrepreneurs (77.5%) than non-Qatari entrepreneurs (40.5%).

4.1 GENDER PROFILE OF ENTREPRENEURS

Female participation improves economic development and allows for more gender equality. Research shows that most economies show greater number of men are more likely to initiate a business venture than women. Every year, only a few economies are identified by GEM which

displays gender equality in TEA rates. The perceived capability of starting a business can significantly impact the transitioning of an individual to an intentional entrepreneur. Those who consider that they do not have the necessary entrepreneurial skill, knowledge, and experience, are less likely to start a new venture. On the contrary, GEM research shows that individuals who are confident about their capabilities are four to six times more likely to be involved in entrepreneurial activity.

Table 8 shows the gender-based self-perception of entrepreneurial opportunities, capabilities, fear of failure and intentions in Qatar. It also summarizes the differences in societal values about entrepreneurship, based on gender.

TABLE 8: ENTREPRENEURSHIP CHARACTERISTICS BY GENDER, 2018

Entrepreneurial activity	Qatar overall	Gender	
		Male	Female
Nascent entrepreneurship rate	5.0	5.3	3.9
New business ownership rate	3.6	3.4	4.3
Early-stage entrepreneurial activity (TEA)	8.5	8.6	8.4
Entrepreneurial employee activity (EEA)	6.3	6.9	3.7
Established business ownership rate	4.2	4.6	2.8
Discontinuation of businesses	3.0	3.1	2.6
Self-perceptions about entrepreneurship			
Perceived opportunities	54.2	55.9	46.7
Perceived capabilities	52.3	55.0	41.5
Fear of failure	31.1	30.4	34.0
Entrepreneurial intentions	31.1	29.6	37.1
Societal values about entrepreneurship			
Entrepreneurship as a good career choice	68.2	67.0	72.7
High Status for successful entrepreneurs	76.7	76.7	76.8
Media attention for entrepreneurship	64.2	63.5	67.0
Easy to start a business	51.1	51.6	48.9
Businesses that primarily aim to solve social problems	46.7	45.7	48.5

Overall, the results show that in Qatar, men have a higher TEA rate compared to women, except in new business ownership rate. Women have a TEA rate of 4.3% compared to that of men (3.4%) in new business ownership activities. However, Qatar shows gender parity in early-stage entrepreneurial activities.

In Qatar, males have a higher rate of perceived opportunities (55.9%) and capabilities (55.0%), compared to their female counterparts. Moreover, the fear of failure is also high among females (34.0%). Additionally, the entrepreneurial intention is found to be higher among female adults (37.1%), than in males (29.6%).

Female entrepreneurs display higher societal values compared to their male counterparts. They view entrepreneurship as a good career choice (72.7%), with high status (76.8%) and media attention (67%). Compared to men (45.7%), female entrepreneurs view is that businesses are mostly aimed at solving social issues (48.5%). However, the ease of starting a business in Qatar, is higher among adult males (51.6%), compared to their female counterparts (48.9%).

4.2 AGE PROFILE OF ENTREPRENEURS

The influence of age on entrepreneurial activities are relatively consistent throughout the GEM research. Previous GEM reports indicate that TEA rates are relatively low in the 18-24 year age group, and it is highest among those aged 25 to 34 years and 35 to 44 years. Qatar has a relatively young population, the majority of its nationals are between the ages of 20 to 40

years old. This implies that in Qatar, younger people are more involved in entrepreneurship. In 2018, the average age of an entrepreneur in Qatar was about 37 years old. However, given that the standard deviation is more than nine years, it can be safely presumed that a large proportion of entrepreneurs in Qatar in 2018 were aged between 28 and 46 years old. Furthermore, the age of entrepreneurs with less than 3.5 years of business activity is around 35 years old with a standard deviation of nine years. Unsurprisingly, owners/ managers of established businesses were older than early-stage entrepreneurs in 2018, with a mean age of about 40 years old (standard deviation of 9.3 years).

In most developing and developed economies, the majority of entrepreneurs belonged to the 25-34 and 35-44 age groups. Therefore, it is likely that entrepreneurs belonging to these age groups have earned a college education and relevant experience. However, these individuals might not have reached a point in their careers where they own and manage established businesses, or pursue attractive and/or stable employment positions. These individuals are more likely to be in harmony with the latest technologies, innovative ideas, and enthusiasm needed to pursue new business opportunities. However, if their start-up ventures are not successful, these young entrepreneurs would still have several working years ahead of them to pursue alternate income-generating options. **Table 9** summarizes the TEA rate in Qatar, segmented according to age. Overall the TEA rate in Qatar shows an increase from 6.6% (18-24 years age group) to 11.7% (45-54 years age group), and then decreases sharply to 5.8% (55-64 years age group).

TABLE 9: TEA RATE BY AGE GROUP, 2018

Entrepreneurial activity	Age Groups (Years)				
	18-24	25-34	35-44	45-54	55-64
Overall Qatar TEA rate	6.6	7.9	9.3	11.7	5.8
Qatari TEA rate	9.8	12.5	13.5	13.1	4.5
Non-Qatari TEA rate	4.5	6.2	8.2	11.0	6.7

Qatari nationals show higher TEA rate compared to the non-Qatari adult population for all age groups, except 55-64 years. In this age group, non-Qataris display a higher TEA rate of 6.7%, compared to Qatari nationals (4.5%). The variation in self-perception and societal values about entrepreneurship has been tabulated as a function of age in **Table 10**.

TABLE 10: AGE GROUPS AND ENTREPRENEURIAL INDICATORS IN QATAR, 2018

Entrepreneurial activity		Age Groups (Years)				
		18-24	25-34	35-44	45-54	55-64
Overall Qatar	Perceived opportunities	47.5	54.3	54.9	55.5	63.9
	Perceived capabilities	33.5	51.8	56.9	63.9	56.9
	Entrepreneurship as a desirable career choice	67.5	69.9	67.0	64.6	72.2
	Fear of failure	34.2	32.5	31.1	26.1	26.1
	Entrepreneurial intentions	22.8	29.8	35.9	34.4	33.0
Qatari	Perceived opportunities	61.4	63.5	69.2	78.6	79.1
	Perceived capabilities	28.6	52.5	64.3	70.6	51.2
	Entrepreneurship as a desirable career choice	75.5	83.6	82.6	76.9	78.6
	Fear of failure	37.9	22.8	28.8	26.4	25.6
	Entrepreneurial intentions	38.3	74.5	61.1	45.6	41.0
Non-Qatari	Perceived opportunities	37.8	51.2	50.5	44.3	54.7
	Perceived capabilities	36.9	51.4	54.7	60.6	59.5
	Entrepreneurship as a desirable career choice	62.1	65.4	62.5	58.6	68.1
	Fear of failure	31.1	35.6	31.8	25.8	25.4
	Entrepreneurial intentions	13.6	24.1	28.8	29.0	29.5

Qatari entrepreneurs have a higher perception of opportunities, entrepreneurial intentions, and desirability for entrepreneurship as a career choice, and a lower sense of failure, compared to non-Qatari entrepreneurs of all age groups. The Qatari adult population also has a higher perception of their capabilities in owning and managing business activities, compared to non-Qataris, in the age groups of 25-34, 35-44, and 45-54 years old. However, the two extreme ranges of age groups; 18-24 and 55-64 years old show a different trend where the non-Qataris have a higher perception of self-capabilities than the Qatari nationals.

Interestingly, entrepreneurs of the age group 55-64 years old display higher entrepreneurial indicators and a lower sense of failure compared to the age groups of 18-24 and 25-34 years old. The older age group of 55-64 years old is also more likely to have lesser financial obligations, in terms of mortgages and cost of living of young families, compared to the younger age groups. This implies that the 55-64 years age group enjoys greater flexibility to explore entrepreneurial opportunities.

4.3 EDUCATION PROFILE OF ENTREPRENEURS

GEM research displays a strong correlation between an individual's perceived capabilities (skills) and TEA rates, thus implying that all forms of education (both formal and informal) are important in developing entrepreneurial aptitudes. According to GEM's entrepreneurial framework conditions, primary and secondary entrepreneurship education entails the basic school education, while

entrepreneurship education at the post-secondary level includes higher education such as vocational, college, business schools, etc. **Table 11** illustrates the education level among the adult population of Qatar involved in nascent entrepreneurship, new businesses and TEA.

TABLE 11: ENTREPRENEURSHIP ACTIVITY BY EDUCATION LEVEL, 2018

Entrepreneurial activity	Education Level			
	Up to High School	Diploma	University	Master & PHD
Nascent entrepreneurship rate	3.5	3.6	5.6	5.8
New business ownership rate	2.6	4.6	4.3	1.6
TEA rate	5.6	8.2	9.9	6.7

Nascent entrepreneurship rate is found to be directly correlated with education. Thus higher education encourages higher entrepreneurial competency. Furthermore, most of the TEA is found to be carried out by university graduates (9.9%). Diploma and university graduates are also seen to be the forerunners in new business ownership rate, while the masters and

Ph.D. holders lag behind. Furthermore, individuals with a diploma and university graduates perceive entrepreneurship to be a good career choice, compared to those with high school degrees or masters and doctorates.



5. QATAR'S ENTREPRENEURIAL FRAMEWORK CONDITIONS

Every economy participating in GEM conducts NES, which involves engaging of survey experts. The NES focuses on environmental factors, which are likely to have a significant impact on the entrepreneurial sector, captured in the EFCs (Entrepreneurial Framework Conditions).

The NES questionnaire is standardized for all countries and has been designed to capture the informed opinions of national experts in each country, who are specially selected based on their background and experience. These experts are asked to express their views about the most important conditions and whether they foster or constrain entrepreneurial activity and development in their country.

When all the data is collected, the files are harmonized centrally by the GEM Data Team, which includes an internal quality audit and the calculation of site variables that summarize each block of questions designed to measure certain aspects of the EFCs.

The NES provides insights into the ways in which the EFCs shape Qatar's entrepreneurial ecosystem. In Qatar, 54 experts were interviewed using both a semi-structured and structured questionnaire. The closed questionnaire consisted of several statements related to different

aspects of the EFCs, and the responses were measured using a Likert scale of 1 (highly insufficient) to 9 (highly sufficient). The data obtained from these respondents were analysed to determine the score for each category of questions.

Using the responses of experts on EFCs, NECI is calculated by GEM for each participating country. The index offers a combined overview of EFCs in a country. GEM uses the composite NECI based on GEM's NES, to assess the entrepreneurship environment in economies using 12 framework conditions. The index can be used by policy-makers and practitioners to benchmark the results against those of peer economies and identify the areas which need to be addressed in order to enhance an economy's entrepreneurial potential and impact. **Figure 9** shows the score and global ranking of the MENA countries in 2018.

Qatar ranked first amongst its global peers on NECI, in 2018. This shows that the entrepreneurial ecosystem in Qatar is thriving. The ranking achieved is a result of the numerous initiatives and efforts undertaken in Qatar to encourage the growth of entrepreneurship, and create a sustainable entrepreneurial environment.

Figure 9: NECI – Score and Global Ranking of MENA countries, 2018

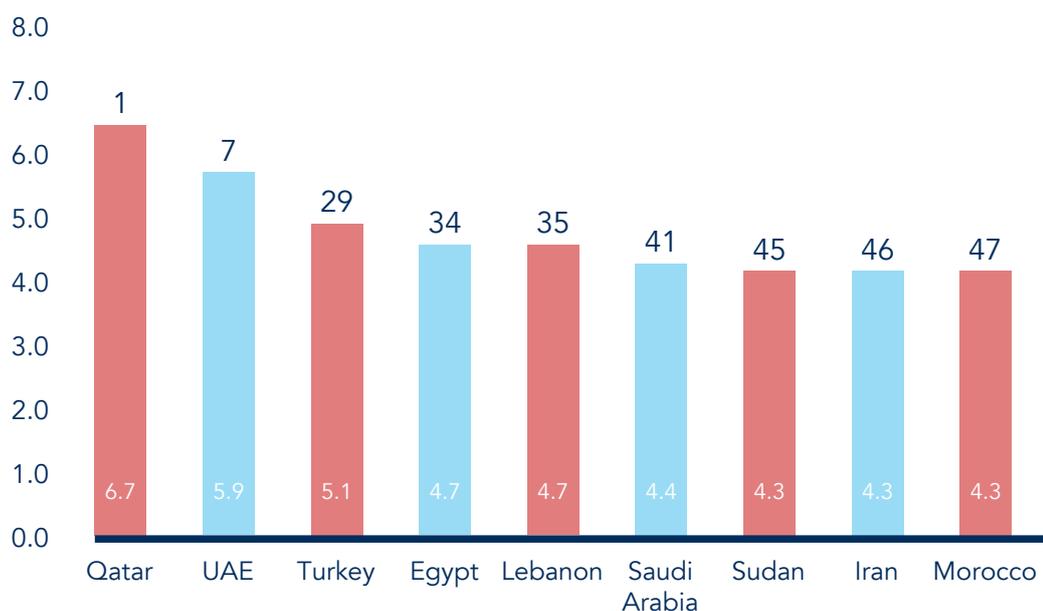
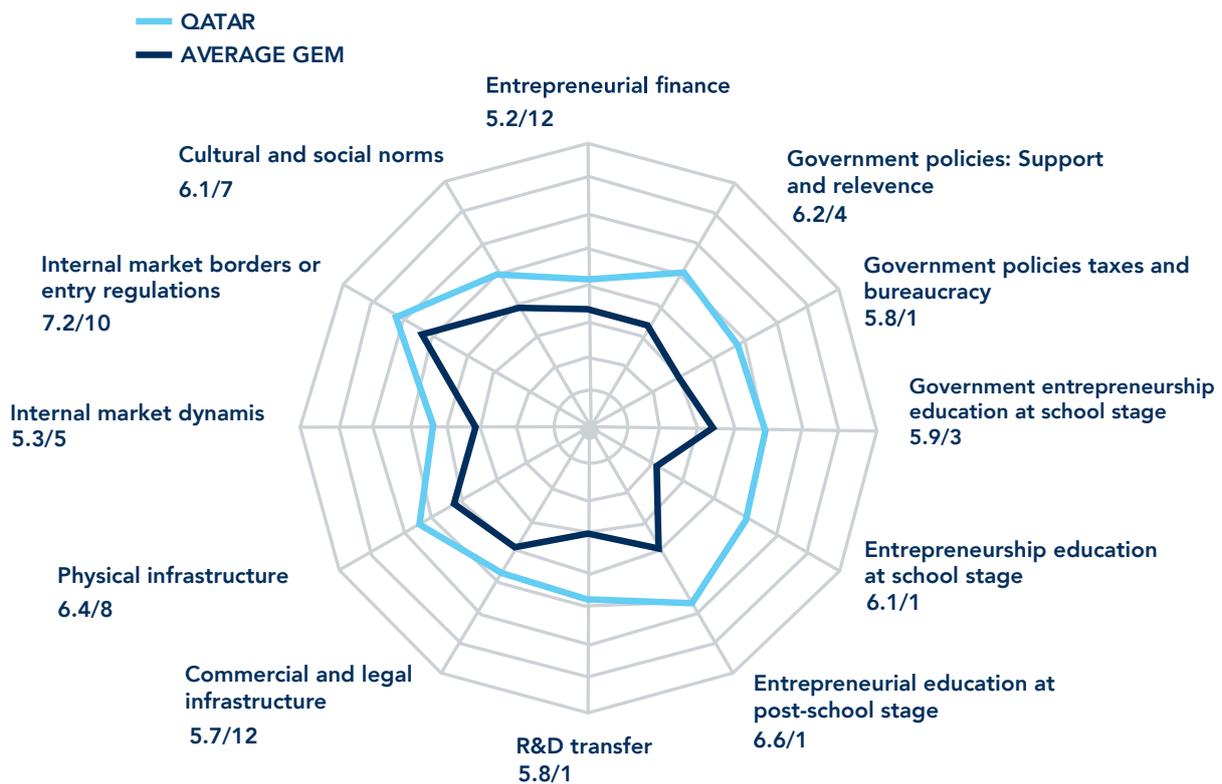


Figure 10 shows the 12 framework conditions, which formed the foundation of the NECI. Qatar outperforms its global peers on each of the framework conditions evaluated. Qatar performed remarkably in government policies: support and relevance; government policies: support and bureaucracy; government entrepreneurship programs; entrepreneurship education at school stage; and entrepreneurial education at the post-school stage, compared to other participating countries. This implies the positive impact of government policies and regulations, along with well-established infrastructure for imparting entrepreneurial education and knowledge. Of the several pro-entrepreneurship initiatives by the Qatar government, the prominent ones include the establishment of

Qatar Development Bank (QDB), which assists in the development of entrepreneurship and the promotion of SMEs; launch of 'Center for Entrepreneurship' (CFE), in 2013, an initiative of Qatar University; establishment of the Qatar Business Incubation Centre (QBIC), one of the largest regional incubator facility aimed to provide financial aid, training, mentorship and other facilities; Tech Venture Fund for financing start-ups; along with several policies for women empowerment. In addition, organizations such as Bedaya, Nama, Injaz Qatar and Silatech are focused to inspire and assist in capacity building of young and aspiring Qatari entrepreneurs to succeed in the global economy by providing support, education, and mentorship.

Figure 10: Expert Rating of the Entrepreneurial Framework Conditions, 2018



(Weighted average: 1 = highly insufficient; 9 = highly sufficient)

Table 12 exhibits the comparative scores for twelve framework conditions of Qatar reported by national survey experts for 2016, 2017, and 2018. Compared to 2016 and 2017, Qatar has shown an improvement in the scores for all the twelve framework conditions reported by 54 national experts in 2018. The outstanding

performance of the nation is a direct outcome of the combined efforts of both government and non-government pro-entrepreneurial initiatives and measures to develop a positive and sustainable environment for entrepreneurship to flourish.

TABLE 12: RATINGS OF THE 12 NATIONAL ENTREPRENEURIAL FRAMEWORK CONDITIONS IN QATAR, 2016–2018

Entrepreneurship Framework Conditions	2016	2017	2018
Entrepreneurial finance	4.5	4.4	5.2
Government policies: support and relevance	5.5	5.7	6.2
Government policies: taxes and bureaucracy	4.7	5.1	5.8
Government entrepreneurship programs	5.4	5.3	5.9
Entrepreneurship education at school stage	4.6	4.3	6.1
Entrepreneurial education at post-school stage	5.8	5.0	6.6
R&D transfer	4.3	4.4	5.8
Commercial and legal infrastructure	5.2	5.1	5.7
Physical infrastructure	6.6	6.4	6.4
Internal market dynamics	4.5	5.2	5.3
Internal market burdens or entry regulations	4.0	4.3	7.2
Cultural and social norms	5.4	4.8	6.1

Finance for Entrepreneurs' Conditions

In 2018, the financial framework condition of Qatar showed a significant improvement (5.2%) compared to the previous years (4.5% in 2016 and 4.4% in 2017). Experts' evaluation indicates a slight increase in VCs, IPOs, angel investors, crowdfunding and equity capital in 2018 compared to the previous years, whereas the availability of debt funding has been reduced for entrepreneurs. The following parameters have received a score in the range of 5 and 6, from the national survey experts, indicating that they do not completely agree to the availability of:

- a. Sufficient equity and debt funding
- b. Government subsidies
- c. Funding from informal investors for new and growing firms

Government Program Conditions

Government programs for entrepreneurs are perceived to be favourable in Qatar (5.9%). All the parameters of government programs have improved over the previous year (5.4% in 2016 and 5.3% in 2017), barring the support from science parks and business incubators, which has decreased slightly from previous years.

Compared to the previous years, the following conditions have shown significant improvement, namely;

- a. Almost anyone who needs help from a government program for a new or growing business can find what they need; and,
- b. Government programs aimed at supporting new and growing firms are effective.

Government Support and Bureaucratic Conditions

In 2018, government policies and the bureaucracy shows significant progress from the previous years. According to Qatar's experts, parameters impacting government policies and bureaucracy, such as national and local level policies to support new and growing firms have improved slightly. Experts' evaluation indicates significant improvements such as the availability of permits and licenses within a week, etc. Additionally, it is now easier to cope with government bureaucracy, regulations, and licensing requirements.

R&D Transfer Conditions

In 2018, the score for R&D transfer condition (5.8%) was much higher than in the previous years (4.3% in 2016 and 4.4% in 2017). Most of the components have witnessed a growth of more than 20%. In 2018, the experts' opinions were more favourable for knowledge transfer from universities and public research centres to new and growing firms. Moreover, not all experts agree to the fact that new firms have as much access to new research and technology, as the large and established firms. In addition, there is a scope for increasing public subsidies for new and growing firms, to help them develop or acquire new technologies.

Commercial Infrastructure and Professional Services Conditions

Commercial and professional infrastructure for entrepreneurs highlights a mixed opinion in Qatar. However, all the components of this block, showed higher average scores in 2018, it still has scope to improve further. Factors such as affordability and availability of sub-contractors, consultant, and suppliers for new and growing firms are not entirely positive; indicating that there is room for improvement. However, it is somewhat favourable to get professional accounting and legal service for new and growing firms.

Internal Market Dynamics and Burdens Conditions

In 2018, the scores for internal market dynamics for new players has improved since last year with an increase of more than 20% in most of the components. Qatar displayed a higher average score for each of the components, in comparison to its regional and global peers. The result suggests that are entry barriers for new firms which are created by established firms. However, this condition has improved by 20% from the previous year. The score of the effectiveness of anti-trust legislation has also increased by 25% and is well above respective scores of MENA and global countries.

Entrepreneurial Education and Training Conditions

Entrepreneurial education has improved significantly in Qatar from the previous year. Most of the components have shown an improvement of more than 30%. Qatar has done significantly well in this parameter, in comparison to its global and regional peers.

Entrepreneurial values and lessons related to market economic principles in schools and universities are also on the rise. The average scores for attention to entrepreneurship, and preparation to establish a new firm at the school and university levels has increased significantly. Similarly, the score for entrepreneurial preparation for start-up ventures at the graduate education level have also increased remarkably.

Physical Infrastructure and Services Conditions

Physical infrastructure and services are perceived moderately well in Qatar, and the score for this framework condition has remained unchanged since 2017 (6.4%). All the parameters impacting the evaluation of physical infrastructure and service conditions have almost remained the same since 2017. The components included in this parameter are as follows:

- a. The physical infrastructure (roads, utilities, communications, and water disposal) provides good support for new and growing firms.
- b. It is not too expensive for a new or growing firm to get good access to communication (telephone, Internet, etc.).
- c. A new or growing firm can get access to communication within a week.
- d. New and growing firms can afford the cost of basic utilities required (gas, water, electricity, sewer, etc.).
- e. Also, new or growing firms can get good access to utilities within a month.

Cultural and Social Norms Conditions

The national culture has started encouraging entrepreneurial values such as risk-taking, creativity, innovation or individual responsibility. Average scores for all the components have improved in 2018. However, there is sufficient scope for improvement in national culture, in regards to the emphasis of self-sufficiency and personal initiative.

6. COMPARATIVE INTERNATIONAL DATA

TABLE 13: SOCIETAL VALUES OF ENTREPRENEURSHIP, 2018

Region	Economy opportunities	Entrepreneurship as a good career choice		High status for successful entrepreneurs		Media attention for entrepreneurship		Easy to start a business	
		Score	Rank/47	Score	Rank/47	Score	Rank/47	Score	Rank/43
East and South Asia	China	60.8	29	68.7	30	68.1	14T	17.3	38
	India	63.7	24	65.0	36	52.1	36	52.9	13
	Indonesia	71.9	11	74.9	18	80.4	3	66.0	4
	Japan	22.8	46	51.5	42	59.4	24	26.8	29T
	Republic of Korea	53.0	37	70.0	26	67.1	16	33.5	25
	Taiwan	69.6	13T	63.1	37T	76.4	5	24.2	32
	Thailand	80.1	6	80.9	6	86.8	1	65.8	5
	Average	60.3		67.7		70.0		40.9	
Europe and North America	Austria	50.2	38	75.3	17	64.6	18	-	N/A
	Bulgaria	62.6	26	69.3	29	44.6	47	14.3	41
	Canada	64.1	22	74.1	22	76.0	6	51.5	15
	Croatia	62.1	27	43.0	47	53.7	31	16.4	40
	Cyprus	69.9	13T	67.6	34	54.3	27T	41.4	19
	France	58.2	32	71.5	25	52.8	33	36.6	22
	Germany	49.6	39	74.8	19	50.6	38	-	N/A
	Greece	64.9	21	67.8	33	50.1	39	12.2	43
	Ireland	55.5	34	83.9	4	73.4	8	-	N/A
	Italy	63.9	23	74.6	20	60.2	23	16.8	39
	Luxembourg	48.8	41	74.2	21	49.3	41	55.0	10T
	Netherlands	81.7	4	63.1	37T	64.8	17	74.7	1
	Poland	85.9	3	76.3	15	46.2	44	74.1	2
	Russian Federation	68.0	17	68.0	32	49.0	42	21.3	34
	Slovak Republic	46.9	42	60.4	40	53.9	30	18.8	36
	Slovenia	58.4	31	75.8	16	77.2	4	39.2	20T
	Spain	53.1	36	49.8	44	49.4	40	29.6	27
	Sweden	49.0	40	72.1	23	62.8	20	74.0	3
	Switzerland	46.5	43	69.7	27	47.7	43	57.9	9
Turkey	80.8	5	66.1	35	52.6	34	28.9	28	

Region	Economy opportunities	Entrepreneurship as a good career choice		High status for successful entrepreneurs		Media attention for entrepreneurship		Easy to start a business	
		Score	Rank/47	Score	Rank/47	Score	Rank/47	Score	Rank/43
	United Kingdom	56.1	33	76.4	13T	58.5	25	-	N/A
	United States	62.7	25	78.7	9	74.4	7	45.5	17
	Average	60.9		69.7		57.6		39.3	
Latin America & Caribbean	Argentina	59.4	30	50.0	43	44.9	46	23.4	33
	Brazil	-	N/A	-	N/A	-	N/A	-	N/A
	Chile	76.1	8	60.8	39	62.5	21	36.5	23
	Colombia	68.7	15	84.2	3	62.4	22	39.2	20T
	Guatemala	94.4	1	71.7	24	54.1	29	35.7	24
	Panama	44.6	44	46.3	46	45.2	45	45.3	18
	Peru	65.7	20	62.4	38	72.0	10	52.6	14
	Puerto Rico	20.7	47	52.6	41	80.9	2	24.3	31
	Uruguay	54.7	35	49.6	45	53.1	32	19.8	35
Average	60.5		59.7		59.4		34.6		
Middle East and Africa	Angola	74.4	9	80.5	7T	68.6	13	55.0	10T
	Egypt	74.0	10	82.6	5	68.1	14T	61.5	7
	Iran	39.3	45	80.5	7T	50.8	37	12.7	42
	Israel	66.0	19	85.0	2	54.3	27T	17.9	37
	Lebanon	-	N/A	-	N/A	-	N/A	-	N/A
	Madagascar	87.2	2	77.0	11	56.7	26	32.7	26
	Morocco	61.1	28	68.3	31	52.2	35	26.8	29T
	Qatar	68.2	16	76.7	12	64.2	19	51.1	16
	Saudi Arabia	66.8	18	78.2	10	71.4	11	64.8	6
	Sudan	79.4	7	85.3	1	70.8	12	53.6	12
	UAE	71.7	12	69.4	28	72.5	9	59.7	8
Average	68.8		78.4		63.0		43.6		

T – indicates that the ranking is the same for two or more economies

TABLE 14: SELF-PERCEIVED ENTREPRENEURIAL OPPORTUNITIES, CAPABILITIES, FEAR OF FAILURE, 2018

Region	Economy	Perceived		High status for successful entrepreneurs		Media attention for entrepreneurship	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
East and South Asia	China	35.1	35	24.2	48	41.7	13
	India	49.8	20	52.2	20	50.1	5
	Indonesia	54.9	15	64.0	8	34.1	27
	Japan	8.1	49	10.1	49	46.4	9T
	Republic of Korea	45.7	23	49.7	24	32.8	28
	Taiwan	26.7	44	28.2	46	41.4	14
	Thailand	50.1	19	51.0	22T	58.9	2
	Average	38.6		39.9		43.6	
Europe and North America	Austria	46.8	21	48.3	27	36.7	20
	Bulgaria	19.3	47	36.9	42	31.0	34
	Canada	63.0	9	55.9	12	42.3	12
	Croatia	33.1	39	52.3	18T	30.3	36T
	Cyprus	45.9	22	45.9	33	48.5	6
	France	35.0	36	37.5	41	37.1	19
	Germany	42.1	28	38.3	40	35.1	24
	Greece	19.2	48	46.4	31	57.8	3
	Ireland	51.7	18	45.6	34	39.3	16
	Italy	34.6	37	29.8	44	51.7	4
	Luxembourg	55.0	14	43.9	35	47.2	8
	Netherlands	66.7	7	46.1	32	34.7	25
	Poland	68.5	6	46.6	29T	31.1	33
	Russian Federation	22.8	45	27.5	47	46.4	9T
	Slovak Republic	37.4	32	53.3	16	29.4	39
	Slovenia	42.2	27	51.0	22T	32.0	31
	Spain	29.1	42	48.5	26	36.2	22
	Sweden	81.6	1	38.4	39	37.2	18
	Switzerland	45.5	24	36.3	43	39.9	15
Turkey	44.3	25	56.8	11	28.1	42	

Region	Economy	Perceived		High status for successful entrepreneurs		Media attention for entrepreneurship	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	44.0	26	46.6	29T	37.7	17
	United States	69.8	5	55.6	13	35.2	23
	Average	45.3		44.9		38.4	
Latin America & Caribbean	Argentina	35.9	33	48.8	25	31.9	32
	Brazil	31.4	40	54.3	14	32.6	29T
	Chile	61.8	10	62.5	9	28.6	40
	Colombia	57.5	11	66.4	6	23.1	45
	Guatemala	54.6	16	65.2	7	30.3	36T
	Panama	39.0	31	42.1	37	19.4	48
	Peru	56.0	13	71.8	4	30.2	38
	Puerto Rico	35.2	34	47.5	28	20.7	47
	Uruguay	28.9	43	59.0	10	27.4	43
Average	44.5		57.5		27.1		
Middle East and Africa	Angola	74.0	3	75.7	2	16.6	49
	Egypt	39.3	30	43.0	36	28.2	41
	Iran	22.3	46	53.1	17	30.4	35
	Israel	56.2	12	41.5	38	47.5	7
	Lebanon	42.0	29	68.1	5	22.4	46
	Madagascar	30.6	41	51.5	21	36.6	21
	Morocco	33.6	38	29.5	45	64.2	1
	Qatar	54.2	17	52.3	18T	32.6	29T
	Saudi Arabia	76.3	2	83.4	1	43.6	11
	Sudan	71.0	4	74.5	3	34.5	26
	UAE	66.5	8	53.6	15	24.3	44
Average	51.5		56.9		34.6		

T – indicates that the ranking is the same for two or more economies

TABLE 15: TYPE OF ENTREPRENEURIAL ACTIVITY, 2018

Region	Economy	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
East and South Asia	China	4.7	28	5.9	17T	10.4	26
	India	8.8	13	2.7	39T	11.4	22
	Indonesia	3.1	40	11.1	7	14.1	16
	Japan	3.3	37T	2.2	46	5.3	44
	Republic of Korea	6.8	20T	7.9	11	14.7	14
	Taiwan	3.2	39	6.5	15T	9.5	31
	Thailand	7.3	16	13.2	5	19.7	9
	Average	5.3		7.1		12.2	
Europe and North America	Austria	6.8	20T	4.4	24	10.9	23
	Bulgaria	2.4	46	3.7	30T	6.0	42
	Canada	11.2	6	8.9	10	18.7	10
	Croatia	5.8	24	3.9	27T	9.6	29T
	Cyprus	1.2	48	2.7	39T	3.9	48
	France	4.0	35T	2.3	44T	6.1	41
	Germany	2.7	42T	2.4	43	5.0	46
	Greece	4.2	30T	2.3	44T	6.4	38T
	Ireland	6.5	22	3.2	36	9.6	29T
	Italy	2.7	42T	1.6	47	4.2	47
	Luxembourg	7.1	17T	3.7	30T	10.7	24T
	Netherlands	6.0	23	6.5	15T	12.3	18
	Poland	4.1	32T	1.1	48	5.2	45
	Russian Federation	2.7	42T	2.9	38	5.6	43
	Slovak Republic	9.2	11	3.1	37	12.1	19T
	Slovenia	2.8	41	3.6	32T	6.4	38T
	Spain	2.7	42T	3.8	29	6.4	38T
	Sweden	4.6	29	2.5	42	6.8	36
	Switzerland	4.1	32T	3.4	35	7.4	35
Turkey	7.4	14T	7.1	12	14.2	15	

Region	Economy	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	4.2	30T	4.2	26	8.2	34
	United States	10.5	8	5.3	22	15.6	13
	Average	5.1		3.8		8.7	
Latin America & Caribbean	Argentina	4.9	27	4.3	25	9.1	32
	Brazil	1.7	47	16.4	3	17.9	11
	Chile	16.0	3	10.1	9	25.1	3
	Colombia	15.7	4	5.8	19T	21.2	7
	Guatemala	13.7	5	15.0	4	27.5	2
	Panama	7.4	14T	6.6	14	13.8	17
	Peru	17.5	2	5.8	19T	22.4	5
	Puerto Rico	9.1	12	2.6	41	11.6	21
	Uruguay	11.1	7	4.9	23	15.7	12
	Average	10.8		7.9		18.3	
Middle East and Africa	Angola	22.8	1	19.5	1	40.8	1
	Egypt	4.0	35T	5.9	17T	9.8	27
	Iran	4.1	32T	5.7	21	9.7	28
	Israel	7.9	14	4.8	24	12.7	18
	Lebanon	6.9	19	17.6	2	24.1	4
	Madagascar	10.3	9T	10.9	8	20.7	8
	Morocco	3.3	37T	3.5	34	6.7	37
	Qatar	5.0	26	3.6	32T	8.5	33
	Saudi Arabia	5.3	25	6.9	13	12.1	19T
	Sudan	10.3	9T	12.6	6	22.2	6
	UAE	7.1	17T	3.9	27T	10.7	24T
	Average	7.9		8.6		16.2	

T – indicates that the ranking is the same for two or more economies

TABLE 16: TYPE OF ENTREPRENEURIAL ACTIVITY (CONT'D), 2018

Region	Economy	EEA		Established business ownership rate		Discontinuation of businesses	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
East and South Asia	China	1.0	42	3.2	44	2.5	36T
	India	0.8	44	7.0	24	4.9	19
	Indonesia	1.3	41	11.8	11	1.4	49
	Japan	2.2	30	6.2	32	1.8	43T
	Republic of Korea	3.6	23	12.5	8	2.5	36T
	Taiwan	4.2	21T	13.9	6	5.4	14
	Thailand	2.4	29	19.6	4	8.1	6
	Average	2.2		10.6		3.8	
Europe and North America	Austria	6.4	9	6.5	27T	5.0	17T
	Bulgaria	0.4	48	8.4	19T	1.8	43T
	Canada	8.6	1T	7.5	22T	8.6	4
	Croatia	5.3	15	4.2	40T	3.4	29T
	Cyprus	5.4	14	6.1	33T	2.3	41
	France	4.3	19T	2.5	47	2.9	34
	Germany	5.2	16	7.5	22T	1.6	46T
	Greece	1.8	36	10.8	14	3.4	29T
	Ireland	8.6	1T	6.8	25T	3.8	25
	Italy	3.2	25T	6.4	29T	1.6	46T
	Luxembourg	7.1	7	3.4	43	3.7	26T
	Netherlands	7.9	4	12.0	10	2.5	36T
	Poland	1.9	34T	13.0	7	2.4	39T
	Russian Federation	0.7	45T	4.9	37	1.6	46T
	Slovak Republic	4.4	18	4.6	38	3.6	28
	Slovenia	5.9	13	6.8	25T	2.4	39T
	Spain	1.7	37T	6.1	33T	1.7	45
	Sweden	6.8	8	5.3	36	3.7	26T
	Switzerland	6.3	10T	11.5	12	2.0	42
Turkey	3.2	25T	8.7	17	5.2	15	

Region	Economy	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	7.3	5	6.4	29T	2.7	35
	United States	8.0	3	7.9	21	4.7	20T
	Average	5.0		7.2		3.2	
Latin America & Caribbean	Argentina	1.5	39T	9.1	16	3.9	24
	Brazil	0.7	45T	20.3	3	4.3	22T
	Chile	4.2	21T	8.5	18	7.1	11
	Colombia	2.0	32T	6.5	27T	4.7	20T
	Guatemala	2.0	32T	11.2	13	7.4	10
	Panama	0	49	6.4	29T	3.4	29T
	Peru	1.5	39T	8.4	19T	7.6	8T
	Puerto Rico	1.9	34T	1.9	48	3.1	32
	Uruguay	3.5	24	5.6	35	6.6	12
	Average	1.9		8.7		5.3	
Middle East and Africa	Angola	3.2	25T	15.2	5	25.5	1
	Egypt	2.1	31	4.5	39	7.6	8T
	Iran	0.9	43	12.3	9	6.1	13
	Israel	7.2	6	4.2	40T	5.0	17T
	Lebanon	1.7	37T	21.6	2	8.0	7
	Madagascar	0.6	47	22.4	1	4.3	22T
	Morocco	4.8	17	4.2	40T	10.4	3
	Qatar	6.3	10T	4.2	40T	3.0	33
	Saudi Arabia	2.8	28	3.1	45	8.5	5
	Sudan	4.3	19T	10.2	15	17.3	2
	UAE	6.3	10T	2.6	46	5.1	16
	Average	3.7		9.5		9.2	

T – indicates that the ranking is the same for two or more economies

TABLE 17: ENTREPRENEURIAL MOTIVATION FOR TEA, 2018

Region	Economy opportunities	Necessity - driven		Opportunity - driven		Improvement - driven opportunity		Motivational index (IDO/Necessity)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49
East and South Asia	China	27.8	17	70.5	28	25.5	47	0.9	44T
	India	46.3	2	43.2	48	25.4	48	0.5	47T
	Indonesia	25.2	19	73.0	24	44.2	29	1.8	28T
	Japan	20.2	29	69.5	31	39.1	38	1.9	26T
	Republic of Korea	21.0	27	77.7	14	67.1	4	3.2	14T
	Taiwan	24.5	20	75.5	16	56.8	9	2.3	22T
	Thailand	17.9	31	80.0	11	63.6	7	3.6	10T
	Average	26.1		69.9		46.0		2.0	
Europe and North America	Austria	15.9	35	75.2	17	38.1	39	2.4	21
	Bulgaria	28.6	14	68.1	34	27.5	45	1.0	43
	Canada	13.7	37	79.3	12	44.6	26T	3.3	13
	Croatia	32.3	9	61.9	42	44.3	28	1.4	34T
	Cyprus	11.5	42	84.6	5	65.5	5	5.7	5
	France	22.3	26	72.9	25	63.7	6	2.9	17
	Germany	16.7	32	69.8	29	52.8	15	3.2	14T
	Greece	15.6	36	81.3	7	47.4	21	3.0	16
	Ireland	19.5	30	76.2	15	43.4	31T	2.2	24
	Italy	11.4	43	81.0	8	31.2	43	2.7	18
	Luxembourg	12.0	41	80.2	10	55.7	12	4.6	7
	Netherlands	8.9	45	80.5	9	69.3	2	7.8	2
	Poland	8.4	46	90.9	1	55.1	13	6.6	4
	Russian Federation	39.8	3	54.2	46	31.6	42	0.8	46
	Slovak Republic	27.0	18	63.4	40	49.6	18	1.8	28T
	Slovenia	24.2	21	69.6	30	47.3	22	2.0	25
	Spain	22.6	25	70.7	27	43.8	30	1.9	26T
	Sweden	9.3	44	73.4	22	40.9	35	4.4	8
Switzerland	7.4	48	87.1	2	67.8	3	9.1	1	
Turkey	16.3	34	74.5	18	28.2	44	1.7	30T	

Region	Economy opportunities	Necessity - driven		Opportunity - driven		Improvement - driven opportunity		Motivational index (IDO/Necessity)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	12.9	39	84.2	6	48.2	19	3.7	9
	United States	8.1	47	78.3	13	56.4	10	6.9	3
	Average	17.5		75.3		47.8		3.6	
Latin America & Caribbean	Argentina	27.9	15T	68.8	33	37.8	40	1.4	34T
	Brazil	37.5	6	61.8	43	50.4	17	1.3	38T
	Chile	23.6	22	74.1	20	59.7	8	2.5	19T
	Colombia	12.2	40	85.5	3	43.4	31T	3.6	10T
	Guatemala	37.7	5	62.2	41	46.1	25	1.2	42
	Panama	13.0	38	85.2	4	70.4	1	5.4	6
	Peru	23.1	23	73.2	23	53.1	14	2.3	22T
	Puerto Rico	22.9	24	71.2	26	39.7	37	1.7	30T
	Uruguay	29.4	13	66.3	37	40.0	36	1.4	34T
	Average	25.3		72.0		49.0		2.3	
Middle East and Africa	Angola	38.8	4	57.0	45	36.3	41	0.9	44T
	Egypt	47.6	1	47.5	47	26.0	46	0.5	47T
	Iran	36.4	7	61.0	44	46.3	24	1.3	38T
	Israel	16.4	34	70.4	29	43.9	30	3.3	13T
	Lebanon	36.1	8	63.7	39	47.5	20	1.3	38T
	Madagascar	31.3	10	67.2	36	42.5	33	1.4	34T
	Morocco	31.2	11	64.5	38	41.0	34	1.3	38T
	Qatar	16.5	33	74.2	19	56.0	11	3.4	12
	Saudi Arabia	29.9	12	69.4	32	44.6	26T	1.5	33
	Sudan	27.9	15T	67.6	35	46.7	23	1.7	30T
	UAE	20.6	28	73.9	21	51.0	16	2.5	19T
	Average	30.2		65.1		43.8		1.7	

T – indicates that the ranking is the same for two or more economies

TABLE 18: JOB CREATION EXPECTATION FOR TEA, 2018

Region	Economy	0 jobs in 5 years		1 - 5 jobs in 5 years		6 or more jobs in 5 years	
		Score	Rank/48	Score	Rank/48	Score	Rank/48
East and South Asia	China	66.7	5	12.9	47T	20.4	23
	India	39.2	33	52.4	3	8.4	42
	Indonesia	75.6	2	22.8	40	1.6	48
	Japan	56.7	14	21.6	43	21.6	20
	Republic of Korea	37.6	35	49.6	6	12.8	34
	Taiwan	27.3	43	35.1	20T	37.6	5
	Thailand	45.4	23	35.5	19	19.1	26
	Average	49.8		32.8		17.4	
Europe and North America	Austria	56.8	13	27.3	30T	15.9	30
	Bulgaria	72.2	4	25.3	35	2.5	46
	Canada	57.1	12	22.2	41T	20.7	21
	Croatia	39.9	31	33.6	25	26.5	15
	Cyprus	43.6	27	34.0	24	22.4	19
	France	40.3	30	30.6	27	29.1	9
	Germany	48.1	20	23.0	39	28.9	10
	Greece	44.9	24	45.4	10	9.7	38
	Ireland	29.7	40	26.6	32	43.7	4
	Italy	60.4	9	26.3	33T	13.3	33
	Luxembourg	48.6	19	34.8	23	16.6	29
	Netherlands	75.0	3	15.4	45	9.5	39
	Poland	43.4	28	45.1	11	11.5	37
	Russian Federation	63.5	7	16.6	44	19.8	24
	Slovak Republic	46.6	22	26.3	33T	27.1	12
	Slovenia	47.0	21	37.7	16	15.3	31T
	Spain	56.2	15	35.1	20T	8.7	40T
	Sweden	55.6	16	27.8	29	16.7	28
	Switzerland	36.6	37	34.9	22	28.5	11
Turkey	29.1	41	25.0	36	45.9	3	

Region	Economy	0 jobs in 5 years		1 - 5 jobs in 5 years		6 or more jobs in 5 years	
		Score	Rank/48	Score	Rank/48	Score	Rank/48
	United Kingdom	51.0	17	28.4	28	20.5	22
	United States	28.3	42	40.0	13	31.8	8
	Average	48.8		30.1		21.1	
Latin America & Caribbean	Argentina	36.4	38	51.9	4	11.7	36
	Brazil	81.0	1	12.9	47T	6.1	43T
	Chile	19.1	47	47.3	9	33.5	7
	Colombia	11.3	48	38.9	14	49.9	2
	Guatemala	20.4	46	52.6	2	27.0	13
	Panama	43.7	26	50.2	5	6.1	43T
	Peru	27.2	44	57.4	1	15.3	31T
	Puerto Rico	26.4	45	49.4	7T	24.2	17
	Uruguay	36.8	36	44.4	12	18.8	27
	Average	33.6		45.0		21.4	
Middle East and Africa	Angola	44.5	25	31.2	26	24.3	16
	Egypt	58.5	10	22.2	41T	19.3	25
	Iran	40.6	29	23.4	37T	36.0	6
	Israel	52.5	17	24.6	37	22.9	19
	Lebanon	58.3	11	38.0	15	3.7	45
	Madagascar	61.1	8	36.6	18	2.3	47
	Morocco	64.0	6	27.3	30T	8.7	40T
	Qatar	49.9	18	23.4	37T	26.7	14
	Saudi Arabia	38.4	34	49.4	7T	12.2	35
	Sudan	39.5	32	37.4	17	23.1	18
	UAE	31.9	39	14.8	46	53.3	1
	Average	49.0		29.8		21.1	

T – indicates that the ranking is the same for two or more economies

TABLE 19: INNOVATION LEVEL, INTERNATIONALIZATION FOR TEA, 2018

Region	Economy	Innovation		Internationalization	
		Score	Rank/49	Score	Rank/48
East and South Asia	China	33.1	12	8.8	34
	India	46.9	3	25.4	16
	Indonesia	15.4	40	5.7	39
	Japan	27.7	21	25.0	17
	Republic of Korea	29.9	17	10.5	31
	Taiwan	18.8	35	10.8	30
	Thailand	17.8	36T	18.6	26
	Average	27.1		15.0	
Europe and North America	Austria	37.0	8	43.0	6
	Bulgaria	14.9	41T	7.4	38
	Canada	41.3	5	43.8	5
	Croatia	24.6	27	40.3	8
	Cyprus	38.6	7	38.2	10
	France	28.1	20	19.9	21T
	Germany	30.5	16	18.9	25
	Greece	28.4	18	27.5	15
	Ireland	35.8	9	35.5	11
	Italy	24.3	28	19.9	21T
	Luxembourg	47.9	1	47.2	3
	Netherlands	23.8	29	8.7	35
	Poland	12.2	45	3.0	41T
	Russian Federation	8.1	47	1.6	45
	Slovak Republic	22.0	32	21.9	20
	Slovenia	25.5	25	28.7	14
	Spain	22.3	31	9.3	33
	Sweden	33.7	11	32.9	13
	Switzerland	31.7	14	33.3	12
	Turkey	30.8	15	14.2	28
	United Kingdom	21.6	34	19.5	23
United States	34.0	10	12.7	29	
Average	28.1		24.0		

Region	Economy	Innovation		Internationalization	
		Score	Rank/49	Score	Rank/48
Latin America and Caribbean	Argentina	32.2	13	3.0	41T
	Brazil	3.7	48	0.3	47
	Chile	47.6	2	-	N/A
	Colombia	16.1	39	9.6	32
	Guatemala	39.2	6	2.3	43
	Panama	10.5	46	14.4	27
	Peru	21.9	33	8.1	37
	Puerto Rico	26.1	24	23.8	18
	Uruguay	25.3	26	8.4	36
	Average	24.7		8.7	
Middle East and Africa	Angola	17.8	36T	1.8	44
	Egypt	27.5	22	22.3	19
	Iran	17.2	38	4.9	40
	Israel	32.9	13	30.2	14
	Lebanon	41.9	4	59.3	1
	Madagascar	13.4	43T	1.1	46
	Morocco	14.9	41T	54.9	2
	Qatar	26.9	23	41.8	7
	Saudi Arabia	23.3	30	40.0	9
	Sudan	13.4	43T	19.2	24
	UAE	28.2	19	46.7	4
	Average	23.4		29.3	

T – indicates that the ranking is the same for two or more economies

TABLE 20: GENDER DISTRIBUTION OF TEA, GEM 2018

Region	Economy	MALE TEA (% of adult male population)		FEMALE TEA (% of adult female population)	
		Score	Rank/49	Score	Rank/49
East and South Asia	China	11.4	29	9.3	18
	India	14.0	21T	8.7	21T
	Indonesia	14.0	21T	14.1	12
	Japan	6.7	43	4.0	41T
	Republic of Korea	17.0	15	12.2	16
	Taiwan	10.2	32	8.8	20
	Thailand	20.1	10	19.3	6
	Average	13.3		10.9	
Europe and North America	Austria	13.9	23	7.9	29
	Bulgaria	6.4	45	5.6	34
	Canada	20.4	8T	17.0	11
	Croatia	12.1	27	7.1	31
	Cyprus	4.8	48	2.9	47
	France	7.0	41	5.3	37
	Germany	6.6	44	3.3	46
	Greece	8.8	37T	3.9	43T
	Ireland	11.9	28	7.5	30
	Italy	5.5	47	2.8	48
	Luxembourg	12.7	26	8.7	21T
	Netherlands	16.2	16	8.3	27
	Poland	6.0	46	4.5	39
	Russian Federation	7.3	40	3.9	43T
	Slovak Republic	15.2	17T	9.0	19
	Slovenia	8.8	37T	3.8	45
	Spain	6.8	42	6.0	33
	Sweden	9.5	35	4.0	41T
	Switzerland	10.0	34	4.7	38
	Turkey	20.0	11	8.4	24T
	United Kingdom	11.1	30	5.4	35T
United States	17.7	14	13.6	14	
Average	10.9		6.5		

Region	Economy	Innovation		Internationalization	
		Score	Rank/49	Score	Rank/48
Latin America and Caribbean	Argentina	10.1	33	8.1	28
	Brazil	18.5	13	17.3	9
	Chile	29.0	4	21.2	3
	Colombia	24.9	6	17.8	7
	Guatemala	30.8	3	24.5	2
	Panama	13.8	24	13.9	13
	Peru	23.9	7	20.9	5
	Puerto Rico	15.2	8T	8.4	24T
	Uruguay	19.4	12	12.3	15
	Average	20.6		16.0	
Middle East and Africa	Angola	41.0	1	40.7	1
	Egypt	14.1	20	5.4	35T
	Iran	12.9	25	6.5	32
	Israel	12.8	26	9.1	19
	Lebanon	31.3	2	17.4	8
	Madagascar	20.4	8T	21.1	4
	Morocco	9.2	36	4.3	40
	Qatar	8.6	39	8.4	24T
	Saudi Arabia	14.7	19	8.5	23
	Sudan	27.5	5	17.1	10
	UAE	11.0	31	10.1	17
	Average	18.5		13.5	

T – indicates that the ranking is the same for two or more economies

TABLE 21: GENDER DISTRIBUTION OF TEA, OPPORTUNITY TEA AND NECESSITY TEA, 2018

Region	Economy opportunities	MALE TEA Opportunity (% of TEA males)		FEMALE TEA Opportunity (% of TEA females)		MALE TEA Necessity (% of TEA males)		FEMALE TEA Necessity (% of TEA females)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49
East and South Asia	China	68.9	37	72.4	22	29.4	10	25.9	24
	India	45.0	48	40.2	47	44.2	2	49.9	2
	Indonesia	75.2	19T	70.8	23	22.4	19	28.0	18
	Japan	73.3	28T	62.8	35	18.1	31	23.8	27
	Republic of Korea	77.6	14	77.8	14T	21.9	20	19.6	30
	Taiwan	75.6	18	75.3	18	24.4	16	24.7	25
	Thailand	80.3	10	79.6	11	17.1	32T	18.7	32
	Average	70.8		68.4		25.4		27.2	
Europe and North America	Austria	74.3	24	77.0	16	16.5	37	14.9	36
	Bulgaria	72.2	32	63.4	34	23.2	17	34.8	11
	Canada	75.9	17	83.3	5	16.8	35	10.0	42
	Croatia	63.3	42T	59.6	40T	32.4	7	32.2	15
	Cyprus	83.4	7	86.6	2	12.4	40	9.8	43
	France	77.5	15	66.9	27	21.1	23	23.9	26
	Germany	69.9	36	69.7	24	17.1	32T	15.9	34
	Greece	87.3	4	67.7	26	10.4	45	27.1	21
	Ireland	75.2	19T	77.8	14T	19.6	27	19.3	31
	Italy	82.2	8	78.6	12T	11.5	41	11.3	41
	Luxembourg	78.8	13	82.4	8	17.1	32T	4.2	47
	Netherlands	79.3	12	82.8	7	8.6	46	9.7	44
	Poland	87.9	1	95.0	1	10.8	43	5.0	46
	Russian Federation	62.6	44T	39.8	48	33.1	5	51.1	1
	Slovak Republic	64.4	41	61.7	37	26.6	13	27.6	20
	Slovenia	72.6	31	62.4	36	20.7	25	32.7	14
	Spain	75.2	19T	65.7	29	18.9	28	26.7	22
	Sweden	70.7	33	80.0	10	12.5	39	1.3	48
	Switzerland	87.4	3	86.4	3	5.5	48	11.5	39
Turkey	73.6	26T	76.7	17	18.3	30	11.4	40	

Region	Economy opportunities	Necessity - driven		Opportunity - driven		Improvement - driven opportunity		Motivational index (IDO/Necessity)	
		Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	85.7	5	81.0	9	11.1	42	16.6	33
	United States	81.1	9	74.7	19	8.5	47	7.7	45
	Average	76.4		73.6		16.9		18.4	
Latin America & Caribbean	Argentina	76.4	16	59.8	39	21.4	21	35.7	9T
	Brazil	67.7	38	55.6	44	31.4	9	44.0	5
	Chile	79.9	11	66.5	28	18.4	29	30.6	16
	Colombia	87.5	2	83.0	6	10.7	44	14.1	37
	Guatemala	67.4	39	56.1	42	32.3	8	43.9	6
	Panama	85.6	6	84.8	4	13.7	38	12.3	38
	Peru	73.3	28T	73.1	21	23.1	18	23.1	28
	Puerto Rico	75.0	22T	64.9	30T	20.9	24	26.2	23
	Uruguay	70.2	35	60.5	38	25.7	15	34.7	12
	Average	75.9		67.1		22.0		29.4	
Middle East and Africa	Angola	67.3	40	47.2	45	27.5	12	49.5	3
	Egypt	48.4	47	45.0	46	47.3	1	48.5	4
	Iran	59.0	46	64.9	30T	39.6	3	29.8	17
	Israel	69.0	37	72.2	23	20.6	26	10.6	42
	Lebanon	63.3	42T	64.3	33	36.4	4	35.7	9T
	Madagascar	70.3	34	64.4	32	28.5	11	33.9	13
	Morocco	62.6	44T	68.3	25	32.8	6	27.7	19
	Qatar	73.1	30	78.6	12T	16.7	36	15.8	35
	Saudi Arabia	73.6	26T	59.6	40T	26.1	14	39.0	7
	Sudan	75.0	22T	55.9	43	21.2	22	38.3	8
	UAE	73.9	25	73.8	20	20.3	26	21.4	29
Average	66.9		63.1		28.8		31.8		

T – indicates that the ranking is the same for two or more economies

TABLE 22: TEA BY AGE GROUP, 2018

Region	Economy opportunities	TEA 18 - 24 years		TEA 25 – 34 years		TEA 35 – 44 years		TEA 45 – 54 years		TEA 55 - 64 years	
		Score	Rank/49								
East and South Asia	China	10.9	24	12.0	29	13.2	21	10.8	22	5.1	26T
	India	12.3	19	13.3	28	9.6	29T	12.6	18T	6.9	20
	Indonesia	13.6	16	14.6	24	16.9	13	12.6	18T	10.0	13
	Japan	5.4	39	8.4	38	6.3	41T	4.5	45	2.6	42
	Republic of Korea	8.6	31	15.3	20	16.0	16	16.3	9	14.5	8
	Taiwan	10.8	25	16.9	18	10.9	26	6.2	36T	3.3	38T
	Thailand	11.9	20	27.2	4	21.7	8	17.5	8	17.4	6
	Average	10.5		15.4		13.5		11.5		8.5	
Europe and North America	Austria	14.0	15	15.1	22	13.0	22	97.0	26	3.5	37
	Bulgaria	3.8	42	8.0	40T	7.7	38	7.3	32	2.4	43T
	Canada	27.3	3	26.1	7	20.1	9	14.7	12	9.3	15
	Croatia	11.7	21	19.0	13T	11.5	25	4.9	42	2.3	45
	Cyprus	1.7	47	4.0	48	4.0	48	5.2	40	3.7	36
	France	3.2	44	8.1	39	8.1	35T	6.2	36T	4.0	35
	Germany	6.0	38	6.6	46	6.1	43	4.6	44	2.4	43T
	Greece	11.5	22	7.0	45	4.1	47	4.7	43	5.4	25
	Ireland	6.7	36T	13.4	26T	9.9	28	9.1	28	7.6	19
	Italy	4.4	41	6.4	47	5.0	46	3.6	46	2.1	47
	Luxembourg	4.8	40	14.2	25	14.6	18	10.0	25	6.5	22
	Netherlands	15.9	10	17.6	16	12.4	24	10.7	23	6.6	21
	Poland	1.2	48	9.8	36	8.1	35T	2.0	48	2.2	46
	Russian Federation	6.9	35	9.7	37	5.6	44T	3.3	47	2.0	48
	Slovak Republic	19.2	7	16.8	19	13.7	20	8.2	30	4.9	28
	Slovenia	3.1	45	13.4	26T	6.3	41T	5.4	38T	2.8	41
	Spain	3.3	43	7.5	44	7.3	40	7.2	33	4.7	30
	Sweden	10.3	28	8.0	40T	5.6	44T	6.9	34	4.2	33T
Switzerland	2.2	46	10.5	34T	7.6	39	9.6	27	4.2	33T	
Turkey	14.3	14	17.2	17	16.2	15	11.2	21	8.7	17	

Region	Economy opportunities	TEA 18 - 24 years		TEA 25 – 34 years		TEA 35 – 44 years		TEA 45 – 54 years		TEA 55 - 64 years	
		Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49	Score	Rank/49
	United Kingdom	7.8	32	11.4	31	9.0	33T	6.5	35	6.2	23
	United States	14.7	12T	18.1	15	19.7	10	14.2	14	10.4	12
	Average	8.8		12.2		9.8		11.5		4.8	
Latin America & Caribbean	Argentina	8.9	30	10.5	34T	9.1	32	10.5	24	5.1	26T
	Brazil	21.2	6	20.2	12	19.5	12	15.6	10	9.7	14
	Chile	18.8	8	26.6	5	31.1	2	26.3	3	19.6	2
	Colombia	17.1	9	24.3	10	26.2	6	21.2	6	13.9	10
	Guatemala	27.4	2	30.0	3	30.7	3	25.6	4	14.7	7
	Panama	11.4	23	14.8	23	16.4	14	15.5	11	8.4	18
	Peru	24.5	5	21.8	11	26.0	7	18.4	7	18.6	3
	Puerto Rico	12.4	18	19.0	13T	13.8	19	8.3	29	4.6	31
	Uruguay	12.9	17	24.5	8	19.6	11	12.8	16T	4.5	32
	Average	17.2		21.3		21.4		17.1		11.0	
Middle East and Africa	Angola	38.9	1	51.0	1	39.8	1	31.6	1	28.2	1
	Egypt	10.7	26	11.2	32T	9.0	33T	7.4	31	9.0	16
	Iran	7.2	33	15.2	21	10.2	27	5.4	38T	3.0	40
	Israel	11.7	21T	13.5	26	9.9	28T	11.0	22	7.6	19T
	Lebanon	15.9	11	30.3	2	27.9	4	23.6	5	18.4	4
	Madagascar	24.8	4	26.3	6	15.6	17	14.6	13	13.7	11
	Morocco	7.1	34	7.8	43	7.8	37	5.1	41	3.3	38T
	Qatar	6.7	36T	8.0	40T	9.3	31	11.6	20	6.0	24
	Saudi Arabia	10.5	27	11.2	32T	12.7	23	12.8	16T	14.4	9
	Sudan	14.7	12T	24.4	9	27.2	5	2.8	2	18.0	5
	UAE	9.0	29	11.9	30	9.6	29T	12.9	15	4.8	29
	Average	14.3		19.2		16.3		12.6		11.5	

T – indicates that the ranking is the same for two or more economies

TABLE 23: NATIONAL ENTREPRENEURSHIP CONTEXT INDEX (NECI) AND ITS 12 COMPONENTS, 2018

Scores for 54 Economies

Economy	NECI		1	2	3	4	5	6	7	8	9	10	11	12
	Score	Rank												
Qatar	6.7	1	5.8	6.9	6.4	6.6	6.8	7.3	6.4	6.3	8.0	7.2	5.9	6.8
Indonesia	6.6	2	6.6	7.0	6.1	6.3	5.7	7.1	6.1	6.4	7.2	7.4	6.0	7.2
Netherlands	6.5	3	6.5	6.0	6.0	6.4	6.0	6.9	5.9	6.8	8.5	5.9	6.5	6.9
Egypt	4.7	4	4.9	4.7	3.9	4.4	2.6	4.1	3.8	5.0	7.2	5.7	4.9	5.1
Taiwan	6.3	4	6.0	6.7	6.2	6.1	4.3	6.0	5.6	6.4	9.0	6.5	6.6	6.3
India	6.2	5	6.3	7.0	5.2	6.3	5.0	5.8	5.8	6.4	7.4	7.2	5.9	6.2
United States	6.0	6	6.6	4.6	5.2	4.9	4.8	6.1	4.9	6.6	7.9	6.1	5.3	8.1
UAE	5.9	7	4.8	6.7	5.8	6.2	5.0	5.7	4.9	5.7	7.5	6.7	5.1	6.8
Luxembourg	5.7	8	4.6	6.1	5.9	7.0	4.5	6.3	5.7	5.9	7.4	4.3	5.8	5.4
Switzerland	5.7	9	5.1	5.1	5.3	6.3	3.8	5.8	6.0	6.4	8.7	5.0	5.4	5.1
France	5.6	10	5.2	6.5	5.9	6.3	3.2	6.3	5.3	5.9	8.5	4.8	4.4	5.2
China	5.6	11	5.1	5.3	5.1	5.0	3.8	5.9	4.5	4.7	8.2	7.4	4.9	6.7
Canada	5.5	12	5.9	5.5	4.8	5.4	4.6	5.3	5.3	6.7	7.5	4.7	5.0	6.2
Austria	5.5	13	5.5	5.2	4.4	6.9	2.9	5.8	5.0	6.7	8.4	5.0	6.4	4.3
Republic of Korea	5.5	14	5.2	6.8	4.9	5.7	3.8	4.8	4.5	4.7	7.4	8.0	4.2	5.7
Thailand	5.5	15	6.0	5.1	4.6	4.7	4.1	5.5	4.5	5.4	7.2	6.7	5.1	6.3
Spain	5.4	16	5.0	5.2	4.4	6.2	3.9	5.9	5.2	5.8	7.0	5.4	5.2	5.6
Ireland	5.4	17	5.8	5.4	4.9	6.2	4.2	5.6	5.1	5.8	5.9	4.7	5.6	6.0
Sweden	5.4	18	5.3	4.4	4.1	5.3	4.4	5.1	4.6	5.6	8.0	6.5	5.5	5.4
Germany	5.4	19	5.3	4.8	4.8	6.5	3.4	5.1	5.1	6.3	6.7	5.6	5.7	5.0
Japan	5.3	20	5.5	6.0	4.5	4.9	2.6	4.6	5.5	4.9	8.2	7.8	4.9	4.0
Argentina	5.2	21	3.6	6.9	4.0	5.8	3.3	5.6	5.0	5.6	6.2	6.2	4.7	6.0
Latvia	5.2	22	5.3	4.6	4.1	5.0	4.6	5.3	4.4	6.7	7.8	4.8	5.1	5.3
Mexico	5.2	23	4.4	5.1	4.1	5.6	3.4	6.5	4.7	4.9	7.5	6.3	4.1	6.2
Poland	5.2	24	5.8	5.4	3.5	4.9	3.0	4.5	4.2	5.5	8.0	7.5	4.8	5.4
Slovenia	5.2	25	5.5	4.9	3.7	5.5	3.5	5.3	4.8	5.5	7.7	5.9	5.3	4.1
Chile	5.1	26	4.3	5.8	5.2	6.2	2.7	5.6	4.1	4.6	8.1	4.9	4.2	6.0
Cyprus	5.1	27	4.2	5.2	5.7	4.1	3.6	5.9	4.6	5.9	7.2	5.4	5.0	4.8
Israel	5.1	28	5.9	4.1	2.8	4.4	3.1	5.3	4.8	6.3	7.7	5.2	4.2	7.7
Turkey	5.1	29	5.3	5.0	3.9	4.7	3.1	5.6	5.0	6.2	6.8	6.9	4.7	5.6
United Kingdom	4.9	30	5.5	3.8	5.4	4.5	3.3	4.8	4.6	5.7	6.2	5.5	4.9	5.4

Economy	NECI		1	2	3	4	5	6	7	8	9	10	11	12
	Score	Rank												
Kazakhstan	4.9	31	3.8	6.1	5.0	5.1	3.5	4.5	3.5	5.3	6.7	5.9	4.2	5.5
Colombia	4.8	32	3.6	4.3	4.1	5.1	3.8	6.3	3.7	4.7	7.0	4.6	4.6	5.9
Uruguay	4.7	33	3.9	4.6	3.8	6.0	2.8	6.3	4.9	5.1	6.8	4.1	4.5	3.9
Lebanon	4.7	35	5.3	3.7	3.8	4.2	4.4	5.3	3.7	5.7	4.4	4.8	4.2	7.2
Bulgaria	4.7	36	5.8	3.5	5.0	3.9	3.1	4.5	3.7	5.8	7.7	5.2	4.3	3.9
Russian Federation	4.6	37	3.7	4.2	3.7	3.6	3.2	5.3	3.0	5.6	6.7	7.1	3.5	5.2
Dominican Republic	4.6	38	3.0	3.9	4.1	5.6	2.6	5.6	2.9	4.7	7.3	4.9	4.0	6.2
Peru	4.5	39	4.0	3.8	3.6	4.6	3.4	5.5	3.8	4.6	6.3	4.7	4.5	6.2
Italy	4.5	40	5.1	4.4	3.5	4.4	3.0	5.0	4.5	4.8	5.5	5.6	4.8	3.9
Saudi Arabia	4.4	41	3.6	4.9	4.0	4.4	1.9	3.5	3.1	4.2	6.9	5.5	4.1	6.0
Greece	4.3	42	4.4	3.7	2.9	3.7	3.1	4.4	4.4	5.0	7.1	5.0	4.1	4.7
Slovak Republic	4.3	43	5.3	2.7	3.2	3.8	3.0	4.3	3.6	5.9	7.9	4.8	5.1	3.2
Guatemala	4.3	44	3.0	2.4	3.9	3.3	2.5	6.2	3.7	5.2	6.9	4.4	4.2	5.6
Sudan	4.3	45	4.3	2.8	3.0	3.0	2.7	4.4	3.3	5.4	5.5	8.3	3.5	4.8
Iran	4.3	46	4.2	4.3	3.3	3.2	3.2	4.2	3.7	4.0	6.4	6.3	4.3	4.7
Morocco	4.3	47	4.0	3.8	4.4	3.8	2.1	4.5	2.9	5.5	7.3	5.0	3.4	4.2
Brazil	4.2	48	5.3	3.1	2.3	3.7	2.5	4.5	3.8	5.0	6.0	6.5	4.1	3.8
Madagascar	4.1	49	3.1	3.7	3.6	3.4	2.6	6.1	3.6	4.8	4.7	5.7	3.7	4.2
Angola	4.1	50	2.9	4.1	4.1	3.5	3.6	4.3	3.0	5.1	4.4	5.5	4.0	5.2
Puerto Rico	4.1	51	3.5	3.2	2.5	3.9	2.6	5.6	3.5	4.9	5.3	5.1	4.0	5.1
Panama	4.0	52	3.4	3.2	3.6	4.7	2.1	4.4	3.5	3.9	6.7	4.5	3.3	5.1
Croatia	3.8	53	4.4	3.1	2.3	3.7	2.7	4.1	3.3	4.2	6.2	5.7	3.3	3.1
Mozambique	3.2	54	1.9	2.0	2.8	2.5	2.0	2.5	2.1	4.0	5.6	5.4	3.5	3.5

1. Entrepreneurial finance
2. Government policy: support and relevance
3. Government policy: taxes and bureaucracy
4. Government entrepreneurship programs
5. Entrepreneurship education at school stage
6. Entrepreneurship education at post-school stage
7. R&D transfer
8. Commercial and legal infrastructure
9. Physical infrastructure
10. Internal market dynamics
11. Internal market burdens or entry regulation
12. Cultural and social norms

NECI - calculated in 10 point scale (1 = very bad e-ship context, 10 = very good e-ship context);

EFCs average scores - assessed in National Expert Survey in 9 point Likert scale (1=highly insufficient; 9=highly sufficient) were re-scaled to 10 points for the purpose of NECI

7. METHODOLOGY AND DEFINITIONS

7.1 GEM INDICATORS

GEM looks at several indicators, which may be viewed as a dashboard representing a comprehensive set of measures that collectively contribute toward the impact entrepreneurship has on a society and the extent society supports this activity. Key entrepreneurship indicators are defined below:

Societal values and perceptions

High Status for Successful Entrepreneurs:

Percentage of the 18-64 population who agree with the statement that in their country, successful entrepreneurs receive high status.

Entrepreneurship a Desirable Career Choice:

Percentage of the 18-64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice.

Ease of Starting a Business:

Percentage of the 18-64 population who believe it is easy to start a business.

Media Attention for Entrepreneurship:

Percentage of the 18-64 population who agree with the statement that in their country, they will often see stories in the public media about successful new businesses.

Individual Attributes of a Potential Entrepreneur

Perceived Opportunities:

Percentage of the 18-64 population who see good opportunities to start a firm in the area where they live.

Perceived Capabilities:

Percentage of the 18-64 population who believe they have the required skills and knowledge to start a business.

Fear of Failure Rate:

Percentage of the 18-64 population with perceived opportunities who also indicate that fear of failure would prevent them from setting up a business.

Entrepreneurial Intentions:

Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who intend to start a business within three years.

Knowing a Start-up Entrepreneur:

Percentage of the 18-64 population who personally know someone who started a business in the past two years.

Entrepreneurial Activity Indicators

Nascent Entrepreneurship Rate:

Percentage of the 18-64 population who are currently

nascent entrepreneurs, i.e., actively involved in setting up a business they will own or co-own; this business has not paid salaries, wages, or any other payments to the owners for more than three months.

New Business Ownership rate:

Percentage of the 18-64 population who are currently owner-manager of a new business, i.e., owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than three months, but not more than 42 months.

Total Early-stage Entrepreneurial Activity (TEA): Percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business (as defined above).

Established Business Ownership Rate:

Percentage of the adult population aged 18 to 64 years who are currently an owner-manager of an established business, i.e. owning and managing an operating business that has paid salaries, wages or any other payments to the owners for more than 42 months.

Business Discontinuation:

Percentage of the 18-64 population who have discontinued a business in the past 12 months, either by selling, shutting down, or otherwise discontinuing an owner/management relationship with the business.

Entrepreneurial Employee Activity (EEA):

Percentage of the 18-64 population who, as employees, have been involved in entrepreneurial activities such as developing or launching new goods or services, or setting up a new business unit, a new establishment, or a subsidiary.

Innovative Entrepreneurial Activity:

Percentage of TEA who indicate that their product or service is new to some or all customers and is offered by few or no other competitors.

International Oriented Entrepreneurial Activity:

Percentage of TEA who indicate that at least 25% of their sales are to customers who come from other countries.

Necessity-Driven Entrepreneurial Activity:

Percentage of those involved in TEA who are involved in entrepreneurship because they had no better options for work.

Improvement-Driven Opportunity Entrepreneurial Activity:

Percentage of those involved in TEA who (i) state they are driven by opportunity as opposed to having no better options for work; and (ii) who indicate the main driver for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income.

Entrepreneurial Framework Conditions (EFC)

The quality of the EFC is based on the average value of experts' perceptions, using a Likert scale of 1 (highly insufficient) to 9 (highly sufficient), for the following Entrepreneurial Framework components:

Entrepreneurial Finance:

The availability of financial resources, equity and debt for SMEs, including grants and subsidies.

Government Policy:

The extent to which government policies, including taxation and bureaucracy, help and support entrepreneurship.

Government Entrepreneurship Programs:

The presence and quality of programs directly assisting SMEs at all levels of government.

Entrepreneurship Education:

The extent that training in creating or managing SMEs is incorporated within the education and training system at all levels, with two components:

- Entrepreneurship education at basic school (primary and secondary)
- Entrepreneurship education at post-secondary levels (higher education such as vocational, college, business schools).

Research & Development Transfer:

The extent that national research and development will lead to new commercial opportunities and is available to SMEs.

Commercial and Legal Infrastructure:

The presence of property rights, commercial, accounting and other legal and assessment services and institutions that support or promote SMEs.

Entry Regulation:

- This has two components:
- Internal market dynamics: the level of change in markets from year to year
 - Internal market burdens or entry regulations: the extent that new firms are free to enter existing markets

Physical Infrastructure:

Ease of access to physical resources including communication, utilities, transportation, land or space at a price that does not discriminate against SMEs.

Cultural and Social Norms:

The extent that social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income.

7.2 GEM CONCEPTUAL FRAMEWORK

Since its inception, the GEM survey has been conceptualized to explore the interdependency between entrepreneurship and economic development, to:

- Determine the extent that entrepreneurial activity influences economic growth within individual economies
- Identify factors which encourage and/or hinder entrepreneurial activity (especially relationships between national entrepreneurship conditions, social values, personal attributes and entrepreneurial activity)
- Guide the formulation of effective and targeted policies aimed at enhancing entrepreneurial capacity within individual countries.

To explore the interdependency between entrepreneurship and economic development, the GEM developed a Conceptual Framework focused on enterprise creation, development and growth. This framework has evolved since its inception in 1999. As shown in Figure 11, the GEM Conceptual Framework is centred on the assumption that a nation's economic growth is directly impacted by the personal capability of its individuals to identify and seek opportunities to start a business. This process is affected by environmental factors which influence individual decisions to pursue entrepreneurial activities.

The social, economic, cultural and political context is represented through the National Framework Conditions (NFCs) and the EFCs. The NFCs reflect the stages of economic development and the progress between them. The EFCs relate to the quality of the entrepreneurial ecosystem, including entrepreneurial finance, government programs, entrepreneurship education, R&D transfer, market dynamics and regulation, physical infrastructure, and cultural and social norms.

The GEM Conceptual Framework recognizes that entrepreneurship is part of a complex feedback system, and makes explicit the relationships between social values, personal attributes and various forms of entrepreneurial activity. It also recognizes that entrepreneurship can mediate the effect of the NFCs on new job creation and new economic or social value creation. Entrepreneurial activity is therefore an output of the interaction of an individual's perception of an opportunity and capabilities (motivation and skills) to act on this, and the distinct conditions of the respective environment where they are located. While entrepreneurial activity is influenced by the EFCs where it takes place, it ultimately benefits this environment through social value and economic development.

Social values toward entrepreneurship:

This includes aspects such as the extent that society values entrepreneurship as a good career choice; whether entrepreneurs have a high societal status; and the extent that media attention on entrepreneurship is contributing to the development of a positive entrepreneurial culture.

Individual attributes:

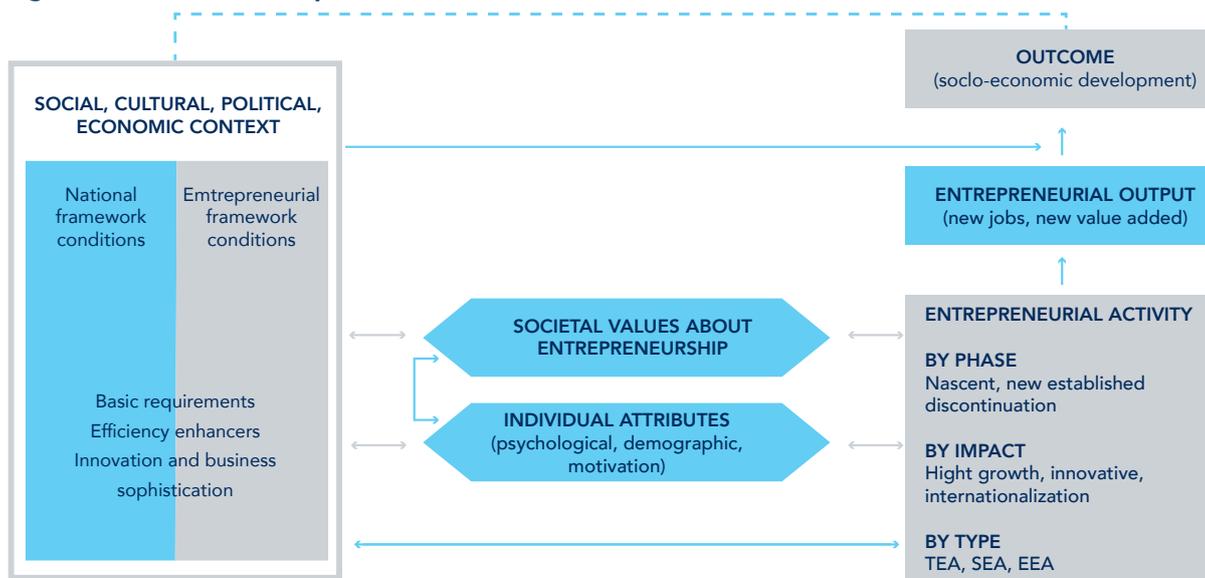
This includes different demographic factors such as gender, age, geographic location; psychological factors including perceived capabilities, perceived

opportunities, fear of failure; and motivational aspects including necessity- versus opportunity-based ventures and improvement-driven ventures.

Entrepreneurship activity:

This is defined according to the phases of the lifecycle of entrepreneurial ventures (nascent, new business, established business, discontinuation), according to impact (high growth, innovation, internationalisation), and by type (TEA, social entrepreneurship activity – SEA, EEA).

Figure 11: The GEM Conceptual Framework



Source: Global Entrepreneurship Monitor, 2018/2019 Global Report

7.3 HOW GEM MEASURES ENTREPRENEURSHIP

The GEM measures individual participation across multiple phases of the entrepreneurial process, providing insights into the level of engagement at each stage. This is important because societies may have varying levels of participation at different points in this process. A healthy entrepreneurial society requires people to be active in all phases of the entrepreneurial process. For example, to have start-ups in a society, there must be potential entrepreneurs. Later in the process, people that have started a business must have the capability to sustain their business into maturity. **Figure 12** presents an overview of the entrepreneurial process and the GEM operational definitions.

The GEM provides a comprehensive account of both informal and formal business activity. This is important because in many societies entrepreneurs operate in the informal sphere. The GEM's emphasis on individuals provides insight into who these entrepreneurs are including: their demographic profiles; their motivations for starting a new venture; and the vision they have for their businesses. It also assesses broader societal attitudes about entrepreneurship, which can indicate the extent that people are engaged in or willing to participate in entrepreneurial activity, and the level of societal support for entrepreneurs.

Every individual engaged in behaviour related to new

business creation, whether it is at the initial concept stage or the established business stage, contributes to the national level of entrepreneurship. The GEM not only considers the number of entrepreneurs in an economy but takes into consideration other aspects such as the level of employment they create, their growth ambitions, and the extent that segments such as women are participating in entrepreneurial activity.

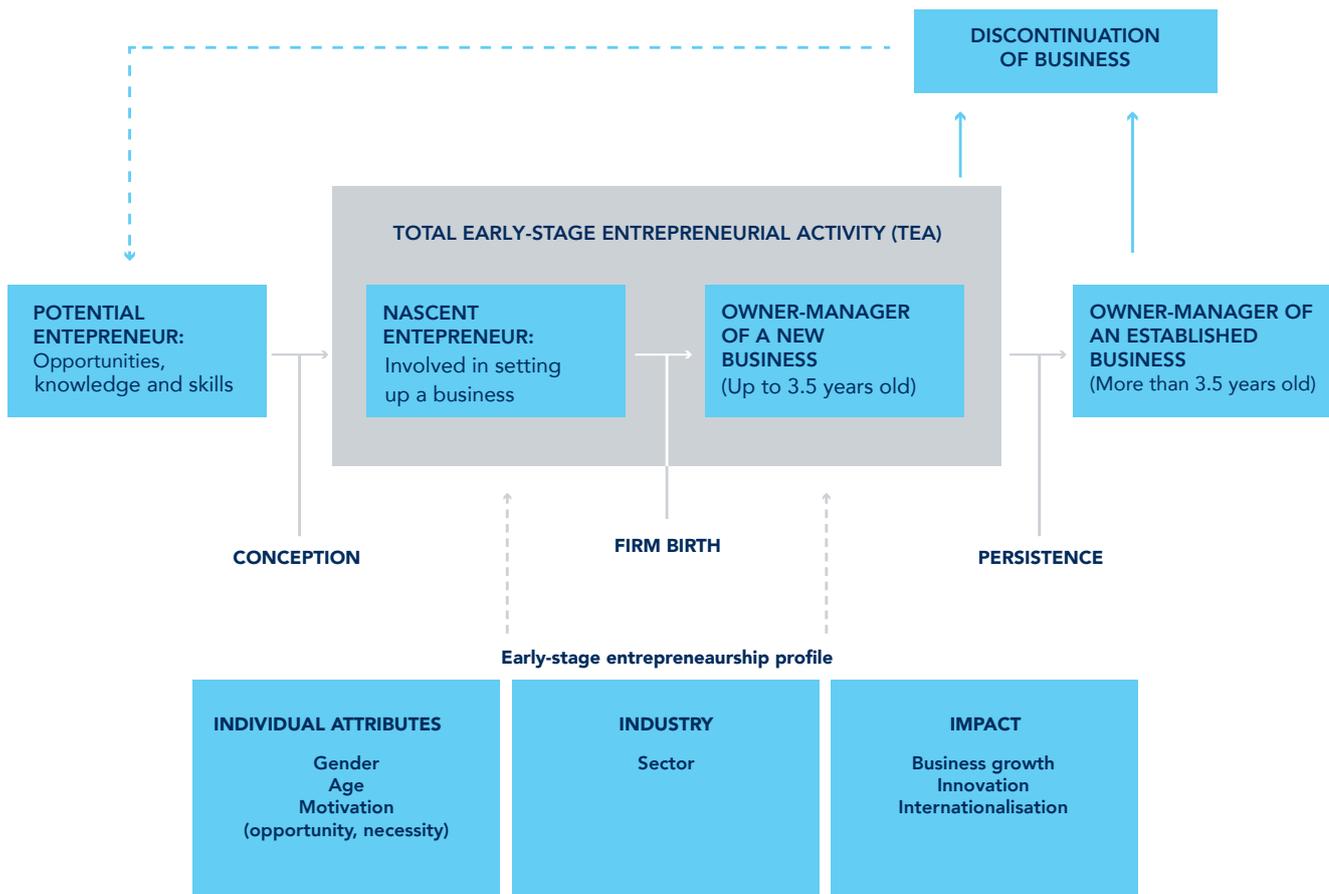
7.4 GEM METHODOLOGY

To provide reliable comparisons across countries, GEM data are obtained using a research design that is harmonized across participating countries. The GEM data are gathered on an annual basis from two main sources:

7.4.1 ADULT POPULATION SURVEY (APS)

At the heart of the GEM methodology is the APS. This GEM survey of entrepreneurship provides primary data on a random representative sample of at least 2,000 adults between the ages of 18 and 64 years. The surveys are conducted at the same time every year (between May and June) using a standardized questionnaire provided by the GEM Global Data Team. The questionnaire is translated into local languages, and back-translated for a validity check. In Qatar, the APS questionnaire was translated from English into Arabic.

Figure 12: GEM Entrepreneurship Indicators



Source: Global Entrepreneurship Monitor, 2018/2019 Global Report

In 2018, the APS conducted in Qatar included a total of 2,573 interviews, with a random selection of the adult population between the ages of 18 and 64 years, covering all nationalities and gender. Interviews were conducted using a structured questionnaire in the preferred language of the respondent (Arabic or English). To maximize the representation of the population, a multi-channel methodology was used: 49% of data was collected via telephone surveys on respondents' mobile phones using random digit dialling (RDD); and 51% of data was collected using a computer assisted personal interviewing (CAPI) methodology, where respondents were randomly approached in public spaces across Qatar and invited to participate. The sample for the telephone surveys was developed by randomly generating thousands of mobile phone numbers, based on two root phone numbers from telecommunication providers Ooredoo and Vodafone. The APS sample was stratified by age, gender and municipality of residence. The individual countries only gain access to the data once it has been analysed by experts at London Business School for quality assurance, checking and uniform statistical calculations. As the GEM research design harmonizes the data, it is possible to conduct reliable cross-national and intra-country comparisons over time.

7.4.2 NATIONAL EXPERTS SURVEY (NES)

The NES comprises at least 36 interviews with selected and pre-approved government and industry experts from across nine frameworks in each participating economy. These frameworks are: entrepreneurial financing; government policy; government entrepreneurship programs; entrepreneurial education; R&D transfer; commercial and legal infrastructure; internal market dynamics and market burdens or entry; physical infrastructure; and cultural and social norms.

National experts are selected for participation in the NES in accordance with the international GEM selection criteria, to ensure each country's selection is balanced, relevant and representative – allowing for global data harmonization and consistent comparisons between the participating countries. It is therefore required that each participating country includes at least four experts from each of the nine NES entrepreneurial framework categories.

In general, experts are carefully chosen based on their level of knowledge and experience of each of the EFCs. In Qatar, a total of 54 interviews with national experts were conducted via an online link to the survey, distributed via email. All countries participating in the NES are required to use a standardized NES questionnaire, which is translated locally into additional languages (such as Arabic for Qatar).

QATAR DEVELOPMENT BANK (QDB)

QDB was founded by Emiri Decree to grow Qatar's private sector and diversify its economy. His Highness Sheikh Hamad Bin Khalifa Al Thani, the Father Amir, identified these as vital tasks in developing Qatar into a modern state. Since its establishment in 1997, QDB has been at the forefront of these efforts. It has worked with thousands of Qatari entrepreneurs and enterprises and has provided investment and guidance to brand-new start-ups and well-established corporations. QDB has built a reputation for identifying promising investment opportunities. Its focus is on growing SMEs in key sectors by offering several services via a single window to support expected growth. Through smart, targeted financing products and advisory support services, QDB is nurturing a sound and sustainable knowledge-based economy for Qatar.



Disclaimer and Copyright Notice: Although GEM data were used in the preparation of this report, their interpretation and use are the sole responsibility of QDB. Referring to this report is mandatory when using its data. All rights are reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means without the prior written permission of QDB. This report is based on data collected by the GEM consortium and the GEM Qatar team; responsibility for analysis and interpretation of the data is the sole responsibility of the authors.

