



Article

# Strategy and Practice for Sustainability in Businesses in the Middle East and North Africa in a Global Perspective

Ayman Ismail <sup>1</sup>, Fatima Boutaleb <sup>2</sup>, Esra E. Karadeniz <sup>3</sup>, Ehud Menipaz <sup>4</sup>, Chafik Bouhaddioui <sup>5</sup> ,  
Widad A. Rahman <sup>6</sup>, Lidia Sanchez-Ruiz <sup>7</sup> and Thomas Schött <sup>1,8,9,\*</sup>

- <sup>1</sup> Management Department, The American University in Cairo, Cairo 11835, Egypt; aymanism@aucegypt.edu  
<sup>2</sup> Department of Economics, University Hassan II, Casablanca 22000, Morocco; fatima.boutaleb@univh2c.ma  
<sup>3</sup> Department of Economics, Yeditepe University, Istanbul 34755, Turkey; ekaradeniz@yeditepe.edu.tr  
<sup>4</sup> School of Industrial Engineering & Management, Ben Gurion University, Beer Sheva 8443944, Israel; ehudm@bgu.ac.il  
<sup>5</sup> Department of Analytics, United Arab Emirates University, Al Ain 15551, United Arab Emirates; chafikb@uaeu.ac.ae  
<sup>6</sup> School of Management Studies, Ahfad University for Women, Omdurman 167, Sudan; widadali01@live.com  
<sup>7</sup> Group of Health Economics and Health Service Management, Instituto de Investigación Sanitaria Valdecilla, Business and Management Department, Universidad de Cantabria, 39005 Santander, Spain; lidia.sanchez@unican.es  
<sup>8</sup> School of Business, University of Agder, 4604 Kristiansand, Norway  
<sup>9</sup> Department of Entrepreneurship, University of Southern Denmark, 6000 Kolding, Denmark  
\* Correspondence: tsc@sam.sdu.dk



**Citation:** Ismail, Ayman, Fatima Boutaleb, Esra E. Karadeniz, Ehud Menipaz, Chafik Bouhaddioui, Widad A. Rahman, Lidia Sanchez-Ruiz, and Thomas Schött. 2022. Strategy and Practice for Sustainability in Businesses in the Middle East and North Africa in a Global Perspective. *Journal of Risk and Financial Management* 15: 277. <https://doi.org/10.3390/jrfm15070277>

Academic Editor: David Gautschi

Received: 27 May 2022

Accepted: 13 June 2022

Published: 23 June 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Abstract:** A business may adopt a strategy for sustainability and may implement its strategy in its practice. Our question is, how are strategy and practice coupled and shaped by entrepreneurs and businesses embedded in national eco-systems in the Middle East and North Africa and around the world? Businesses were randomly sampled and surveyed in 2021, and national conditions were assessed by experts in ten countries in the Middle East and North Africa and in Spain and other countries around the world, as part of the Global Entrepreneurship Monitor. Strategy and practice are found to have a loose coupling but are tighter in the Middle East and North Africa than in Spain. Strategy is promoted by support from businesses and governments, but support depends on national wealth. Strategy and practice by entrepreneurs and businesses are promoted by the entrepreneurs' human and social capital and the value of making a difference in the world and continuing a family tradition. Findings contribute to understanding business engagement with sustainability, specifically in the Middle East and North Africa, as compared to Spain and in a global perspective.

**Keywords:** sustainability; strategy; practice; businesses; Middle East and North Africa; Global Entrepreneurship Monitor

## 1. Introduction

*"The social responsibility of business is to increase its profits."*

*"We are ... dependent on companies' efforts and willingness to find sustainable solutions.*

*But ... the primary purpose of a corporation is, after all, to produce economic profit.*

*Not to save the world.*

*Claims that there is no contradiction between these two conflicting goals ring ... false"*

The first quote, explaining that the social responsibility of a business is to increase its profits, expresses the value underpinning capitalism, as promulgated by the Nobel laureate Milton Friedman (1970). The second quote expresses the value underpinning activism for sustainable development to save the world, as advocated by Greta Thunberg et al. (2020, p. 133). The movement for sustainability has not shaken capitalism, but it is pressuring societies, governments and businesses to engage with sustainability in strategy and practice.

Businesses differ in their engagement with sustainability. Some adopt a strategy for sustainability, whereas others do not. Some practice sustainability, while others do not.

Some businesses profess to elaborate a strategy for sustainable development, but do not implement or couple it with practice—they are *'greenwashing'*. Entrepreneurs who value enhancing their own wealth, aligned with Milton Friedman, may be pressured to profess a strategy for sustainability, but may be reluctant to implement it in practice.

Some businesses adopt a strategy, and couple it with practice—they *'walk the talk'*. Entrepreneurs who value making a difference in the world, aligned with Greta Thunberg, are more likely to develop a strategy for sustainability and to implement their strategy in practice.

The global movement for sustainable development has led to the UN adoption of Sustainable Development Goals. National authorities, notably governments, are engaging with these goals (Sachs et al. 2021). Governments and business leaders and associations are more or less supporting pursuits of sustainable development, specifically in businesses (Agarwal et al. 2017). Notably, the *Harmonious Entrepreneurship Society* is founded on and dedicated to the promotion of entrepreneurial training and enterprising for sustainable development (Harmonious Entrepreneurship Society 2022). Most cultures have an expectation that people and businesses pursue sustainable development, and many societies are requiring the adoption of sustainability efforts. Post-materialist culture appears especially favorable for sustainable development (Hechavarría et al. 2016; Rosati and Faria 2019a).

Pursuits of sustainability differ widely around the world (ibid.). Business endeavors, including the pursuit of sustainability, are embedded in national eco-systems that regulate, constrain, enable, and support their endeavors. A study of business pursuits in Colombia and Egypt found considerable differences (Liu et al. 2021). Notably, while businesses in both countries reported substantial strategies and practices, the endeavors were more elaborate in Colombia than in Egypt, and the coupling between strategy and practice was substantial in both countries, but tighter in Colombia than in Egypt (ibid.). This comparison calls for contextualizing business pursuits of sustainability.

These considerations frame our research question—how are strategy and practice coupled and shaped by entrepreneurs and businesses embedded in national eco-systems in the Middle East and North Africa and around the world?

We address the question by analyzing data from surveys of businesses and national eco-systems around the world. Businesses were randomly sampled and surveyed in 2021, and national conditions were assessed by experts in ten countries in the Middle East and North Africa (MENA), and also in Spain and many other countries around the world, as part of the *Global Entrepreneurship Monitor* (2022). MENA has a culture that is predominantly traditional, whereas the culture in Spain is more modern and secular-rational (Inglehart and Welzel 2005). This difference in culture makes the comparison between MENA and Spain interesting.

Strategy and practice are here found to have a coupling that is loose but that is tighter in MENA than in Spain. Strategy is promoted by support from businesses and governments, but support depends on national wealth. Strategy and practice by entrepreneurs and businesses are promoted by the entrepreneurs' human capital, social capital, value of making a difference in the world, and value of continuing a family tradition in business.

The findings contribute to understanding business engagement with sustainability, specifically in the Middle East and North Africa compared to Spain and in global perspective.

The following firstly presents our conceptual framework and research design, then reports analyses of coupling between strategy and practice, analyses of effects of national conditions on sustainability, and analyses of effects of entrepreneurs and businesses on strategy and practice, and finally discusses findings and contributions.

## 2. Conceptual Framework and Hypotheses

The theoretical starting point is that an actor—here a business or an entrepreneur—is engaging in action—here sustainable development in the business. Furthermore, the theorizing uses a conceptual distinction between strategy and practice (also often termed operations in the management tradition). Theorizing thereby concerns strategy for sustainable development and practice for sustainable development and the relationship between these two. The relationship can be conceptualized as an implementation or a coupling. This raises theoretically important questions about implementation, including whether strategy is implemented in practice, to what extent, how, and under what conditions? Coupling between two phenomena refers to their intertwining and interdependence (Weick 1976; Orton and Weick 1990). The stream of research on coupling considers the theoretical questions: Do the two phenomena have a tight coupling or a loose coupling? Which phenomena and conditions entail a tight coupling? and Which create a loose coupling? These theoretical issues are addressed here. We begin by elaborating on strategy and practice for sustainability.

The strategy of the business is formed by decision-making about the future of the business. The decision-makers may consider social and environmental implications of the business, weighed against more economic priorities. Social implications may be access to education, health, safety, inclusive work, housing, transportation, and quality of life at work. Environmental implications may be preservation of green areas, reduction of the emission of pollutants and toxic gases, selective garbage collection, and conscious consumption of water, electricity, and fuels. Such social and environmental considerations may be weighed against and even prioritized above profitability or growth. This conceptualization of strategy is largely the operational definition in the survey, cited in the section on measurements (Global Reporting Initiative (GRI) and United Nations Global Compact (UN Global Compact) 2017).

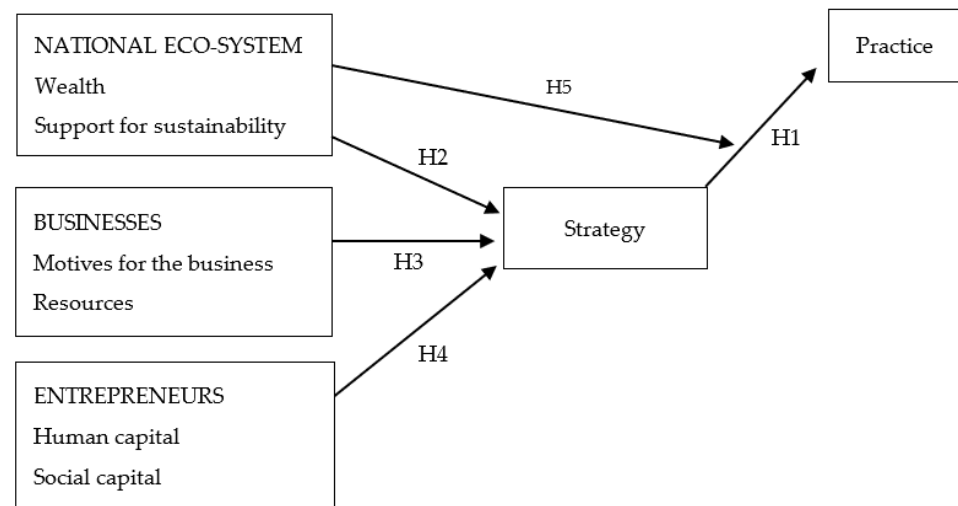
The practice of the business are the operations that, more or less, implement the strategy. The practice thus encompasses the steps the business takes to enhance social benefit and to reduce environmental harm. Steps to enhance social benefits may include creating jobs for the unemployed youth and other groups with limited access to the labor market, including social enterprises in the supply chain, ensuring a diverse workforce, prioritizing companies and/or suppliers that take actions that respect human rights and the environment when buying a product or service, fighting against any form of child or slave labor, and investing in or supporting projects or social organizations that develop the community and include less-favored groups. Steps to reduce environmental harm may include taking energy-saving measures or measures to reduce carbon emissions, introducing more efficient machinery, taking care of the solid waste generated, using recyclable materials, and using of alternative means of transportation, such as cycling, walking, collective rides, and public transportation. Essentially, this conceptualization of practice is the operational definition in the survey, as cited in the section on measurements.

The strategy is formed by the business and its leading entrepreneur on the basis of the background for the business, including the motives for the business and its resources and the background of the entrepreneur, including the entrepreneur's human, social, and financial capital (Hockerts 2015; Hoogendoorn et al. 2019; Hörisch et al. 2014; Kraus et al. 2017; Rosati and Faria 2019b; York et al. 2016).

The strategy in a business is also influenced by its institutional context, notably the national eco-system, including the wealth of the society and the support that the society provides for the pursuit of sustainability. The practice tends to be an implementation

of the strategy, but the national eco-system influences not only the strategy, but also its implementation in practice (Brinks et al. 2019; Pérez 2021; Rosati and Faria 2019a).

This conceptualization of formation of strategy and practice in a business can be formalized as a model, as in Figure 1.



**Figure 1.** Model of strategy and practice of sustainability in businesses.

The conceptualization suggests several hypotheses. First, let us consider coupling between strategy and practice. Engaging with sustainability is not a core endeavor in a business but is rather peripheral. Therefore, we should not expect the coupling between strategy and practice to be tight, but we should expect the coupling to be loose. We state this as our first hypothesis.

**Hypothesis 1.** *Strategy and practice will have a coupling that is loose.*

This generalizes the finding that coupling has been found to be rather loose in both Colombia and Egypt (Liu et al. 2021).

Second, we expect some effects of the national eco-system upon strategy and thereby also upon practice. Engaging with sustainability issues is costly, as emphasized by Friedman (op.cit.), so we should expect that wealth of a society positively affects business sustainability pursuits, both collectively and individually. Part of this effect of wealth on businesses pursuits is expectedly mediated by governments, in that wealth of a society enables the government to provide more support for business endeavors. These hypothesized effects are expressed as our second hypothesis.

**Hypothesis 2.** *Strategy and practice will be promoted by national wealth (H2a) through support from businesses and government (H2b).*

Third, we expect some effects of business characteristics upon its strategy and thereby also upon its practice. Broadly, we would expect resources such as size of the business to positively affect pursuit of sustainability.

**Hypothesis 3.** *Strategy and practice will be promoted by the resources such as the size of the business.*

Fourth, we expect some effects of characteristics of entrepreneurs upon the strategy and thereby also upon the practice. Notably, the entrepreneurs' human and social capital expectedly promotes sustainability pursuits. A value of wanting to make a difference in the world, aligned with Greta Thunberg, would also promote sustainability pursuits

(op.cit.). Conversely, a value of enhancing own wealth, aligned with Milton Friedman, would expectedly reduce sustainability pursuits (Figge and Hahn 2012). These ideas are expressed in our hypothesis.

**Hypothesis 4.** *Strategy and practice will be promoted by the entrepreneurs' human and social capital, and by a value of wanting to make a difference in the world, but will be reduced by a value of enhancing own wealth.*

Fifth, we expect that the implementation of strategy is not automatic or perfect but that it depends on the environment. Earlier studies have proposed that culture affects socio-environmental goals in businesses. Notably, post-materialist culture promotes a business goal of environmental good (Hechavarría et al. 2016). This cultural difference exists between MENA and Spain, in that the culture in Spain is more post-materialist than the culture in MENA. Therefore, we hypothesize.

**Hypothesis 5.** *The coupling differs between MENA and Spain, in that the coupling is tighter in Spain.*

*The Context: Spain and the Middle East and North Africa*

The study has a focus on MENA compared to Spain. Here, we provide a brief review of the engagement with sustainability in Spain and countries in MENA (Luomi et al. 2019).

Spain has a clear political and social commitment towards sustainability. The Spanish Sustainable Development Strategy was approved as early as 2007 (Ministry for Ecological Transition and Demographic Challenge 2022). A few years later, with the aim of providing continuity to this document, the National Action Plan for the implementation of the 2030 Agenda was published (Spanish Government 2018). In addition, sustainability is included in one of the six strategic axes of the Spanish Strategy for Science, Technology and Innovation 2021–2027 (Spanish Ministry of Science and Innovation 2022). In parallel, specific initiatives and progress in the business field have also been promoted. Thus, different regulations applicable to companies operating in Spain have come into effect during the last few years (the Non-financial Information and the Equality Law from 2019), while others are still in progress (Future Law on Climate Change, which is focused on the fight against climate change and will establish strategies to reduce CO<sub>2</sub> emissions). In 2004, Spain joined the Global Compact Network, a global initiative aimed at promoting sustainability among companies (United Nations Global Compact). In fact, Spain is the member with the highest number of adhered entities (more than 2100). According to the results obtained through a study developed among more than 1900 Spanish companies, 81% of companies know the SDGs and 89% affirmed their activities could impact the 2030 agenda (Pacto Mundial. Red Española 2020). Another interesting figure to highlight is the fact that, in 2020, sustainable and responsive investment exceeded €345 million in Spain, which represents an increase of 21% compared to the previous year (Spainsif 2021).

Israel has had sustainability as a main part of its business landscape for many years (Menipaz and Avrahami 2020). As of late, sustainability technologies, or ClimateTech, are poised to be the next big trend when it comes to made-in-Israel innovation. In 2021, ClimateTech companies made up 10% of the \$26 billion in capital raised by the Israeli high technology eco-system and there is every reason to think that this sector will only rise in significance and volume. The country is putting a concerted effort into becoming the go-to hub for climate change-battling innovation, aiming to make up in its ingenuity what it lacks in size. Involved in this concerted effort is both the Government's Innovation Authority as well as "angel investors" and other private capital funds. As of the middle of 2022, a two billion US-dollar investment was announced by Saudi Arabia, destined to be invested in the high technology sector in Israel, brokered by the Infiniti Fund. Israel, ranked sixth on the Global Cleantech Innovation Index, is among the countries with the greatest potential to produce commercially viable cleantech companies over the next 10 years. Overall, there are



more than 750 sustainability-related tech companies and startups in Israel, according to the Start-Up Nation Finder, the innovation discovery platform developed by Start-Up Nation Central, which maps Israel's tech eco-system (<https://finder.startupnationcentral.org/> (accessed on 1 May 2022)).

Turkey has been linking SDGs with National Development Plans (NDPs) and sectoral strategies since 1996 (UN, SDG, Knowledge Platform). Turkey was among the first 22 countries that submitted a Voluntary National Review (VNR) Report in 2016. The Turkish government and businesses see sustainable development as a strategy to boost the worldwide competitiveness of Turkish enterprises in the global marketplace. As part of its national development strategy, the government encourages sustainability reporting and sustainable development concerns. Over the last five years, an increasing number of businesses have begun to embrace corporate social responsibility (CSR) as a medium- and long-term success strategy (Akdogana et al. 2020). The number of non-governmental organizations and consultancy firms in this market has recently increased due to more interest in sustainability and CSR. The launch of the Sustainability Index on the Istanbul Stock Exchange in 2014 is one of the most prominent initiatives in Turkey on the subject of sustainability in general and corporate social responsibility in particular. Turkey joined The United Nations Global Compact in 2002, which is an initiative that 370 companies signed to commit to responsible business practices in human rights, labor, the environment, and corruption (United Nations Global Compact). Turkey is 8th in Europe by the number of companies, and 1st in the Middle East and Eastern Europe. Aydoğan et al. (2021) proposed that it is crucial to support entrepreneurial activities within the framework of a development model in Turkey (Siffert and Guimarães 2020) that includes the economic, social, and environmental dimensions of Sustainable Development and to implement policies that will provide better living conditions.

Morocco put in place a sustainable vision and development model based on renewable energy long before the COVID-19 pandemic, convinced that this sector will play a key role in both South–South cooperation and Africa's sustainable economic recovery. Morocco has committed to international efforts by adhering to multilateral environmental agreements and transposing them into law. The country ratified the three Rio Conference conventions on climate change, biodiversity, and desertification. Morocco supports the UN Sustainable Development Goals. The 2011 Constitution, which makes sustainable development a citizen right, defines the roles of various stakeholders and expands the scope of the Economic, Social, and Environmental Council (EESC), which gives its opinion on the national economy and sustainable development. The Kingdom has established a governance for sustainable development (Kahime et al. 2017) and has made significant progress in integrating sustainability into sectoral policies through the National Strategy for Sustainable Development (NSSD), which aims to achieve an integrated green economic transition by 2030. Morocco started implementing a set of sectoral plans in the early 2000s to foster their development, as well as to spread the concept of sustainability and its importance in durable growth: the National Energy Strategy was adopted in 2009, the Green Morocco Plan was endorsed in 2008, and the Industrial Acceleration Plan, which covered the period 2009–2020 to boost agriculture, fishing industries, and diversify the industrial portfolio. Such plans contributed to improve the country's business climate and to attract additional foreign direct investments, in addition to building significant transportation and energy infrastructure. Based on a collective intelligence approach, a new development model has just been adopted that enshrines Morocco's ambition for 2035 (CSMD 2021). It advocates four main areas of transformation for sustainable and inclusive development: a diversified economy, strengthened human capital, inclusion for all, and territorial sustainability.

These reviews of sustainability development in Spain and several countries in MENA show that all the societies have adopted strategies for sustainable development, and that they differ in detail. In the following we shall see that the societies also differ in the implementation of strategies in practices in businesses.

### 3. Research Design

Businesses and national eco-systems around the world were surveyed in 2021 with a focus on sustainability, by the national teams in the [Global Entrepreneurship Monitor \(2022, pp. 39–41\)](#). Teams around MENA and in Spain have pooled their data on businesses for the analysis reported here. The GEM consortium has compiled national-level aggregates from the surveys in all participating countries and made them available for members on its website: [www.gemconsortium.org](http://www.gemconsortium.org) (accessed on 1 June 2022). GEM is scheduled to share the data on the businesses in the public domain on its website by spring 2025.

We conducted analyses at several levels. At the global level, we make comparisons among three world regions: MENA, the western region, and the rest of the world, where the unit of analysis is a world region. At the national level, we make comparisons among 10 national societies in MENA and with Spain, where the unit of analysis is a country. At the level of the individual businesses, taking a business as the unit of analysis, we analyze how strategy and practice in a business are influenced by characteristics of the business and its entrepreneur (based on individual-level data on businesses in Spain and seven countries in MENA, Egypt, Emirates, Iran, Israel, Morocco, Sudan, and Turkey).

In short, our data analysis uses:

- World-region aggregated data, on three regions;
- National aggregated data, on 47 countries around the world, as listed below;
- National aggregated data, on 11 countries in MENA and Spain;
- Individual business data, on many businesses in eight countries in MENA and Spain.

#### 3.1. Sampling of Countries and Businesses

Businesses were surveyed in 47 countries (*ibid.*). Ten of the countries are in MENA: Egypt (EG), Emirates (AE), Iran (IR), Israel (IL), Morocco (MA), Oman (OM), Qatar (QA), Saudi Arabia (SA), Sudan (SD), and Turkey (TR). Another 25 of the countries can be classified as Western: Spain (ES), Belarus (BY), Canada (CA), Croatia (HR), Cyprus (CY), Germany (DE), Finland (FI), France (FR), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Luxemburg (LU), Latvia (LV), Netherlands (NL), Norway (NO), Poland (PL), Romania (RO), Russia (RU), Slovakia (SK), Slovenia (SI), Sweden (SE), Switzerland (SW), United Kingdom (UK), and United States (US). Finally, the 12 other countries are around the rest of the world: Brazil (BR), Chile (CL), Colombia (CO), Dominican Republic (DR), Guatemala (GT), India (IN), Japan (JP), Kazakhstan (KZ), Korea (KR), Panama (PA), South Africa (ZA), and Uruguay (UY). National eco-systems were assessed by experts in 51 countries, namely the above 47 countries (imputing expert assessments for France) and also Belgium (BE), Jamaica (JM), Lithuania (LT), and Mexico (MX) (*ibid.*). The acronyms are used in the later figures.

In each of the 47 countries, adults were randomly sampled and asked whether they own and manage a starting or operating business. The so-identified entrepreneurs were asked about the engagement with sustainability in their business as described below.

#### 3.2. Measurements

##### 3.2.1. Practice of Sustainability

The practice in each surveyed business was measured in the GEM survey of businesses by asking two Yes-No questions:

*Have you taken any steps to minimize the environmental impact of your business over the past year? This could include energy saving measures, measures to reduce carbon emissions or introducing more efficient machinery, take care of the solid waste generated, use of recyclable material, use of alternative means of transportation, such as cycling, walking, collective rides, public transportation, etc.*

*Have you taken any steps to maximize the social impact of your business over the past year? This could include creating posts for young unemployed and other groups with limited access to the labor market; including social enterprises into your supply chain; ensuring a diverse workforce; prioritize companies and/or suppliers that take actions that respect human rights and the environment, when buying a product or service; fight against any form of child or slave labor; invest or support projects or social organizations that develop the community and include less favored groups.*

The responses are positively correlated, so their mean is an index of practice in each business. We use this index of practice in businesses for testing effects on practice in businesses in Spain and several countries in MENA.

Our GEM consortium has aggregated the responses from the business in each country to the national level ([Global Entrepreneurship Monitor 2022](#), pp. 39–41). GEM has made the national-level aggregate measures from all 47 participating countries available for members on: [www.gemconsortium.org](http://www.gemconsortium.org) (accessed on 1 June 2022). We use these national-level aggregate measures of practice for most analyses.

### 3.2.2. Strategy for Sustainability

The strategy in each surveyed business was measured in the GEM survey of businesses by asking the owner/manager to rate (dis)agreement with three statements:

*When making decisions about the future of your business, you always consider social implications such as access to education, health, safety, inclusive work, housing, transportation, quality of life at work, etc.*

*When making decisions about the future of your business, you always consider environmental implications such as preservation of green areas, reduction of the emission of pollutants and toxic gases, selective garbage collection, conscious consumption of water, electricity and fuels, etc.*

*You prioritize the social and/or environmental impact of your business above profitability or growth.*

This operationalization is fairly consistent with other ways of measuring businesses' pursuits of sustainability (e.g., [Global Reporting Initiative \(GRI\) and United Nations Global Compact \(UN Global Compact\) 2017](#)).

The responses are positively correlated, so their mean is an index of strategy in each business. We use this index of strategy in businesses for testing effects on practice in businesses in Spain and in seven countries in MENA.

Our GEM consortium has aggregated the responses from the business in each country to the national level ([Global Entrepreneurship Monitor 2022](#), pp. 39–41). GEM has made the national-level aggregate measures from all 47 participating countries available for members on: [www.gemconsortium.org](http://www.gemconsortium.org) (accessed on 1 June 2022). We use these national-level aggregate measures of strategy for most analyses.

### 3.2.3. Support from Business and Government in Each Country

In each of the 51 countries, a panel of experts rated truthfulness of several statements about the national eco-system. Support from businesses and the government was indicated by two statements:

*In my country, due to the pandemic, a substantial number of new and growing firms are prioritizing protecting the environment above profitability or growth.*

*In my country, as a result of the pandemic, the government has accelerated the 'green agenda,' or specific environmental policy, taking effective measures to promote sustainability and environmental awareness among all firms.*



The responses for the panel to the two statements are positively correlated, so their mean is an index of support for sustainability in each country. The national-level indicators from all 51 countries surveyed by the experts are available for members on the GEM website: [www.gemconsortium.org](http://www.gemconsortium.org) (accessed on 1 June 2022).

#### 3.2.4. Country

With data on businesses in many countries around the world, Country is a categorical variable. In multivariate analyses, Country may be included with a series of dummies. For analyzing how MENA and Spain differ, we use a dummy coded '0' for Spain and '1' for MENA.

#### 3.2.5. Control Variables

The analysis of effects on strategy and practice in businesses should control for characteristics of the businesses which may affect strategy and practice. The GEM survey of the businesses enables us to control for several business characteristics,

- Age of the business, as a count of years, logged;
- Owners, as count, logged;
- Employees, as a count, logged;
- Sector, as four categories;
- Motive of wanting to make a difference in the world, measured on a five-point Likert scale;
- Motive of continuing a family tradition, measured on a five-point Likert scale;
- Motive of enhancing own wealth, measured on a five-point Likert scale;
- Motive of making a living as jobs are difficult to get, measured on a five-point Likert scale;
- Gender of the entrepreneur, recorded as male (coded 1) or female (coded 0);
- Age of the entrepreneur, as a count of years;
- Education of the entrepreneur, as a count of years to highest completed degree;
- Self-efficacy, measured on a five-point Likert scale;
- Opportunity-assessment, measured on a five-point Likert scale;
- Risk-willingness, measured on a five-point Likert scale;
- Networking with starters, measured on a five-point Likert scale.

### 4. Results

Here, we first describe the background of the businesses, then examine the coupling between strategy and practice, the effects of the national eco-system on strategy and practice at the national level, and finally the effects of entrepreneurs and businesses on strategy and practice at the individual level of businesses in MENA and Spain.

#### 4.1. Background of Businesses and Entrepreneurs

The background is briefly described by the characteristics of the businesses, as seen in Table 1. Most businesses are young and small. The strongest motive for running a business is the necessity to make a living when jobs are difficult to get.

The background of the businesses is further described by correlations of variables of interest, as seen in Table 2. Strategy and practice of sustainability are substantially correlated with the motive of wanting to make a difference in the world, aligned with Greta Thunberg.

**Table 1.** Characteristics of businesses and entrepreneurs; in MENA and Spain.

Sample of Businesses	Businesses with Individual-Level Data	7921
	Countries with businesses with ind.-level data	8
	Countries with national-level data on support	51 countries
	Countries with national-level data on strategy and practice	47 countries
Sector: Extracting	Percent of businesses	9%
Sector: Transforming	Percent of businesses	24%
Sector: Business services	Percent of businesses	22%
Sector: Consumer oriented	Percent of businesses	45%
Age of business	Number of years, median	2
Owners	Number of owners, median	2
Employees	Number of employees, median	2
Motive: Make a difference	Scale 1 to 5, mean	2.8
Motive: Family tradition	Scale 1 to 5, mean	2.5
Motive: Enhance own wealth	Scale 1 to 5, mean	3.2
Motive: Make a living	Scale 1 to 5, mean	4.0
Gender of entrepreneur: Male	Percent of businesses led by a male	61%
Age of entrepreneur	Number of years, mean	42.0
Education	Number of years, mean	13.0
Self-efficacy	Scale 1 to 5, mean	4.1
Opportunity-assessment	Scale 1 to 5, mean	3.1
Risk-willingness	Scale 1 to 5, mean	3.3
Networking with starters	Scale 0 to 3, mean	1.3

Source: Individual level data from Spain and seven countries in MENA, described in the section on research method.

**Table 2.** Correlations among individual-level variables of interest (N = 8278 businesses in MENA and Spain).

	Practice	Strategy
Practice in business		
Strategy in business	0.33 ***	
Sector: Extraction	0.09 ***	0.03 **
Sector: Transformation	0.02 †	0.00
Sector: Business services	−0.10 ***	−0.04 ***
Sector: Consumer services	0.01	0.02
Age of business	−0.07 ***	−0.08 ***
Owners	0.08 ***	0.04 ***
Employees	0.09 ***	0.15 ***
Motive: Make difference in world	0.28 ***	0.20 ***
Motive: Continue a family tradition	0.17 ***	0.10 ***
Motive: Enhance own wealth	0.05 ***	0.11 ***
Motive: Make a living, job difficult to get	0.01	−0.01
Gender of entrepreneur: Male	−0.01	0.03 *
Age of entrepreneur	−0.03 *	−0.06 ***
Education	−0.03 **	0.05 ***
Self-efficacy	0.08 ***	0.11 ***
Opportunity-assessment	0.18 ***	0.14 ***
Risk-willingness	−0.03 **	0.02
Networking with starters	0.14 ***	0.13 ***

Source: Individual-level data from Spain and seven countries in MENA, described in the section on research method. †  $p < 0.01$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

The context of the businesses is described by correlations among national-level variables, as shown in Table 3. Strategy and practice are related as aggregates at the national level, which is not surprising. Strategy correlates negatively with wealth, to perhaps a surprisingly strong extent.

**Table 3.** Correlations among national-level variables of interest (N = 47 countries).

	Aggregate Practice	Aggregate Strategy	Support from Bus and Gov	GDP per Capita
Aggregate practice				
Aggregate strategy	0.38 **			
Support from business and government	−0.08	0.15		
GDP per capita	−0.23	−0.32 *	0.57 ***	

Source: Aggregate practice, strategy, and support are based on national-level data, described in the section on research method. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

*4.2. Coupling between Strategy and Practice*

Hypothesis 1 posits that strategy and practice have a coupling that is loose. Here, we provide an initial test of this hypothesis. A further test is provided later (last table).

The national-level aggregates of strategy and practice in businesses are listed in Table 4 for Spain and countries in MENA. Table 4 reveals no systematic pattern or coupling between aggregate strategy and aggregate practice. Later, we shall see a pattern emerging from a larger analysis.

**Table 4.** Aggregate strategy and aggregate practice in MENA and Spain.

	Aggregate Strategy	Aggregate Practice
Egypt	85.5	42.3
Emirates	88.3	58.8
Israel	47.6	40.2
Iran	50.0	42.4
Morocco	77.6	42.5
Oman	75.7	46.5
Qatar	81.3	56.5
Saudi Arabia	72.1	26.5
Sudan	79.3	58.9
Turkey	80.6	44.9
Spain	65.8	41.3

Source: Aggregate practice and strategy are based on the national-level data, described in the section on research method.

To enable comparison of MENA with other world regions, the national-level aggregates of strategy and practice are averaged for each of the three world regions, as in Table 5.

**Table 5.** Aggregate strategy and aggregate practice in MENA, western region, and rest of the world (47 countries).

	MENA	Western Region	Rest of World
Aggregate strategy	73	64 *	73
Aggregate practice	46	46	56 *
N countries	10	25	12

\*  $p < 0.05$  in *t*-test of difference with MENA. Source: Aggregate practice and strategy are based on national-level data, described in section on research method.

Strategy in MENA is less elaborate than strategy in the western region, but similar to strategy in the rest of the world.

Practice in MENA is less elaborate than practice in the rest of the world, but similar to practice in the western region.

The coupling between strategy and practice in businesses can be ascertained by their correlation coefficient, as in Table 6.

**Table 6.** Correlations between strategy and practice, across businesses and across countries.

	Correlation Coefficient	p-Value	N
Correlation, across businesses, between their individual strategy and their individual practice	0.33	<0.0001	7945 businesses
Correlation, across countries, between national aggregate strategy and national aggregate practice	0.38	0.008	47 countries

Sources: Aggregate practice and strategy are based on national-level data, described in section on research method. Individual level data from Spain and seven countries in MENA, described in the section on research method.

Table 6 indicates that strategy and practice are positively coupled, both at the level of the businesses and at the aggregate level of countries. We would say that a correlation of 0.33 is substantial but still indicative of a loose, rather than tight, coupling.

The coupling between aggregate strategy and aggregate practice is illustrated by the plot of countries in Figure 2. The plot indicates the positive coupling and the spread around the regression line illustrates that the coupling is loose rather than tight. MENA is seen to be quite heterogeneous in that the MENA countries are not clustered but are widely scattered.



**Figure 2.** Countries plotted according to their aggregate strategy and their aggregate practice. Sources: Aggregate practice and aggregate strategy are based on national-level data, described in section on research method.

The above analysis lends initial support for Hypothesis 1—that strategy and practice have a coupling that is loose. A statistical test of Hypothesis 1 is conducted below.

#### 4.3. National Eco-System Affecting National Aggregate Strategy and Practice

Hypothesis 2 claims that strategy and practice are embedded in national eco-systems. Specifically, strategy and practice are promoted by national wealth (H2a) through support from businesses and government (H2b).

The national eco-system comprises several conditions. Here, we focus on three conditions that expectedly affect the pursuit of sustainability, namely the support from business, the support from government, and—underlying these supports—the wealth or economic production of the society.

Support from business and government and wealth are listed in Table 7, for Spain and countries in MENA.

**Table 7.** National eco-systems for sustainability in MENA and Spain.

	<b>Businesses Prioritize Sustainability</b>	<b>Government Promotes Sustainability</b>	<b>GDP per Capita</b>
Egypt	3.2	4.1	12,600 \$
Emirates	6.7	7.9	70,000 \$
Israel	3.6	3.3	41,900 \$
Iran	2.4	1.6	13,100 \$
Morocco	3.1	3.7	7300 \$
Oman	4.3	4.7	28,400 \$
Qatar	4.4	5.4	89,900 \$
Saudi Arabia	4.9	6.6	46,800 \$
Sudan	2.2	2.5	4200 \$
Turkey	3.2	3.5	28,100 \$
Spain	3.3	3.2	38,300 \$

Sources: Business and government support are based on national-level data, described in section on research method.

Table 7 indicates several associations. First, support from business correlates positively with support from government. This holds across the world, so the two supports are combined into an index of support. Second, it appears that support is related to wealth. Notably, support is highest in wealthy Emirates and support is low in low-income Sudan and Morocco.

Support for sustainability in MENA can be compared to support in other world regions, as seen in Table 8. Table 8 indicates that MENA is not discernibly different from the western region or the rest of the world, but the western region and the rest of the world differ significantly from each other in their support for sustainability.

**Table 8.** Support from business and government for sustainability in MENA, western region, and the rest of the world (51 countries).

	<b>MENA</b>	<b>Western Region</b>	<b>Rest of World</b>
Support for sustainability	4.1	4.4	3.8
N countries	10	27	14

Sources: Business and government support are based on national-level data, described in section on research method.

Effects of the national eco-system on strategy and practice can be ascertained in a multiple linear regression, seen in Table 9. Hypothesis 2 posits that strategy and practice are embedded in national eco-systems. Specifically, strategy and practice are promoted by national wealth (H2a) through support from businesses and government (H2b). Model A shows that support for sustainability from business and government in a society is highly dependent on wealth of the society. Support in society, in turn, promotes strategy in the society, as shown in model D. Strategy, in turn, promotes practice, as shown in model I. In short, the regression analysis supports H2—that wealth promotes support—and that support promotes pursuit of sustainability in society.

Support depends on wealth, as also illustrated in Figure 3. The heterogeneity of MENA is vividly illustrated by wealthy Arab Emirates, Saudi Arabia and Qatar near the top, and low-income Sudan, Morocco and Iran near the bottom.

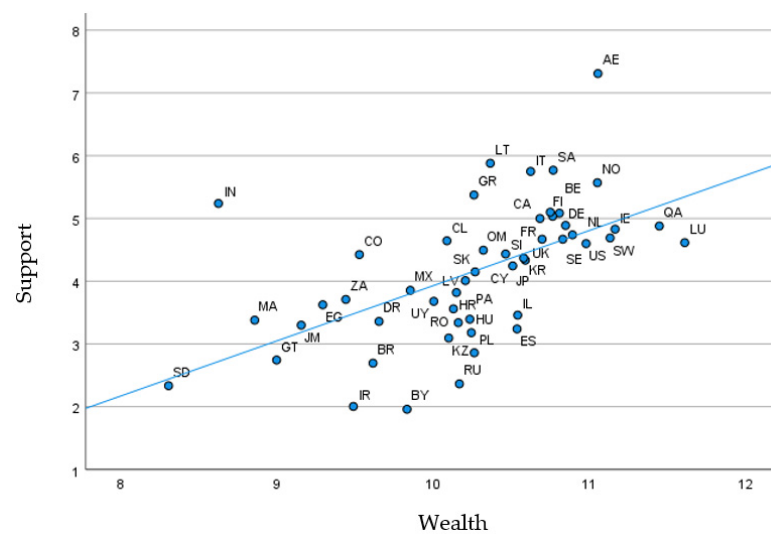
Strategy depends on support, as also illustrated in Figure 4. The diversity of MENA is illustrated by Arab Emirates near the top and Iran near the bottom.



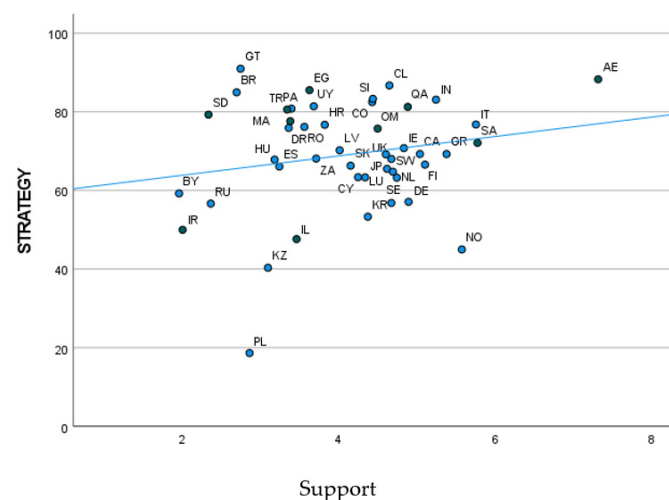
**Table 9.** Strategy and practice, affected by the national eco-system.

	Support	Aggregate Strategy				Aggregate Practice			
	Model A	Model B	Model C	Model D	Model E	Model F	Model G	Model H	Model I
Aggregate strategy					0.38 **				0.39 * H2
Wealth	0.57 *** H2	−0.32 *		−0.60 ***		−0.23		−0.27	−0.04
Support			0.15	0.49 ** H2			−0.08	0.08	−0.11
R-square	0.33 ***	0.10 *	0.02	0.27 **	0.15 **	0.05	0.01	0.06	0.17 *
N countries	51	47	47	47	47	47	47	47	47

Linear regressions, OLS, with standardized coefficients. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Sources: Aggregate strategy and practice, and also support, are based on national-level data, described in section on methods. Wealth is GDP per capita, PPP, in international \$, reported by the World Bank.



**Figure 3.** Countries plotted according to their wealth and their support. Sources: Support is based on national-level data, described in section on research method. Wealth is GDP per capita, originating from the World Bank.



**Figure 4.** Countries plotted according to their support for sustainability and aggregate strategy for sustainability. Sources: Support and strategy are based on national-level data, described in section on research method.

In short, the above analyses support Hypothesis 2, that pursuits of sustainability is embedded in the national eco-systems, specifically their wealth and support.

4.4. Entrepreneurs and Businesses Affecting Strategy and Practice, in MENA and Spain

Our final substantive question is: how are the characteristics of a business and its entrepreneur affecting strategy and practice for sustainability in the business?

Effects on strategy and practice in a business from characteristics of the business and its entrepreneur are ascertained by linear modeling (Table 10) for businesses in Spain and in seven countries in MENA.

**Table 10.** Strategy and practice in businesses, affected by characteristics of businesses and entrepreneurs; MENA and Spain.

	Strategy		Practice	
	Main effects	Main effects	Interaction included	
Strategy		0.30 ***		0.35 ***
		H1		
MENA contrasted Spain	−0.01	0.01		0.01
MENA * Strategy				0.09 ***
				H5
Sector: Extracting	0.22 ***	0.04		0.04
Sector: Transforming	0.01	−0.02		−0.02
Sector: Business services	−0.15 ***	−0.05		−0.05
Age of business	−0.03 *	−0.06 ***		−0.06 ***
Owners	0.02 †	−0.02 †		−0.02
Employees	0.02 †	0.13 ***		0.13 ***
Motive: Make difference in world	0.22 ***	0.09 ***		0.09 ***
Motive: Continue family tradition	0.09 ***	0.03 *		0.02 †
Motive: Enhance own wealth	−0.06 ***	0.01		0.01
Motive: Earn a living, jobs scarce	−0.03 *	0.00		0.00
Gender of entrepreneur: Male	−0.10 ***	0.01		0.01
Age of entrepreneur	0.04 *	0.02		0.01
Education of entrepreneur	−0.03 *	0.02 †		0.02
Self-efficacy	0.01	0.06 ***		0.06 ***
Opportunity-assessment	0.06 ***	0.01		0.01
Risk-willingness	−0.01	0.00		0.00
Networking with starter	0.06 ***	0.04 **		0.03 **
Country	Yes	Yes		Yes
Intercept	0.05	−0.03		−0.03
N countries	8	8		8
N businesses	6063	5944		5944

Hierarchical linear modeling; with random effect of country. For sector, the reference is consumer services, that each other sector is compared to. The dependent variables are standardized. The numerical independent variables are standardized and centered within each country. The dichotomous variables are 0–1 dummies. †  $p < 0.10$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Source: Individual level data from Spain and seven countries in MENA, described in the section on research method.

Hypothesis 1 posits that strategy and practice have a coupling that is loose. An initial test, provided in the section on coupling (Table 6 and Figure 2), indicated that strategy and practice are coupled when no other conditions are taken into consideration. The hypothesis is tested in Table 10, now with controls for other conditions. The coefficient is significant and positive, showing that strategy tends to be implemented in practice, although other conditions also influence practice considerably. The standardized coefficient 0.30 is substantial, so the implementation is a substantial tendency. This supports H1.

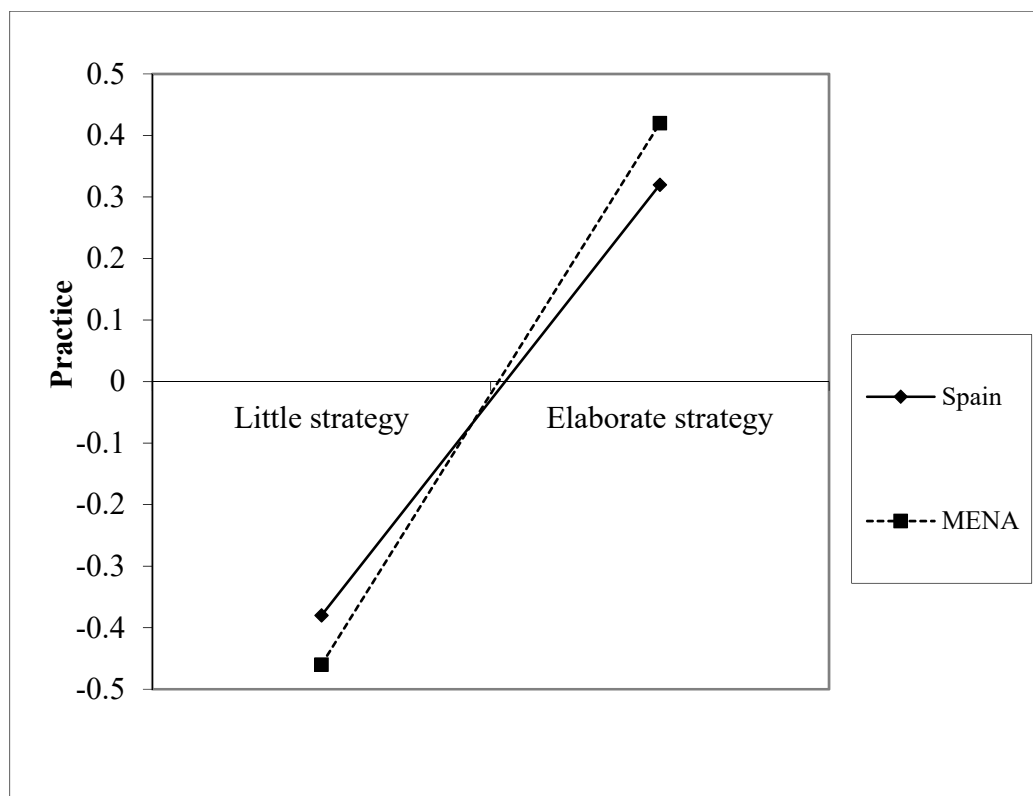
Hypothesis 3 claims that strategy and practice are shaped by business characteristics. Specifically, strategy and practice are promoted by the resources such as size of the business. These effects are tested in Table 10. Size in terms of owners and employees both promote strategy. Size in terms of employees also promotes practice. This lends some support for H3.

Hypothesis 4 asserts that strategy and practice are shaped by characteristics of entrepreneurs. Specifically, strategy and practice are promoted by the entrepreneurs' human and social capital, and by their values such as wanting to make a difference in the world. These effects are tested in Table 10. Human capital hardly affects pursuit of sustainability. Social capital, however, promotes both strategy and practice.

Hypothesis 5 posits that the coupling between strategy and practice is contingent on the national eco-system. Specifically, the coupling differs between MENA and Spain. This hypothesis is tested by the interaction in Table 10. The interaction effect is significantly positive, meaning that the effect of strategy upon practice is stronger in MENA than in Spain. Businesses in MENA 'walk the talk' more than their counterparts in Spain.

#### 4.5. Graphing the Coupling between Strategy and Practice, in MENA Contrasted Spain

The coupling between strategy and practice in MENA is tighter in MENA than in Spain, as noted in the previous model in Table 10. The estimates in the model can be used for graphing the effects of strategy upon practice as an effect in MENA and another effect in Spain, Figure 5.



**Figure 5.** Practice affected by strategy, in MENA and in Spain.

The graph illustrates two conclusions. First, strategy and practice are seen to be positively related and a more elaborate strategy entails a greater practice, and this positive effect unfolds in both MENA and in Spain. That strategy tends to be implemented in practice is not surprising and requires no further explanation. Second, the effect of strategy upon practice is seen to be stronger in MENA than in Spain. This finding calls for explanation. Which institutional difference between MENA and Spain generates a tighter coupling in MENA than in Spain? Rather than speculate, we postpone theorizing until later, when the more global tendencies can be revealed.

## 5. Discussion

The above analyses address the research question: How are strategy and practice coupled and shaped by entrepreneurs and businesses embedded in national eco-systems in the Middle East and North Africa and around the world? Here, we discuss findings and their contributions, relevance and limitations, and also further research.

### 5.1. Findings

Strategy and practice are found to have a loose coupling, which is tighter in MENA than in Spain. Strategy is promoted by support from businesses and governments, but their support depends on national wealth. Strategy and practice by entrepreneurs and businesses are promoted by the entrepreneurs' human capital, social capital, and entrepreneurial motives, such as the value of making a difference in the world and the value of continuing a family tradition.

### 5.2. Contributions

Findings contribute to understanding business engagement with sustainability, specifically in the Middle East and North Africa compared to Spain and in global perspective.

Distinguishing between strategy and practice is important as their coupling is loose, rather than tight. The tendency to implement strategy in practice is substantial, but the tendency is weak within both businesses and societies.

Our finding that the coupling is looser in Spain than in MENA calls for interpretation. Our interpretation is that the post-materialist culture in Spain (like in western Europe, more generally), compared to the more survivalist culture prevailing in most of MENA, enhances the professed strategy for sustainability in Spain, without a strong pressure to implement it in practice.

Whatever the reason, it is high time to go one step further. Although it is true that the inclusion of sustainability at a strategic level is a milestone, now is the time to transform these strategic commitments into concrete actions. Companies and entrepreneurs already know that sustainability is important, but the question is what kind of actions can they incorporate into their daily operations to promote sustainability?

To design effective initiatives, it would be necessary to understand what difficulties companies encounter when operationalizing sustainability. Is it a problem of lack of resources or is it a problem of know-how? Understanding the root cause is the first step.

From there, assuming that the problem was the lack of knowledge on how to put sustainability into practice, it would be expected that the different countries would launch support programs that are not only focused on generating awareness, but also on promoting the implementation of concrete actions at an operational level. For instance, one possibility would be to develop sector-oriented guides in which good practices to be developed by companies were identified. Similarly, collaboration networks could be generated between companies to promote the exchange of ideas and joint learning. On the other hand, if lack of resources were the problem, economic aid could be launched at an institutional level to support companies in the challenge of achieving sustainability.

One of the findings is that human capital hardly affects the pursuit of sustainability. To reverse this negative impact, all levels of the educational system should be effective in providing instruction and experience that can simultaneously encourage entrepreneurship and promote sustainable development to stimulate a new generation of enterprise culture with a focus on sustainability. Hence, education is one of the critical areas that may affect the value systems of potential entrepreneurs and can be a driving force in their perceptions of sustainable development.

### 5.3. Limitations

The large sample of 47 fairly representative countries, with new data on pursuits of sustainability, is unique. These data enable original analyses with generalization to the world. The limitation, however, is that the data from the 47 countries are aggregated to the

national level, and therefore do not allow for analysis of individual business pursuits in the 47 countries.

The random sample of thousands of businesses with new data on their pursuits is also unique. These data enable informative analyses of strategy and practice in businesses, with generalization to the businesses in the countries. The limitation, however, is that these individual-level data are available from a set of countries that is small and concentrated in MENA and therefore do not allow for any global generalization.

#### 5.4. Further Research

The limitations point to further research. Insights can be expected from data on sustainability pursuits in many businesses in many countries, so many and so representative that findings can be generalized to the world's businesses. Specifically, our findings on the effects of national eco-systems on aggregate strategy and aggregate practice invite analysis of the effects of eco-systems upon business strategy and practice.

**Author Contributions:** Conceptualization, methodology, software, formal analysis, investigation, visualization, T.S.; Resources, data curation, validation, supervision, and project administration, A.I., E.E.K., F.B., L.S.-R., W.A.R., E.M. and C.B.; writing, T.S., E.M., E.E.K., F.B. and L.S.-R.; and all authors have engaged in funding acquisition. All authors have read and agreed to the published version of the manuscript.

**Funding:** The work of T.S. has been supported by a Distinguished Visiting Professorship at The American University in Cairo.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** The data will become freely available at [www.gemconsortium.org](http://www.gemconsortium.org), (accessed on 1 June 2022).

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Agarwal, Namit, Uwe Gneiting, and Ruth Mhlanga. 2017. Raising the Bar: Rethinking the Role of Business in the Sustainable Development Goals (Oxfam Discussion Papers). Available online: [https://www-cdn.oxfam.org/s3fs-public/dp-raising-the-bar-business-sdgs-130217-en\\_0.pdf](https://www-cdn.oxfam.org/s3fs-public/dp-raising-the-bar-business-sdgs-130217-en_0.pdf) (accessed on 1 May 2022).
- Akdogana, Nalan, Seval Kardes Selimoglu, and Medine Turkcan. 2020. Sustainability accounting and corporate social responsibility in Turkey and in its region. *Accounting and Management Information Systems* 19: 5–32. [CrossRef]
- Aydođan, Ebru Tomris, Esra Emine Karadeniz, and Mehmet Güney Celbiş. 2021. Entrepreneurship and Sustainable Regional Development in Turkey: Findings Obtained from Machine Learning Approaches. *Journal of Research in Economics, Politics & Finance* 6: 882–91. (In Turkish)
- Brinks, Daniel M., Steven Levitsky, and Maria Victoria Murillo. 2019. *Understanding Institutional Weakness*. Cambridge: Cambridge University Press.
- CSMD. 2021. The New Development Model, Releasing Energies and Regaining Trust to Accelerate the March of Progress and Prosperity for All. Available online: <https://csmd.ma/rapport-en> (accessed on 1 June 2022).
- Figge, Frank, and Tobias Hahn. 2012. Is green and profitable sustainable? Assessing the trade-off between economic and environmental aspects. *International Journal of Production Economics* 140: 92–102. [CrossRef]
- Friedman, Milton. 1970. The Social Responsibility of Business is to Increase Its Profits. *New York Times*, September 13.
- Global Entrepreneurship Monitor. 2022. 2021/2022 Global Report: Opportunity Amid Disruption. Available online: [www.gemconsortium.org](http://www.gemconsortium.org) (accessed on 1 May 2022).
- Global Reporting Initiative (GRI), and United Nations Global Compact (UN Global Compact). 2017. Business Reporting on the SDGs: An Analysis of the Goals and Targets. Available online: [https://www.globalreporting.org/media/v5milwee/gri\\_ungc\\_business-reporting-on-sdgs\\_analysis-of-goals-and-targets.pdf](https://www.globalreporting.org/media/v5milwee/gri_ungc_business-reporting-on-sdgs_analysis-of-goals-and-targets.pdf) (accessed on 1 June 2022).
- Harmonious Entrepreneurship Society. 2022. Available online: <https://harmonious-entrepreneurship.org/> (accessed on 1 May 2022).
- Hechavarría, Diana M., Siri A. Terjesen, Amy E. Ingram, Maija Renko, Rachida Justo, and Amanda Elam. 2016. Taking care of business: The impact of culture and gender on entrepreneurs' blended value creation goals. *Small Business Economics* 48: 225–57. [CrossRef]
- Hockerts, Kai. 2015. A cognitive perspective on the business case for corporate sustainability. *Business Strategy and the Environment* 24: 102–22. [CrossRef]



- Hoogendoorn, Brigitte, Peter van der Zwan, and Roy Thurik. 2019. Sustainable entrepreneurship: The role of perceived barriers and risk. *Journal of Business Ethics* 157: 1133–54. [CrossRef]
- Hörisch, Jacob, R. Edward Freeman, and Stefan Schaltegger. 2014. Applying stakeholder theory in sustainability management. *Organization & Environment* 27: 328–46.
- Inglehart, Ronald, and Christian Welzel. 2005. *Modernization, Cultural Change, and Democracy*. Cambridge: Cambridge University Press.
- Kahime, Kholoud, Moulay Abdelmonaim el Hidan, Sereno Denis, Arib Fatima, Kamar Abaaoukide, and Mohammed Messouli. 2017. Environmental economic-health component challenges in a sustainable development context in Morocco. *Current Politics and Economics of Africa* 10: 189–208.
- Kraus, Sasha, J. Burtscher, T. Niemand, N. Roig-Tierno, and P. Syrjä. 2017. Sustainable entrepreneurship in SMEs: Configurational paths to social performance. *Sustainability* 9: 1828. [CrossRef]
- Liu, Ye, Mahsa Samsami, Hakim Meshreki, Fernando Pereira, and Thomas Schøtt. 2021. Sustainable development goals in strategy and practice: Businesses in Colombia and Egypt. *Sustainability* 13: 12453. [CrossRef]
- Luomi, M., G. Fuller, L. Dahan, K. Lisboa Bäsund, E. de la Mothe Karoubi, and G. Lafortune. 2019. *Arab Region SDG Index and Dashboards Report 2019*. Abu Dhabi: SDG Centre of Excellence for the Arab Region, New York: Emirates Diplomatic Academy and Sustainable Development Solutions Network.
- Menipaz, Ehud, and Yoash Avrahami. 2020. *Overcoming National and Personal Crises Through Entrepreneurship and Innovation, Beer Sheva*. Israel: Ben Gurion University. Available online: <https://www.gemconsortium.org/report/leveraging-entrepreneurship-and-innovation-to-deal-with-national-and-individual-crisis-israel-gem-20192020-report> (accessed on 1 May 2022).
- Ministry for Ecological Transition and Demographic Challenge. 2022. Spanish Sustainable Development Strategy. Available online: [https://www.miteco.gob.es/es/ministerio/planes-estrategias/estrategia-espanola-desarrollo-sostenible/09047122800cfd5b\\_tcm30-88639.pdf](https://www.miteco.gob.es/es/ministerio/planes-estrategias/estrategia-espanola-desarrollo-sostenible/09047122800cfd5b_tcm30-88639.pdf) (accessed on 2 May 2022).
- Orton, J. Douglas, and Karl E. Weick. 1990. Loosely coupled systems: A reconceptualization. *Academy of Management Review* 15: 203–23. [CrossRef]
- Pacto Mundial. Red Española. 2020. Contribution of Spanish Companies to the 2030 Sustainable Development Strategy. A Comprehensive Consultation. Available online: <https://www.pactomundial.org/noticia/contribucion-de-las-empresas-espanolas-a-la-estrategia-de-desarrollo-sostenible-2030-una-consulta-integral/> (accessed on 3 May 2022).
- Pérez, Andrea, ed. 2021. *Future Advancements for CSR and the Sustainable Development Goals in a Post-COVID-19 World*. IGI Global. [CrossRef]
- Rosati, Francesco, and Lourenco G. D. Faria. 2019a. Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production* 215: 1312–26. [CrossRef]
- Rosati, Francesco, and Lourenco G. Faria. 2019b. Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management* 26: 588–97. [CrossRef]
- Sachs, Jeffrey G., Christian Kroll, Guillaume Lafortune, Grayson Fuller, and Finn Woelm. 2021. *Sustainable Development Report 2021*. Cambridge: Cambridge University Press.
- Siffert, Paulo Vitor, and Liliane de Oliveira Guimarães. 2020. Entrepreneurial ecosystem and sustainability as catalysts for regional development: Proposition of a theoretical framework. *Interações* 21: 739–52. [CrossRef]
- Spainsif. 2021. Sustainable and Responsible Investment in Spain. Available online: [https://www.spainsif.es/wp-content/uploads/2022/01/AF\\_Estudio\\_Anuar\\_Spainsif\\_2021\\_ENweb.pdf](https://www.spainsif.es/wp-content/uploads/2022/01/AF_Estudio_Anuar_Spainsif_2021_ENweb.pdf) (accessed on 1 May 2022).
- Spanish Government. 2018. National Action Plan for the implementation of the 2030 Agenda. Available online: <https://transparencia.gob.es/transparencia/dam/jcr:6e0f06b9-a2e0-44c0-955a-dad1f66c11d7/PLAN%20DE%20ACCI%C3%93N%20PARA%20LA%20IMPLEMENTACI%C3%93N%20DE%20LA%20AGENDA%202030.pdf> (accessed on 2 May 2022).
- Spanish Ministry of Science and Innovation. 2022. Spanish Strategy for Science, Technology and Innovation 2021–2027. Available online: <https://www.ciencia.gob.es/Estrategias-y-Planes/Estrategias/Estrategia-Espanola-de-Ciencia-Tecnologia-e-Innovacion-2021-2027.html> (accessed on 1 May 2022).
- Thunberg, Greta, Svante Thunberg, Malena Emman, and Beata Emman. 2020. *Our House Is on Fire*. London: Penguin.
- United Nations Global Compact. 2002. Available online: <https://www.unglobalcompact.org/what-is-gc> (accessed on 1 June 2022).
- Weick, Karl E. 1976. Educational organizations as loosely coupled systems. *Administrative Science Quarterly* 21: 1–19. [CrossRef]
- York, Jeffrey G., Isobel O’Neil, and Saras D. Sarasvathy. 2016. Exploring environmental entrepreneurship: Identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies* 53: 695–737. [CrossRef]