



The Role of Entrepreneurship in Achieving Sustainable Development Goals in the Kingdom of Saudi Arabia

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Abstract

Entrepreneurship for sustaining the gains of development (called sustainpreneurship) is a growing issue as society seeks solutions that will lead to long-term development. Saudi Arabia's Vision 2030 emphasizes the role of entrepreneurship in achieving sustainable development goals (SDGs). The Kingdom's government has provided all supporting tools, the most important of which is support for entrepreneurs, as entrepreneurship is critical to achieving the SDGs. However, the literature shows that only a few studies investigated the effects of entrepreneurship on sustainable development. Therefore, a statistical-analytical method was used to investigate the linkage between sustainpreneurship and the achievement of the SDGs in the Kingdom of Saudi Arabia in terms of creating a society that is socially, economically, and environmentally sustainable. Primary data was collected from a sample of Saudi entrepreneurs who have recently launched their businesses.

This paper shows to what extent Saudi entrepreneurs employ sustainpreneurship to motivate unused economic resources, generate employment and income for the government, produce and distribute goods capable of improving living standards, and develop local technology, all provide opportunities for achieving sustainability goals. This research was carried out using the survey method, as it relied on a questionnaire designed by the researcher for the purposes of this research. The results of this research showed that entrepreneurship significantly affects achieving sustainable economic development in Saudi Arabia. The research contributes theoretically to the development of the concept of sustainpreneurship. Its practical significance lies in explicating the impact of entrepreneurship on the achievement of SDGs' triple bottom line: profit (economic goals), planet (environmental ends), and people (societal needs). As for the recommendations, the researcher suggested that governments should work to bridge a thousand gaps between the output's education and labor market need. Moreover, increasing domestic production by increasing Saudi exports. Also, informing entrepreneurs to the role of business incubators that support entrepreneurs, encouraging entrepreneurs to innovate and exploit industrial and consumer waste through recycling as well as spread awareness and culture about the optimal use of resources and materials.

Keywords: *Sustainpreneurship, Entrepreneurship, Environmentally Sustainable, Economic Sustainable, Social Sustainable, Sustainable Development.*

Introduction

Sustainable entrepreneurs need to have a positive vision for the direction of their businesses, in which sustainable development must play a central role. By proactively involving their businesses in sustainable practices, sustainable entrepreneurs seek to improve their enterprises' competitiveness and efficiency across all

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three dimensions of sustainability: social, economic, and environmental (Perrini et al., 2007). Previous studies have confirmed that entrepreneurship for sustainable development (ESD) has significance for achieving SDGs.

Saudi Arabia's 2030 Agenda for sustainable development emphasizes the role of entrepreneurship in achieving sustainable development goals and highlights the importance of providing all people with access to high-quality education and encouraging them to continue their education throughout their lives. To achieve this on the scale of the Kingdom of Saudi Arabia, the Kingdom's Vision 2030 is launched, and one of its sustainable development goals is to launch ambitious and targeted entrepreneurial projects in the field of business with the goal of: eliminating poverty, total elimination of hunger, healthy life and quality of life, education quality, non-discrimination, adequate sanitation, clean and reasonably priced energy, ensuring proper work and econometric growth (Kingdom's 2030 Vision). According to John (2014), it is critical to promote advancement policies that support long-term productivity, entrepreneurship, creativity, and innovation, as well as the formalization and growth of the economy, and small and medium-sized enterprises.

The idea of sustainable development can be described in several different ways; nevertheless, at its core, it is an approach to growth that strives to strike a balance between the fulfillment of urgent needs and an understanding of the environmental, social, and economic restrictions that face our society. In most cases, progress is motivated by a specific need, and there is no consideration given to the wider or more far-reaching effects of this. We are already recognizing the implications of this approach, from large-scale financial disasters created by reckless banking to changes in the global environment caused by our reliance on energy sources that are based on fossil fuels. As a result, the objectives of economic and social growth in each nation need to be clearly stated in terms of their sustainability (Goel & Joshi, 2017).

Literature Review

Entrepreneurship:

According to the findings of several studies published in recent years, the term "entrepreneurship" may be summed up as "the development of new entrepreneurial activities such as strategic renewal, innovation, new enterprises and, all of which contributed to enhanced social and economic performance inside corporations", (Habbershon et al., 2010). The introduction of new products, the implementation of processes that are more effective and efficient, the innovation of methods that lead to the formation of new markets, and the shaping of new norms are all examples of how entrepreneurs create new rules (Chiasson & Saunders, 2005).

However, being creative in business activities such as product improvement, process design, solving problems, and general change management is the essence of what it means to be an entrepreneur in the current time. (Robinson, 2004). The primary goal of entrepreneurship development is to develop an individual's innovative potential, whether they are already successful entrepreneurs or have the potential to become successful entrepreneurs.

Sustainopreneurship

The term "sustainopreneurship" became increasingly popular in the year 2000 (Schaltegger, 2000), and further publications in 2003 (Hockerts, 2003, Gerlach; 2003a, b) helped to broaden its scope. The term was further developed and defined in 2006 (Abrahamsson, 2006). Two particles of conceptual structure were ecopreneurship and social entrepreneurship, which primarily dealt with the ecological and social dimensions of sustainability. Abrahamsson (2007) discussed the conceptual development leading to sustainopreneurship.

Sustainopreneurship is a creative concept in which an entrepreneur uses innovation for a worthy cause, especially in terms of environmental improvement and social progress. The simplest way to describe

it is as “business with a purpose” which includes “entrepreneurship and innovation for sustainability” (Abrahamsson, 2007).

Innovation aimed toward long-term development is the primary concern here (Gerlach, 2003). Sustainability stimulates for businesses can take the initiative to improve their operations by engaging in a variety of self-motivated activities, such as brainstorming creative solutions to existing problems or investigating new opportunities for expansion. For example, recycling, global peace, justice, and human security.

According to Abrahamsson (2007), the concept combines entrepreneurship with social and environmental development. In essence, sustainable entrepreneurship is the awareness of sustainability that leads to innovative products aimed at a wider market and assisting the larger part of society. Sustainable entrepreneurs frequently address the needs of a larger group of stakeholders by understanding such sustainability innovations (Goel et al., 2017). Furthermore, the concept of sustainability refers to entrepreneurial approaches that aid in the comprehensive development of social, environmental, and economic issues that enable an organization to continue operating in the long run (Whiteman et al., 2013).

Sustainable Development Dimensions



Figure 1. The Dimensions of Sustainability (Besler, 2009)

1- Economic Dimension of Sustainability:

The economic dimension refers to an attempt to improve efficiency and lifestyle to reduce energy and resource waste and consumption patterns that threaten biodiversity.

Dhaliwal (2016) investigated the role of entrepreneurial discovery in ensuring the efficient allocation of resources within a market economy, as well as how different institutional arrangements and cultural factors influence the psychological disposition for alertness, allowing individuals to reap the benefits of exchange.

According to Sergi et al. (2019) studied entrepreneurial integration procedures accelerate and improve the quality of economic growth. Integration processes within entrepreneurship are diverse and can take various forms, each of which might impact economic growth differently depending on the situation. As a result, Wennekers et al. (2010) found that economic growth and the rate of entrepreneurship have a U-shaped relationship.

Wennekers et al. (2010) suggested that decision-makers should be aware of the relationship between entrepreneurship and economic development in different countries since it acts as a guidepost for the efforts that undertake.

Table 1- Demographic Variables

	Gender	Frequency	Percent
Valid	Male	125	53.9
	Female	107	46.1
	Total	232	100
	Age	Frequency	Percent
Valid	Less than 20 years old	1	.4
	From 20 to 30 years old	79	34.1
	From 30 to 40 years old	108	46.6
	From 40 to 50 years old	36	15.5
	More than 50 years old	8	3.4
	Total	232	100
	Experience	Frequency	Percent
Valid	Less than 3 years	44	19.0
	From 3 to 7 years	70	30.2
	From 7 to 15 years	72	31.0
	More than 15 years	46	19.8
	Total	232	100

2- **Social Dimension of Sustainability:**

Moral responsibility, the idea that businesses should help society in some way, is one of the driving forces behind corporate social responsibility (CSR), along with sustainable development (SD), which places an emphasis on environmental and community governance; license to operate (LOP), the idea that businesses need the approval of governments, communities, and a wide range of stakeholders in order to operate; and finally, public image (PI), which is used by many businesses to attract customers (Porter & Kramer, 2006).

According to Seelos and Mair (2004), many businesses generate significant social value through employment, enhanced working conditions, engagement in environmental issues, and tax rates. Several larger corporations attempt to generate social value by implementing CSR or corporate governance programs.

İyigün (2015) recognized the beneficial social impact of business owners meeting fundamental needs and its significance in achieving sustainable development. Thus, entrepreneurship is viewed as a viable option to poverty and unemployment with the potential to be a development solution (Bogan & Darity, 2008).

The unemployed, a constant problem in third-world countries, are quickly and widely employed by entrepreneurs. There are several factors that can influence society, including reducing the percentage of men and women of all ages suffering from poverty. Achieving gender equality and developing nationally appropriate social protection measures. Furthermore, increasing the benefits, or at least maintaining them for the national economy, and reinforcing development programs for the development of national values (Dhaliwal, 2016).

3- **Environmental Dimension of Sustainability:**

There is a great interest in society in achieving environmental sustainability and finding solutions that lead to sustainability. Omri (2018) claimed that the development of some major policy implications will improve global environmental quality and clarify the impact of entrepreneurship on the environment and biodiversity in ecosystems. One of the strengths of the study is that it focuses on the interest of academics and policymakers in searching for solutions that lead to environmental sustainability and mentions the main factors affecting environmental degradation.

Environmentally sustainable means implementing environmentally friendly practices and managing the green supply chain, eliminating waste, reducing costs, and preserving the lives of future generations (Goel & Joshi, 2017). According to Goel and Joshi (2017), corporations and countries will use resources in a way that promotes abundance for current generations while not sacrificing opportunities for future generations. As a result, this assumption was formed once it was established that resources were becoming increasingly scarce to allow the developing world to develop, and it was conceived as a means of promoting a fair distribution of the benefits of the economic process.

These empirical results contributed to the development of sound economic policies to improve the quality of the environment and achieve sustainable economic development. As a result, when governments have achieved a high level of economic growth, environmental damage is reduced. In addition, it is not always the case that entrepreneurial activity results in a worsening of environmental conditions. The environment can be affected by economic activity, but the reason for having a stage of economic development and growth is overlooked. Economic development is accompanied by a rise in environmental risks, which may increase in low- and middle-income countries before leveling off in high-income countries due to their greater access to resources and higher levels of technical efficiency. However, there are other ways in which, depending on the state of development, industrialization harms the environment (Omari, 2018).

York and Venkataraman (2010) believed that, building on the history of early sustainability discourse concerned with environmental degradation, entrepreneurs find solutions to environmental deterioration rather than understanding its source. The researchers claimed that environmental concerns unmistakably

offer the kind of opportunity that entrepreneurs are particularly well oriented toward and present a model explaining how entrepreneurial initiatives might solve environmental degradation.

The Role of Entrepreneurship in Achieving Sustainable Development in Saudi Arabia:

The Kingdom of Saudi Arabia 2030 Vision is a strategic plan with clear visual analytics for an ambitious goal in Saudi Arabia (2030). Its strength stems from Arab and Islamic work, a large investment capacity, and a prominent geographical location. It is the first step in a new direction of implementing best international practices to build a better future for the country, diversify the economy, and achieve sustainability (Vision of the Kingdom of Saudi Arabia, 2017).

The vision is organized around three principal directions: first, it is a strong community whose members live in a positive and appealing environment where citizens and residents can enjoy the benefits of a high quality of life.

They are supported by a strong family system as well as potential health and social care structures. Second, a prosperous economy that concentrates on providing opportunities for everyone by developing a system of education that is linked to labor market needs and maximizes the potential of all, from small businesses and entrepreneurs to large corporations. Third, it focuses on the government's efforts to implement effectiveness and responsibility. So, the homeland is idealistic in its production and achievements by activating the public sector's activities at different economic, manufacturing, and service levels (Kingdom of Saudi Arabia Vision 2030, 2017).

One of the most important efforts of the Kingdom of Saudi Arabia to achieve the SDGs is to ensure that laws and mechanisms are in place to preserve the region's special and unique environmental character, where the work is done in terms of environmental sustainability and the conservation of natural resources in accordance with globally applicable best practices and standards. The Kingdom of Saudi Arabia is willing to carry out activities related to the goals of sustainable development while the Kingdom's Vision 2030 is being implemented at a steady and rapidly accelerated rate. Among the most important things that need to be done are working on enhancing the quality and coverage of Sustainable Development Goal indicators, conducting data analysis, and preserving the compatibility of government programs and plans with the goals, targets, and indicators of global development while also developing a strategy to increase cooperation and synergy among a wide variety of entities and actors.

Research Importance:

This research is important from different perspectives, as follows:

Theoretical Importance

After analyzing the existing literature, it shows that there is little research that investigates the effect of entrepreneurship on sustainable development goals based on Saudi Arabia's Vision 2030. This research will be considered an important reference for sustainable development goals and understanding the role of entrepreneurship in achieving sustainability in different aspects.

Practical Importance

This paper will investigate the extent of applying sustainopreneurship in the population of the study, so it will show the actual strengths and weaknesses to provide a baseline for decision-makers and may help them with formulating policies and improving their regulations. Finally, the researcher hopes that this study will contribute to increasing his scientific and practical knowledge.

Problem statement

According to the findings of recent research, entrepreneurship plays a crucial and important role in achieving the global goals of sustainable development. However, this research identified the role of entrepreneurship in achieving the Kingdom of Saudi Arabia's goals of sustainable economic, environmental, and social development, specifically considering the Kingdom's Vision 2030, which had not been addressed by any previous studies.

Research Objectives:

This research aims to achieve the following objectives:

- To highlight the theoretical and intellectual concepts of entrepreneurship and sustainable development.
- To find out the role of entrepreneurship in achieving the Kingdom of Saudi Arabia's economic sustainable development.
- To investigate the impact of entrepreneurship in achieving the social dimension of sustainable development.
- To learn about the role of entrepreneurship in achieving sustainable development's environmental dimension.
- To provide recommendations that help in achieving sustainable development.

Research Questions:

The main research question is: "What is the impact of entrepreneurship on achieving sustainable development goals in Saudi Arabia?"

Regarding the main question, the research can exclude the following sub-questions:

- What is the impact of entrepreneurship on sustainable economic development?
- What is the impact of entrepreneurship on sustainable environmental development?
- What is the impact of entrepreneurship on sustainable social development?

Research Hypothesis:

Based on the research framework, the main hypotheses can be formulated as follows:

there is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable development goals in Saudi Arabia.

- H1: There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable economic development.
- H2: There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable environmental development.
- H3: There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable social development.
- H4: There are a statistically significant effect at the level of 0.05 or less among respondents regarding the impact of entrepreneurship on achieving sustainable development goals in Saudi Arabia due to personal characteristics (gender, age, education level, type of entrepreneur project, years of practical experience)

Research Model

Figure 2 below shows the correlation between independent variable and dependent variables.

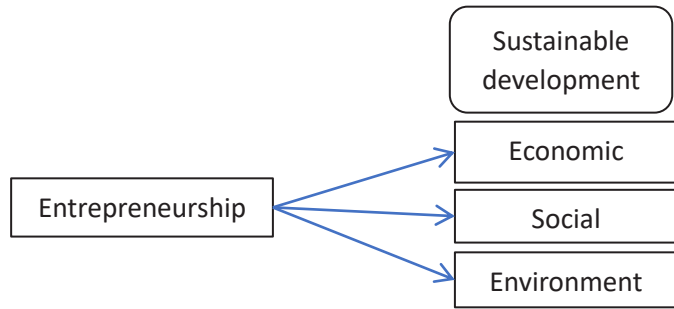


Fig 2. Research Model

Methodology

The descriptive-analytical strategy will determine how this research is conducted. As quantitative research is the process of gathering, evaluating, interpreting, and presenting the results of a study. The data analysis processes are discussed, and the quantitative information that was acquired through the process of this study allows for the formation of an interpretation of the findings to answer the study questions. The researcher is going to rely on a questionnaire, and the primary tool that will be utilized is SPSS. The study is based on two types of secondary sources. Furthermore, journal articles and the survey provide validity in terms of statistics.

- **Study Population and Sample:** The study community includes male and female entrepreneurs in the Kingdom of Saudi Arabia with various entrepreneurial projects in all fields. The sample size of the study is 144 responses. To obtain the study data, the Richard Geiger equation is distributed using the Monkey-Survey mechanism.
- **Study Tool:** The study tool consists of two main parts, as follows: The first part: It represents the primary data of the members of the research community represented by gender, type of entrepreneur project, age, education, years of experience. The second part: It consists of 21 expressions divided into the following dimensions: The first dimension is Entrepreneurship, and the second dimension is sustainable development, which includes sub-dimensions: the economic dimension of development Sustainability, the environment dimension of development sustainability and the social dimension of developmental sustainability.

Data Analyses and Results

Test of Normality

In statistical analysis, the normal distribution is by far the most common type of distribution to utilize. The Gaussian distribution is another name for this type of distribution (Johann Karl Gauss, 1777–1855). Many times, parametric statistical tests assume that the population from which the sample being tested comes from follows a normal distribution. Because of this presumption, parametric tests are more powerful than their non-parametric equivalents and can identify differences with smaller sample sizes or find smaller differences with the same sample size. Additionally, parametric tests can detect larger differences with the same sample size. In this research, to be able to test the assumption of normality. We need to Determine the standardized skewness of the data set by dividing the skewness (statistic) value by the standard error of skewness value. This may be done by getting the skewness value. Then make a comparison between that number and +3.29. Concern should be expressed for values greater than +3.29. In other words, if the standardized skewness is greater than +3.29, we can draw the conclusion that there is a significant departure from normality, which indicates that the assumption of normality was not satisfied. (Kim, 2013)

Table (1) Statistics

Scale	N	Mean	Std. Deviation	Skewness	Std. Error of Skewness	standardized skewness
Entrepreneurship	144	13.35	2.019	-0.878	0.202	-4.345
Economic development	144	20.48	2.928	-0.576	0.202	-2.851
Environment development	144	21.63	4.840	-0.337	0.202	-1.666
Social development	144	13.54	2.051	-0.334	0.202	-1.654
Total data set	144	69.00	9.711	-0.091	0.202	-0.449

As shown in table (1) for the (entrepreneurship – economic – environment - social & the total data set), we find that the assumption of normality has been met, since standardized skewness values did not exceed +3.29.

Reliability Analysis:

To check the reliability (consistency of the questionnaire), Cronbach’s alpha coefficients⁽¹⁾, were calculate.

The reliability results in the table (2) show that Cronbach’s alpha coefficients for the entire questionnaire and its sub-dimensions were greater than 0.60, and It is clear that Cronbach’s alpha for the subscales and the overall scale are valid, acceptable statistically because (α) values are greater than accepted percent (0.60).

Table (2) reliability (consistency of the questionnaire)

Instruments	No of items	Cronbach’s alpha coefficient
Entrepreneurship	4	0.630
Economic development	6	0.814
Environment development	7	0.909
Social development	4	0.762
Overall	21	0.918

Participant Profile:

As shown in table (3) frequencies, Percentage, were calculated to provide the Participants profile.

As shown in table (3): the majority of the participant was females (66.0%) followed by the males (34.0%). Also, from table (3) we find that the type of entrepreneur project of (63.2%) of the Participant was Business, followed by service projects (25.7%) then the industrial projects with a Percentage of (11.1%). And the age of the majority was (less than 30 year) with a Percentage of (47.9%) followed by participant within the age group (from 30 to 39 year) with a Percentage of (27.8%), then (from 40 to 49 year) with a Percentage of (20.1%) and finally participant within the age group (50 years and more) with a Percentage of (4.2%).

Table (3) Participant Profile (N = 246)

		N	Total	Percentage %	Total
Gender	Male	49	144	34.0	100%
	Female	95		66.0	
Type of entrepreneur project	industrial project	16	144	11.1	100%
	Service project	37		25.7	
	Business	91		63.2	
Age	less than 30 year	69	144	47.9	100%
	from 30 to 39 year	40		27.8	
	from 40 to 49 year	29		20.1	
	more than 50 year	6		4.2	
Education	Diploma or less	32	144	22.2	100%
	Bachelor	91		63.2	
	Master	15		10.4	
	PhD	6		4.2	
years of practical experience	less than 5 years	88	144	61.1	100%
	from 5 to less than 10 years	26		18.1	
	more than 15 year	30		20.8	

And according to the education level, the majority of the survey respondents (63.2%) their educational level was (Bachelor) then the (Diploma or less) with a percentage of (22.2%) followed by (Master) with a percentage of (10.4%) and finally the (PhD) with a percentage of (4.2%). The results showed also (61.1) of the Participant with less than 5 years of practical experience, then those who had more than 15 years of practical experience with a percentage of (20.8%) and finally those who had years of practical experience within (from 5 to less than 10 years) with a percentage of (18.1%).

Entrepreneurship:

As shown in table (4) the total mean score of the responses about entrepreneurship in the Kingdom of Saudi Arabia (3.34) with Standard deviation (0.72), which falls within the category (from 3.25 to 4), and the means within this category according to Likert indicates a very high degree. So, the survey participants were in strong agreement with the entrepreneurship role in achieving development.

(1) Cronbach’s alpha is a measure used to assess the reliability, of a set of scale or test items. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach’s alpha is one way of measuring the strength of that consistency.

Table (4) Descriptive statistics of the responses about entrepreneurship in the Kingdom of Saudi Arabia

No	Items	Strongly agree	Agree	Neutral	Dis-agree	Mean	±Std. Deviation
1	I have a strong need for achievement and excellence in the work	100	36	6	2	3.63	0.64
2	I constantly initiate new ideas related to sustainability	73	54	15	2	3.38	0.73
3	Education and training enhance the drive for achievement and the development of entrepreneurial spirit	92	45	5	2	3.58	0.63
4	I receive support and encouragement from the official authorities that I deal with	37	47	51	9	2.78	0.90
Total mean score (3.34)		±Std. Deviation (0.72)					

The Economic Dimension of Development Sustainability:**Table (5) Descriptive statistics of the responses about the role of entrepreneurship in achieving the economic dimension of development Sustainability in K.S.A**

No	Items	Strongly agree	Agree	Neutral	Dis-agree	Mean	±Std. Deviation
1	entrepreneurship contributes to diversifying production and providing new services and products	75	62	6	1	3.47	0.61
2	Entrepreneurship contributes to improving the standard of living by increasing entrepreneurial business activities	72	60	10	2	3.40	0.68
3	Entrepreneurship helps to develop local industries	69	61	14	0	3.38	0.66
4	Entrepreneurship has a role to play in combating poverty, providing food security and promoting sustainable agriculture	71	49	22	2	3.31	0.78
5	Pioneering work contributes to promoting economic growth and providing appropriate work	83	49	11	1	3.49	0.67
6	Pioneering contributes to establishing resilient infrastructure ,stimulating mass industrialization, and encouraging innovation	75	56	13	0	3.43	0.65
Total mean score (3.41)		±Std. Deviation (0.68)					

As shown in table (5) the total mean score of the responses about the role of entrepreneurship in achieving the economic dimension of development Sustainability in K.S.A (3.41) with

Standard deviation (0.68), which falls within the category (from 3.25 to 4), and the means within this category according to Likert indicates a very high degree. So the survey participants were in strong agreement with the entrepreneurship role in achieving the economic dimension of development Sustainability in K.S.A.

The Environment Dimension of Development Sustainability:**Table (6) Descriptive statistics of responses about the role of entrepreneurship in achieving the environment dimension of development Sustainability in K.S.A**

No	Items	Strongly agree	Agree	Neutral	Dis-agree	Mean	±Std. Deviation
1	entrepreneurship has a role in making cities and settlements able to face climate change	47	56	31	10	2.97	0.91
2	Entrepreneurship has contributed to increasing environmental awareness	56	49	32	7	3.07	0.90
3	entrepreneurship contributes to preserving the ocean seas and marine resources and using them on a global scale sustainably	50	48	37	9	2.97	0.93
4	entrepreneurship contributes to reducing the negative effects resulting from the practice of companies' activities that affect the environment	56	53	26	9	3.08	0.90
5	entrepreneurship contribute to providing environmentally friendly and safe products	58	55	26	5	3.15	0.84
6	Entrepreneurship contributes to providing alternative sources of energy	55	59	24	6	3.13	0.84
7	The entrepreneurial concept implements the policy of multiple utilization of resources	54	73	16	1	3.25	0.67
Total mean score (3.09)		±Std. Deviation (0.86)					

As shown in table (6) the total mean score of the responses about the role of entrepreneurship in achieving the environment dimension of development Sustainability in K.S.A (3.09) with

Standard deviation (0.86), which falls within the category (from 2.50 to less than 3.25), and the means within this category according to Likert indicates a high degree. So the survey participants were in agreement with the entrepreneurship role in achieving the environment dimension of development Sustainability in K.S.A.

The Social Dimension of Development Sustainability

Table (7) Descriptive statistics of responses about the role of entrepreneurship in achieving the social dimension of development Sustainability in K.S.A

No	Items	Strongly agree	Agree	Neutral	Dis-agree	Mean	±Std. Deviation
1	Entrepreneurship helps achieve societal development and well-being	67	68	9	0	3.40	0.61
2	Entrepreneurship contributes to reducing unemployment	76	52	13	3	3.40	0.74
3	Pioneering work contributes to the commitment to continuous development of products that are compatible with the evolving needs of society	69	65	10	0	3.41	0.62
4	Pioneering work has a role in supporting social responsibility programs	67	59	17	1	3.33	0.71
Total mean score (3.39)		±Std. Deviation (0.67)					

As shown in table (7) the total mean score of the responses about the role of entrepreneurship in achieving the social dimension of development Sustainability in K.S.A (3.39) with Standard deviation (0.67), which falls within the category (from 3.25 to 4), and the means within this category according to Likert indicates a very high degree. So, the survey participants were in strong agreement with the entrepreneurship role in achieving the social dimension of development Sustainability in K.S.A.

Hypothesis Tests

The main hypothesis of this research was: There is a significant effect at level $\alpha \leq 0.05$ of entrepreneurship on achieving sustainable development goals in Saudi Arabia. It was divided into three sub-hypotheses. The sub-hypotheses were tested by conducting correlation and regression analysis as follows:

$H_{sub(1)} \equiv$ There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable economic development.

As shown in table (8) the correlations Coefficient between entrepreneurship and achieving sustainable economic development in Saudi Arabia (0.380) p -value ≤ 0.01 , indicating a positive Relationship between entrepreneurship and achieving sustainable economic development in Saudi Arabia. And the regression results showed that the entrepreneurship significantly affects achieving sustainable economic development in Saudi Arabia ($R^2=0.145$, $t=4.901$, $p<0.01$).

$H_{sub(2)} \equiv$ There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable environment development.

As shown in table (9) the correlations Coefficient between entrepreneurship and achiev-

Table (8) Regression and Correlations statistics between entrepreneurship and achieving sustainable economic development

Predictor	B	SE	Correlations Coefficients	R ²	t	P-value
(Constant)	13.113	1.520	--	--	8.627	.000
Entrepreneurship	0.552	.113	0.380**	0.145	4.901	.000
a Dependent Variable: Economic						

Table (9) Regression and Correlations statistics between entrepreneurship and achieving sustainable environment development.

Predictor	B	SE	Correlations Coefficients	R ²	t	P-value
(Constant)	8.129	2.463	--	--	3.300	.001
Entrepreneurship	1.011	0.182	0.422**	0.178	5.540	.000
a Dependent Variable: environment						

ing sustainable environment development in Saudi Arabia (0.422) p-value ≤ 0.01 , indicating a positive Relationship between entrepreneurship and achieving sustainable environment development in Saudi Arabia. And the regression results showed that the entrepreneurship significantly affects achieving sustainable environment development in Saudi Arabia ($R^2 = 0.178$, $t = 5.540$, $p < 0.01$).

$H_{sub(3)} \equiv$ There is a statistically significant effect at the level of 0.05 or less of entrepreneurship on achieving sustainable social development.

As shown in table (10) the correlations Coefficient between entrepreneurship and achieving sustainable social development in Saudi Arabia (0.296) p-value ≤ 0.05 , indicating a positive Relationship between entrepreneurship and achieving sustainable social development in Saudi Arabia. And the regression results showed that the entrepreneurship significantly affects achieving sustainable social development in Saudi Arabia ($R^2 = 0.088$, $t = 3.694$, $p < 0.01$).

Table (10) Regression and Correlations statistics between entrepreneurship and achieving sustainable social development

Predictor	B	SE	Correlations Coefficients	R ²	t	P-value
(Constant)	9.524	1.100	--	--	8.660	.000
Entrepreneurship	0.301	0.081	0.296*	0.088	3.694	.000

a Dependent Variable: Economic

Differences among respondents towards the impact of entrepreneurship on achieving sustainable development goals in Saudi Arabia, due to personal characteristics:

To Verify the significance differences among respondents towards the impact of entrepreneurship on achieving sustainable development goals in K.S.A, due to personal characteristics, the researcher conducted a T- independent samples test with the gender characteristic (male/female), and the analysis of variance (ANOVA) with the (Type of entrepreneur project - Age - Education - years of practical experience), and the results are shown in the following table:

Table (11) differences among respondents towards the impact of entrepreneurship on achieving sustainable development due to personal characteristics.

characteristics	Categories	N	Mean	±Std.	T- value	P-value
Gender	Male	49	67.86	10.54	1.014	0.313
	Female	95	69.59	9.26		
characteristics	Categories	N	Mean	±Std.	F- value	P-value
Type of entrepreneur project	industrial project	16	71.00	9.06	0.457	0.634
	Service project	37	68.22	11.18		
	Business	91	68.97	9.23		
Age	less than 30 year	69	69.86	9.16	0.618	0.605
	from 30 to 39 year	40	68.35	10.21		
	from 40 to 49 year	29	67.38	10.22		
	more than 50 year	6	71.33	11.09		
Education	Diploma or less	32	69.53	10.28	0.420	0.739
	Bachelor	91	69.31	9.77		
	Master	15	67.20	7.21		
	PhD	6	66.00	12.35		
years of practical experience	less than 5 years	88	69.20	9.73	0.381	0.684
	from 5 to less than 10 years	26	67.54	8.57		
	more than 15 year	30	69.67	10.72		

As shown in Table (11) there is no significant difference among respondents towards the impact of entrepreneurship on achieving sustainable development goals in K.S.A, due to personal characteristics (Gender - Type of entrepreneur project - Age - Education - years of practical experience), all p values ≥ 0.05 .

Results Discussion:

The basis of sustainable development is the development of cities and societies, mainly through businesses that aim primarily to meet the goals and needs of society through using available resources without prejudice to what affects future generations.

The results of this research showed that entrepreneurship significantly affects achieving sustainable economic development in Saudi Arabia ($R^2 = 0.145$, $t = 4.901$, $p < 0.01$), meaning that an increase in the level

of entrepreneurship by one degree will lead to a positive change in the economic dimension by (14.5%). The impact of entrepreneurship on the economic sustainable development aspect can be attributed to the fact that entrepreneurship in its main axes depends on the initiative to establish new and effective projects and has a prominent role in society. It is also interested in what is going on in society and always focuses on providing the maximum benefit to individuals and the state to achieve the greatest benefit. Which reflects positively on the economic aspects of Saudi society and the economy of the Kingdom of Saudi Arabia as a whole, and the impact of entrepreneurship on economic development has become a sure and real thing in many developed countries. An example of this is that the projects of entrepreneurs contribute in America with more than (60%) of the total national economy, and (60%) of the total economy in China.

The results also showed that entrepreneurship significantly affects achieving sustainable environment development in Saudi Arabia ($R^2= 0.178$, $t= 5.540$, $p<0.01$), meaning that an increase in the level of entrepreneurship by one degree will lead to a positive change in the environment dimension by (17.8%). The impact of entrepreneurship on the environmentally sustainable development aspect can be explained by the fact that entrepreneurship is one of the causes of economic growth, and thus affects the achievement of sustainable development and that the relationship between entrepreneurship and achieving environmental quality is positive, based on the important role that entrepreneurship plays in environmental aspects, as the role of entrepreneurship lies in innovation New ways to invest in human resources and natural resources so that their results will reflect positively on individuals now and in the future. An example of this is the innovation of investing in alternative energy means that reduce air pollution and many other examples. Hence, entrepreneurship is an essential tool for sustainable development and development. Entrepreneurship has a major role in achieving and activating the sustainable development of the environment if it is properly directed toward the environmental goal.

The researcher believes that, based on what the results showed about the existence of a low impact of entrepreneurship on the scale of the environmental dimension, it is necessary to focus more on entrepreneurial projects that achieve a sustainable future through the establishment of green environmental projects that work to protect the environment of society and the state.

The results showed that entrepreneurship significantly affects achieving sustainable social development in Saudi Arabia ($R^2= 0.088$, $t= 3.694$, $p<0.01$), meaning that an increase in the level of entrepreneurship by one degree will lead to a positive change in the social dimension by (8.8%).

Regarding this result, it can be said that in a narrow sense, the social dimension represents the human dimension, and both the environmental and economic dimensions are closely related to the social dimension. Where entrepreneurship leads to clear and tangible changes in the community's economy by creating job opportunities and increasing the welfare of society because of the impact of entrepreneurial projects in the local community, which leads to increasing the incomes of community members and then raising their standard of living and creating a series of job opportunities in society.

Entrepreneurship creates new job opportunities, which reduces unemployment and eradicates poverty. The importance of corporate social responsibility (CSR) on business success and good influence on business and society is expanding at a time when entrepreneurship is considered as a solution to unemployment and poverty, which can be a panacea for development.

Conclusion and Recommendations:

This research is an attempt to explain the role of entrepreneurship in achieving sustainable development, economic, environmental, and social goals in Saudi Arabia by defining the relationship between the entrepreneurship and achieving sustainable development goals in Saudi Arabia. Based on the results revealed by the research, this study recommends the need to provide all means of support for entrepreneurs

to develop entrepreneurial investment projects with positive returns that contribute to achieving the goals of sustainable development, and to encourage entrepreneurs to innovate environmental management projects and move towards a green economy by adopting green products and creating positive methods of using resources in a way that helps preserve a world. Also, encouraging usage of clean water and sanitation services, and activating the role of partnership for leadership and sustainable development including all parties involved including the government, the private sector, the civil society, and the public.

This paper also points out that one of the most important things that must be worked on to achieve sustainability in entrepreneurship is the possession of the means of knowledge in a programmed way that works on investment with high efficiency and effectiveness, which leads to economic development in the current developmental stage that we live in at the present time. At the forefront of this approach is “innovation”, which many countries are working to encourage and increase support for young people to come up with innovative ideas and patterns. Innovations along with entrepreneurship are two appropriate tools to achieve sustainable development in a significant way. Moreover, Governments should be aware of both revolutionary movements, realize their causes and consequences, and customize strategies accordingly. Finally, we hope that this scientific paper will inspire further studies and research on entrepreneurship in the pursuit of sustainable development.

Study Limitations:

Despite the interesting findings and practical implications, this study does have some major limitations. This research focuses on how entrepreneurship affects the transition toward eco-friendly business models. On the other hand, sustainable entrepreneurship is a multi-step process. Therefore, subsequent studies should expand upon this conceptual framework by including moderating or mediating variables. Moreover, the study is limited to the investigation of the topic on a specific number of participants, this is considered a limited sample compared to the size the researcher had previously expected. future Researchers could use big and more sample sizes to get accurate results in the future.

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