# The characteristics of a green, innovative and transformational entrepreneur: an example of transformative entrepreneurship in an efficiency-driven economy

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Abstract: The article addresses the issue of entrepreneurship and sustainability by considering the characteristics of an Egyptian transformational green entrepreneur and the venture he founded. It is based on two in-depth case studies derived from secondary data and participant observation and results in a new holistic model for business that harmonises or integrates the main economic, ecological, humane and social approaches to entrepreneurship to produce a venture with a triple bottom line that does not just address profit but also people and planet. The model recognises the systemic nature of the planet and is based on systems thinking and the principle of harmony. Apart from developing the business model the attributes of the transformative entrepreneur are considered, and the role of spirituality and 'ethical custom' is discussed. The article questions, also, the Friedman (1970) mantra that the responsibility of business is 'to make as much money as possible'. The implications of the approach are considered and the article will be of interest to both entrepreneurship academics and practitioners.

**Keywords:** green entrepreneurship; transformative entrepreneurship; innovation; Egypt.

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**Biographical notes:** David A. Kirby was the Founding Dean and Vice President of the British University in Egypt from 2007–2017, in which capacity he introduced entrepreneurship education to the university and country. Prior to this, he had pioneered the teaching of entrepreneurship in the UK and internationally and since 1988 had held Chairs in Entrepreneurship at Durham and Surrey Universities. He holds an Honorary Professorships at Almaty Management University and the University of Wales Trinity St. David and is the co-founder of the Harmonious Entrepreneurship Society. In 2006, he was a recipient of The Queen's Award for Enterprise Promotion.

Iman El-Kaffass is a seasoned executive and international consultant with proven expertise working with international development and donor organisations, public and private enterprises as well as international, regional and local NGOs around the world. Her areas of expertise include project design and management, capacity development of teams, and women and youth entrepreneurship development. From 2003 to 2007, she designed and managed the USAID funded Student Leadership Development of the American University in Cairo, then she established a similar program for the initiation of King Abdullah University for Science and Technology (KAUST), and also managed her own enterprise 'Step Up International for Learning and Development'. Step Up focused on youth and women entrepreneurship development, a focus that she took further through her following work at the global level, with multiple international organisations.

#### 1 Introduction

While there is no uniform, standard agreement on the term 'entrepreneurship' and there are various 'schools of thought' about what it is, there is general agreement that entrepreneurship has the potential to address sustainability and ameliorate its conditions (Villar and Miralles, 2019). This results very largely from two factors.

The first relates to the fact that while entrepreneurship has been perceived traditionally to be about job generation and wealth creation (Birch, 1979; Friedman, 1970), increasingly it is being seen more broadly as being about initiating change and improvement – what Schumpeter (1943) referred to as 'creative destruction', the creation of 'new combinations' that bring about change. Thus entrepreneurs are being regarded, increasingly, as change agents – people who see opportunities or find innovative solutions to problems and bring them to fruition, in the process initiating change and improvement.

The second factor stems from the growing emphasis on sustainability and the fact that although entrepreneurship has traditionally created wealth, generated jobs and brought about change, it has also had negative consequences, impacting on the environment, people and society (Kirby and El-Kaffass, 2021). In recent years, therefore, new forms of entrepreneurship have emerged, most notably ecopreneurship (Kainrath, 2011) and social entrepreneurship (Borzaga and Defourny, 2001), while the International Council for Small Business (ICSB) has introduced, most recently, the concept of humane entrepreneurship (Kim et al., 2018). This promotes the idea that business should be done in a humane way and argues that "the assurance of wealth creation and continued operation only occurs when your employees and customers are confident that your business cultivates an environment of safety and health."

Such developments have led Schaltegger et al. (2016, p.5) to observe that "while extant research on sustainable business models has often been rooted in ecological sustainability, other scholars have seen business models as tools for addressing social needs." However, while achieving much, these approaches have not addressed the sustainability problem *per se* and have had relatively little impact on it. This has been recognised by Katsikis and Kyrgidou (2007) and Tilley and Young (2009) and the reason for it is not just the magnitude and complexity of the problem but the inter-connectivity of the planetary ecosystem. This means that the solving of one problem often generates

others elsewhere in the system. As a consequence, both scholars and practitioners have been searching, increasingly, for new models of business that will increase "economic wealth by either radically reducing negative or creating positive external effects for the natural environment and society" [Schaltegger et al., (2016), p.5].

#### 2 Methodology

As Shepherd and Patzelt (2011) have observed the study of entrepreneurship and sustainability focuses on "the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy and society." The aim of the present article, therefore, is not to challenge this but to explore how it may be achieved in practice by identifying a new model for business and the characteristics of the founding, transformative entrepreneur. It does so by adopting a grounded theory type approach based on studies of an Egyptian entrepreneur and the venture he founded. The two cases are based on both secondary data and participant observation and, in accordance with the traditional principles of grounded theory, are not based on any pre-consideration of the literature (Glaser and Strauss, 1967). The case study approach has been adopted as the study is exploratory involving 'how' and 'why' questions which, as Yin (1994, p.6) has recognised, does 'lead to the use of case studies'. The two cases are drawn from a middle to low income economy, Egypt.

According to the World Economic Forum (Sala-I-Martin et al., 2015) Egypt has transformed from a factor- to an efficiency-driven economy. Factor driven economies are the least developed, relying heavily on unskilled labour and natural resources, whereas efficiency-driven economies are increasingly competitive with more efficient production processes and increased product quality. This has resulted from the government's macro-economic and structural reform program and while growth slowed in 2020 as a result of the pandemic, the country has been one of a small number to maintain positive economic growth. However, unemployment remains high at around 8% and almost one third of the population are living in poverty with some 6.2% having less than a \$1 dollar a day on which to live. At the same time, the country remains heavily dependent on its natural resources, particularly agriculture, natural oil and gas, its climate and its people. While just under half of the workforces (48.55%) are engaged in the service sector, of which approximately 12% are employed in tourism, agriculture continues to dominate the employment market, accounting for almost one quarter (23.9%) of the workforce. Although it is exceeded by 'industry' (28.6%), textiles (cotton) and clothing are the largest employers in the sector, accounting for 46% of all manufacturing (O'Neil, 2021).

#### 3 Case examples

3.1 The characteristics of a green, innovative and transformational entrepreneur: Professor Ibrahim Abouleish

Professor Abouleish, who died in June 2017, was the founder of SEKEM<sup>1</sup> Holding on the outskirts of Cairo. He was very much a transformative entrepreneur (Ratten and Jones,

2018) and during his lifetime he received numerous awards for his visionary achievements. These included the Schwab Foundation's 'Outstanding Social Entrepreneur' Award, and the Global Thinker Forum Award for Excellence in Positive Change as well as being appointed as a councillor at the World Future Council and an Oslo Business for Peace Honouree by the Business for Peace Foundation. His remarkable life story (Abouleish and Abouleish, 2008; Mair and Seelos, 2006) explains why and provides insights into the characteristics of this transforming entrepreneur.

Born in Egypt, in the city of Mashtul in 1937, in 1956, at the age of 19, he travelled to Austria where he studied chemistry and medicine at the University of Graz, and in 1969 was awarded a Doctorate in Pharmacology. He then worked in pharmaceutical research concentrating on medicines for osteoporosis and arteriosclerosis before returning to Egypt in 1975 on a family holiday. During this visit he became aware of the pressing problems of overpopulation, pollution and education, as well as the parlous state of Egyptian agriculture, with the country importing some 40% of its food and 60% of its wheat.

On returning to Austria he found he was unable to escape the images and recollections he had witnessed and began to formulate a plan for "a community dedicated to the holistic development of its workers and all of its stakeholders – a model that would transform Egyptian agriculture and act as a force for positive change..." [Abouleish and Abouleish, (2008), p.24]. In 1977 he returned to Egypt and started looking for land he could purchase. Eventually, after rejecting more favourable sites, he settled on a 70 acre site that everyone agreed was unsuitable, his logic being that if the biodynamic farming he envisaged "could thrive in this wasteland and under such extremely adverse conditions, then it would be possible to transfer this model to easier environments." Although he was told the project would not work this only made him more determined and he began to plan the development. This included infrastructural facilities such as roads, wells and a 30 metre wide band of trees as well as houses, a school, medical centre, a social centre, stables and the businesses that would finance the venture. When the project was first launched he planted 120,000 casuarinas, eucalyptus and Persian lilac seedlings, engaged the internationally renowned Egyptian architect, Hassan Fathy, to design traditional adobe housing and engaged and housed the native Bedouin inhabitants.

To do this, though, he needed funding and he began to think how he could use his pharmacological knowledge to generate income. While doing so, he heard of an American company that was looking to purchase an extract of the plant *Ammi majus* from Egypt. Although he had never heard of the plant, he researched it thoroughly, invited the Americans to meet with him and, after a period of studying the commercial feasibility of the project, entered into a contract with them (the American Elder company in Ohio) to start supplying ammoidin, the crystallised active ingredient present in the seeds. To fund the project he established The Sekem Company as an investment company (with his two children) and entered into 'partnership' with a local bank that took 40% equity in the business. Following an audit of the company, the state investment authority discovered that its estimated value was considerably higher than the book value which meant that the bank was required to pay more for its involvement. It was reluctant to do so and demanded back its 150,000 EGP investment, which had been spent already.

As he was not able to raise funding from any of the other banks until the disagreement was settled he raised 100,000 EGP, eventually, from an 'angel investor'. After two months the investor also wanted his money back but the Egyptian National Bank, recognising that there was no risk as the funding would be covered by the equity in

the land and property as well as the American contract, agreed to lend him the money and he started building the laboratory and processing rooms to produce the ammoidin. This required a 30 metre high chimney which he, his son and his employees built themselves, as well as a steam generator which he created from an old wood-powered German steam locomotive that he acquired from a scrap dealer. After several successful years the owner of the Elder company died and the contract was terminated as his family did not wish to continue trading. A new line of business had to be sought.

Despite opposition from the Egyptian Agricultural Ministry to his biodynamic agriculture and composting, his vision of an oasis in the desert was beginning to take shape. It took him 12 months to persuade the Ministry that his methods would not 'infest the whole country', which was their concern and they sent inspectors to analyse the soil, something they did at regular intervals for the next ten years. So, he could now operate once more, having been prevented from doing so previously by the police.

Then, one morning he found bulldozers pulling down thousands of the trees he had planted as the land had been acquired by the military. Despite knowing the then President of Egypt, Anwar Sadat, and holding meetings with the Minister and the then Deputy President, Hosni Mubarak, it took weeks before the decision was reversed and all of the military machinery was removed. Meanwhile, it turned out that the intention had been to establish a co-operative with single plots of land for officers on 3,000 hectares of desert, so he persuaded the authorities that this could be done not on his land, but on adjacent land. So the land around SEKEM was then divided into small plots of 5–10 hectares for each officer and a cooperative was established.

Although his intention had been to sell fresh produce, SEKEM had only produced fresh foods for its own use and it was not until he met a Greek Cypriot living in Mashtul who was growing and exporting fresh produce to England that the opportunity arose. The man had been advised to enter into partnership with SEKEM which Professor Abouleish found of interest, but he was opposed to the use of artificial fertilisers, pesticides and hybrid seeds. However, he made a quick decision and founded the Libra Company, in which SEKEM held a 50% share. When eventually the partnership was dissolved, amicably, SEKEM had learned a great deal about the marketing of fresh produce.

Once Libra was in place he started to produce organic vegetables. These proved costly, partly because it was difficult to get the seeds needed and partly because the yield was about half of that which they had forecast. Additionally, a sandstorm destroyed their greenhouse and their efforts to date. Even so, they remained confident and committed and established a new logistics company, Hator, to ensure the produce would be delivered speedily from the fields to its correct destination without spoilage and loss of revenue. The company was managed by Professor Abouleish's wife who trained 70 young women in SEKEM's Centre for adult learning and they then checked for quality and ensured all necessary processes were performed swiftly and correctly.

However, further problems arose when pesticide residues were found on their medicinal plants. The residues came from the planes spreading pesticides on the neighbouring cotton fields. So, they began to look at how the cotton plants could be protected organically and two Egyptian scientists developed an organic method of stopping the insects that were destroying the cotton plants from multiplying. As a result their crops produced a 10% higher yield than the average for the area and they presented their findings at the world's first international organic cotton conference held in Cairo. Their results were well received but for the next three years they were required to

continue testing all over Egypt before the minister stopped the application of pesticides, initially on 200,000 hectares of land and one year later on the total cotton crop production in the country.

Shortly after this ban on the use of pesticides, articles appeared in the newspapers questioning the benefits of organic farming and stressing the need for artificial fertilisers in order to feed the world's poor. SEKEM was named in them and accused of wanting to let people starve. Professor Abouleish even received anonymous threatening phone calls and one day an article appeared in the local newspaper under the heading 'the sun-worshippers' claiming SEKEM's round house and other round objects were all symbols of the sun. As a consequence SEKEM workers were harassed, stones were thrown at them and the local prayer leaders in the mosques around SEKEM began to stir up animosity against them. So, he invited all of the people opposed to them, the mayor and the local sheikhs, to meet with him and colleagues, greeting them personally on arrival.

Before the meeting started he had a sheikh read a passage from the Koran and the SEKEM musicians to play a Mozart serenade. One man erupted violently not wanting to 'listen to this work of the devil' while another claimed that 'music and art are forbidden in Islam' so Professor Abouleish countered their objections with quotations from the Koran and demonstrated how biodynamic agriculture is in keeping with the teachings of Islam, whereas artificial fertilisers and pesticides are in contravention of it. Eventually one man got up and hugged and kissed him. Shortly after, the meeting closed with the sheikhs content that the venture was founded on Islamic principles. When it did, Professor Abouleish left them with a quotation from the Koran, namely:

"O you who believe! If an evil person comes to you with news, verify it, lest you harm people in ignorance..." (Surah, Al-Hujurat, 49, 6, The Holy Quran)

Normally full of energy, in 1986, after seven years of hard work establishing the venture, Professor Abouleish suffered two heart attacks but refused medical intervention and was absent for much of the year. His son, Helmy, took over the company's administration, marketing and sales and they decided to reorganise. A circle of people who understood clearly why SEKEM was founded, the 'Council of the Future', was appointed to run the company, and guide it according to the original vision. Since then, new businesses have been established (ISIS Organic in 1997; ConyTex/NatureTex in 1998) while a school was created in 1986, a medical centre in 1996, a vocational centre and an art school in 1997 and, in 2012, a university specialising in sustainable development.

On 15th June 2017, Professor Abouleish passed away but his work and thoughts continue to live on. He was a humble, honest and religious person whose personal mantra was "goodness of the heart, light of truth, love of the people" (Papageorgiou, 2013).

## 3.2 The characteristics of a green, innovative and transformational enterprise: Sekem

SEKEM Holding is an Egyptian commercial enterprise that sells 150 products, including organic foods, herbal teas, medicines and organic cotton products, that are produced by ten companies and sold nationally and internationally through four subsidiaries:

 ISIS Organic Food (vegetables, honey, dates, oils, beverages) employs 230 people and was launched in 1983.

- Hator established 1996 produces and packs some 4 tons of fresh tomatoes, beans, peppers, oranges, grapes, etc. each day plus large volumes of potatoes, onions and oranges for export to Europe.
- NatureTex Organic Textiles. Employs some 200 worker and produces 3,000 pieces
  of high-quality clothing mostly for babies and children for export to the UD and
  Germany.
- PharmaAtos (pharmaceuticals) established in 1986 as a joint venture with the German Development Bank and Dr. Schaette AG to research and develop natural medicines. In 1992 Atos was licensed by the German firm Weleda to manufacture and market natural cosmetics in Egypt.

To do this it has introduced biodynamic agriculture to Egypt and turned 70 acres of desert located 37 miles north east of Cairo into a thriving, fertile residential oasis. However, instead of focusing solely on business growth the objective of SEKEM Holding is somewhat broader, namely the creation of a community and the introduction and promotion of sustainable agriculture through the holistic development of the individual, society and the environment. Profits generated by the Holding Company are used to fund social and cultural projects through the cooperative of SEKEM employees, which has responsibility for all aspects of the HR development of the workforce, and the SEKEM Development Foundation, which is responsible for all cultural matters and which receives 10% of all company profits.

In total the holding company employs some 2,000 people and has a network of over 3,000 farmers who produce for the group. To help meet its objectives of promoting sustainable agriculture it has trained some 477 Egyptian farmers in biodynamic agricultural methods which are applied on approximately 4,600 acres of land. Since the year 2000 around 1,000 students have graduated from the Company's Vocational Training Centre and since 2012, when it opened it is not for profit university, it has offered knowledge transfer opportunities to farmers, employees and the community. In addition, employees are entitled to reduced fees for the education of their children at SEKEM's Steiner or Waldorf schools<sup>2</sup>, while free educational courses are provided for employees and healthcare is available in SEKEM health centres.

The initiative was founded in 1977 based on a synthesis of the Islamic values of equitable business and social responsibility and the anthroposophy of Rudolf Steiner<sup>3</sup> that would promote sustainable agriculture and enable employees and farming communities to improve their living conditions, health, education and quality of life. Some 43 years later the founder's vision has resulted in some 684 acres of desert being reclaimed and transformed to agricultural use with a 90% reduction in artificial fertilisers and pesticides and a 30% increase in the production of Egyptian cotton.

The profits from the businesses enabled SEKEM to develop the 'Egyptian Society for Cultural Development' in 1984. This is one of the activities of the SEKEM Development Foundation, the mission of which is to "elevate the total welfare of the Egyptian people by enabling them to determine their own socially unique and culturally-appropriate development path." Other activities address two other problems facing Egypt, namely education and health. The SEKEM School was founded in 1989 and enrols 300 Muslim and Christian primary and secondary pupils encouraging them to live in harmony, while the Chamomile Project employs 80 children aged 12 years or more to work on the SEKEM farm. While child labour is illegal in Egypt, it is widespread. The project

participants are educated for half of the working day enabling them to pass the primary school exams in order to start formal vocational training. This is provided by a two-to-three year vocational training program that takes 50 trainees a year who can acquire the skills either to start work or set up their own business on graduation.

Meanwhile, in recognition of the fact that human development has many facets, attention is paid to the health and fitness of the community and the company's medical centre offers health care services to more than 120 patients a day. In addition, it offers education on all aspects of public health and in total some 30,000 rural people receive modern healthcare and educational programs via the centre and a mobile clinic.

Summarising the activities of the SEKEM Development Foundation, Professor Abouleish's son, Helmy, has observed that the foundation's activities "are founded on the belief that society's problems cannot be tackled in isolation." Rather as they involve a series of inter-related cultural, economic, educational, environmental and health care components they require an all-embracing comprehensive strategy.

#### 4 Discussion

#### 4.1 The characteristics of the entrepreneur

Professor Abouleish would certainly have rated highly on the five dimensions<sup>4</sup> of Caird's (1991) General Enterprising Tendency Test and his story demonstrates the sort of entrepreneurial competences needed to lead sustainable change. According to Timmons et al. (1985) entrepreneurs possess some 19 characteristics or traits.<sup>5</sup> The case study reveals that Professor Abouleish displays all 19 of them plus others, such as

- his ability to see and seize opportunities
- courage
- persistence and endurance
- self-belief
- persuasiveness
- networking capability.

However, Villar and Miralles (2019) have concluded that sustainability entrepreneurs (as they call them) differ from more conventional entrepreneurs particularly in their desire to change the world and it is necessary, therefore, "to acknowledge the orientation and motivation of the entrepreneur to include non-economic goals in the entrepreneurial ventures" (op cit., p.106). Clearly, the case highlights Professor Abouleish's concern for both the environment and society and his desire to address the economic and social problems facing Egypt. At the same time it demonstrates his

- creativity, foresight and vision
- ability to think strategically
- interdisciplinary competence (including commercial awareness)
- understanding of systems thinking and the inter-connectivity of the ecosystem

- action orientation and practical capability
- interest in recycling and saving waste
- ability to motivate and empower others
- spirituality.

As shown in Table 1, several of these competences have been identified, previously, by Lans et al. (2014) and more recently by Ploum et al. (2018). Noticeably there is one particular difference. Professor Abouleish was a very religious and spiritual person<sup>6</sup>, what Kauanui et al. (2008) refer to as a 'make me whole' entrepreneur. Such entrepreneurs, according to them, are "extremely passionate about their work, believing that work impacts, inspires and changes the lives of those they work with, especially employees" (op cit., p.174). Despite Weber's (2001) concept of the 'protestant work ethic' and its links with capitalism, attention to spirituality, and its impact on business performance, has been recognised only relatively recently (Benefiel et al., 2014). While it might be particularly difficult to inculcate spirituality, these are the sort of competences, including ethics and morality, that will be needed by transformative entrepreneurs in order to address the issue of sustainability.

 Table 1
 Required competences of the transformational entrepreneur

Competence	Lans et al. (2014)	Ploum et al. (2018)	Professor Abouleish
Creativity, foresight and vision	+	+	+
Ability to think strategically	+	+	+
Interdisciplinary competence (including commercial awareness)	+	+	+
Understanding of systems thinking and the inter-connectivity of the ecosystem	+	+	+
Action orientation and practical capability	+	+	+
Ability to recycle and save waste			+
Ability to motivate and empower others			+
Spirituality			+
Normative competence	+	+	

Note: + denotes the presence of a required attribute.

#### 4.2 The characteristics of the enterprise

According to Helmy Abouleish, the current CEO, "Sekem is a business. It is a community. It is a shared vision for Egypt and the world" [Abouleish and Abouleish, (2008), p.48].

Clearly the holistic approach adopted by SEKEM has combined economic/commercial entrepreneurship, ecopreneurship, humane entrepreneurship and social entrepreneurship – and it is contended here that this is the way entrepreneurs will need to operate in the future if the mistakes of earlier generations are not to be repeated and the sustainability challenge is to be addressed. This was recognised in 2003 by the Right

Livelihood Award Foundation (the Alternative Nobel Peace Prize). In its Award citation, the Foundation stated:

"Sekem (Egypt) shows how a modern business can combine profitability and engagement in world markets with a humanistic and spiritual approach to people and respect for the natural environment. The Jury sees SEKEM as a business model for the 21st century in which commercial success is integrated with and promotes the social and cultural development of society through the 'economics of love'."

From the SEKEM case, therefore, it is apparent that the future of entrepreneurship and its contribution to sustainability lies in seeing problems and opportunities more holistically rather than as unrelated elements in what is a highly interconnected ecosystem. This more holistic, integrated approach to entrepreneurship has been termed 'harmonious entrepreneurship' by Kirby and El-Kaffass (2021). They have defined it as:

"A vision for the future rooted in ethical innovation that results in change and improvement in economy and society, while not harming or damaging people or the environment. Preferably, it improves and replenishes them and leads to development that is both long-term and sustainable."

To be classed as harmonious entrepreneurship, they argue, entrepreneurial activity should not only conform to the definition but should embrace five PROSPER aspects of development. These have been identified by El-Kaffass (2007) as:

- Professionally-based: Taking state-of-the-art quality measures to develop, improve and grow the business.
- Spiritually and ethically inspired: Emanating from a principle of doing good on earth benefit the environment and the wholeness of the world, ensuring equilibrium and justice and sustaining the initial harmony of the universe.
- Physically/materially concerned: Supporting improvement in the health and wellbeing of people and the physical environment, including air, earth, seas and space.
- Emotionally rooted: Serving and benefiting the community.
- Rationally and intellectually-based: Creative and innovative, finding smart and novel solutions.

While the number of cases of ecological, humane and social entrepreneurship is valuable and growing, as mentioned above they rarely address the sustainability challenge *per se*. This is because the planet is a system and it is not possible to address the challenge simply by addressing one aspect of it. Hence, the proposed harmonious entrepreneurship model is based on general systems theory (Von Bertalanffy, 2015) and Ashby's (1968) law of requisite variety. This implies that only variety can absorb variety – that it is not possible to address any problem by addressing just one facet. The solution must be equal to or greater than the number of factors involved. Hence, as the three dimensions of entrepreneurship (economic, environmental and social) are inter-related subsets of the sustainability problem (Katsikis and Kyrgidou, 2007), any solution will need to integrate or harmonise the main approaches to entrepreneurship (economic/wealth creation, ecopreneurship, humane entrepreneurship and social entrepreneurship) in order to address the sustainability challenge and the 17 Sustainable Development Goals (SDGs) of the

United Nations. The outcome is the creation of a new systemic ethical business model that adopts the harmony principles espoused by HRH The Prince of Wales et al. (2012) and focuses not solely on wealth creation but on addressing the SDGs and producing a triple bottom line of people-planet-profit.<sup>7</sup> As the Prince asserts many of the modern challenges the world is facing are the result of disharmony with nature and the solution lies in our ability to regain a balance with the world around us. It is not just nature and the environment that is important, though, but the physical well-being of the human population – its health, nutrition, living conditions, education, spirituality, etc – as the SEKEM case demonstrates.

#### 5 Implications

#### 5.1 For theory

As Parente et al. (2018, p.30) have recognised, questions have been raised in recent years about "the idea that profit seeking is good for economic development and that profit maximisation is the consistent means to measure the performance of entrepreneurial behaviour." Indeed, as they acknowledge, such financially-based business models may be resulting in "the irreversible depletion of economic, social and natural capital" (op cit., p.30). It is for this reason that they and the ICSB have been searching in recent years for a new definition of entrepreneurship. The outcome of their deliberations is a "new conceptual model in which care for people and care for society assume a central role" (op cit., p.32). In this model, they see three orientations – an entrepreneurial orientation, a sustainability orientation and an executives and employees orientation. In the harmonious entrepreneurship model it is proposed that the model should concern itself not just with people and society but with the economy and the environment and that there should be only two orientations – the entrepreneurial orientation and the sustainability orientation. However, the sustainability orientation should recognise the interconnectivity of the global ecosystem and the 17 prescribed SDGs of the United Nations, together with the need for harmony. Thus the outcome is the development of a new, holistic systemic business model that integrates or harmonises the four main approaches to entrepreneurship (economic, eco, humane and social) and yields the triple bottom line of profit-planet-people required to sustain financial performance long-term. While it does not replace the traditional entrepreneurship models, or the ICSB humane entrepreneurship model, it does demonstrate how entrepreneurship can address the sustainability challenge and produces a model that better captures the current world in which we live, one of the objectives of the research undertaken by Parente et al. (2018).

Thus, it is contended, if entrepreneurship is to address the sustainability challenge successfully, this new, harmonised approach is required, together with a new, integrated business model that does not focus solely on the profitability of the venture and its share performance but embraces the 'triple bottom line' of profit, people, planet (Elkington, 2004). It is not sufficient for entrepreneurship to be categorised as economic, eco, humane or social and implemented independently. Rather, the approaches need to be integrated or harmonised and the likely ramifications of any innovation need to be anticipated and addressed. This would appear to contradict the finding of Belz and Binder (2017, p.1) who conclude "that the triple bottom line of ecological, social and economic

goals is integrated sequentially, not simultaneously." This involves a six phase process that includes:

- recognising a social or ecological problem
- recognising a social or ecological opportunity
- developing a double bottom line solution
- developing a triple bottom line solution
- funding and forming a sustainable enterprise
- creating or entering a sustainable market.

As the SEKEM case demonstrates, they can be introduced simultaneously, but they should be planned and the pro-ecological and pro-social postulates of sustainability must be integrated into the strategy of the firm (Gawel, 2012).

#### 5.2 For practice

The harmonious entrepreneurship model has implications for both new and established ventures, whether large or small, as well as for those members of the support network who advise, mentor and train them. In particular it will have implications for educators and those responsible for the training of future entrepreneurs. To educate students to become entrepreneurs capable of creating new harmonious models of business that address the sustainability challenge requires a change in both the content and pedagogy of learning as Lans et al. (2014) and Ploum et al. (2018) have demonstrated. It is necessary not just to develop in the participants the attitudes and competences of the harmonious entrepreneur or to educate them in how to launch and grow a harmonious venture, but to introduce them to such issues as sustainability and its importance, the concept of systems thinking, harmonious entrepreneurship, the characteristics of the harmonious entrepreneur and the importance of ethics. Such topics have to be added to the traditional entrepreneurial education content/curriculum with the students developing their understanding and capability experientially (Kirby, Forthcoming).

Similarly, it is necessary to move away from Friedman's widely held mantra that the sole responsibility of business is to 'make as much money as possible'. This has tended to dominate business practice for much of the past 50 years or more, together with the concept of shareholder satisfaction. Instead it will be necessary to focus on what Friedman (1970) actually said, namely that business is about "making as much money as possible while conforming to the basic rules of society both those embodied in law and those embodied in ethical custom." Though laws relating to the environment and its protection are evident in all developed and many developing economies they are relatively recent. Certainly this is the case when compared with ethical custom relating to the environment which has existed for centuries. Indeed, the ancient Chinese religion of Taoism, for example, is based on the harmony between nature and humanity while Hinduism is rooted in nature and encourages environmental protection. Similarly in the Hebrew Bible and in the Old Testament it is noted that "The Lord took the man and put him in the garden of Eden to work it and keep it" (Genesis 2:15), while in Islam the Prophet Mohamed observed that "The world is green and verdant and verily God, the exalted, has made you his stewards in it." Both entrepreneurs and business leaders need

to recognise this and move away from the narrow focus on profit maximisation and shareholder satisfaction to the broader concept of the stakeholder – employees, suppliers, customers and all of those with responsibility for protecting the environment. Such a change will pose a significant challenge for entrepreneurship and the academic support community, not least as further stakeholder theory-based research will be needed, particularly into how enterprises can best initiate relationships with their stakeholders and create value for each other (Pollack et al., 2017).

#### 6 Conclusions

The study has aimed to determine how entrepreneurship needs to change in order to address the sustainability challenge. It has done so by examining the characteristics and behaviour of a green, transformative entrepreneur and the venture created in a middle to low income economy. This revealed that the founder conformed to the typical characteristic profile of an entrepreneur but possessed an additional set of traits and competences which was found to be needed in order to focus on the sustainability challenge and the inter-connectivity of the global ecosystem. This requires that, in accordance with Ashby's (1968) law of requisite variety, any solution to the sustainability problem cannot address just one facet of the problem as this will impact on other connected facets. Rather, the solution has to adopt a holistic approach that integrates or harmonises the four main approaches to entrepreneurship (economic, eco, humane and social) that previously have each been applied separately. Hence a new harmonised business model has been developed.

While the research of Schaefer et al. (2015, p.394) has recognised the importance of systems thinking to the issue of sustainability their emphasis is very much on the entrepreneurship-sustainability research agenda. Indeed, one of their conclusions is that future research could 'zero in more on complex systems thinking'. This is what this current research has attempted to do – to demonstrate how systems thinking can be applied to produce an entrepreneurial business model that addresses the sustainability problem and produces a triple bottom line of profit-people-planet.

Based as it is on one industry sector and one country, clearly the universal applicability of the proposed model is open to question. Doubtless other cases could have been examined but on the basis of these two, a harmonised approach to entrepreneurship would appear to offer opportunities for increased transformation and sustainability. Further research is necessary to explore such cases and test the efficacy of the proposed approach in different socio-economic contexts, physical environments and industry sectors. However since its conception, some 40 cases have been presented, each addressing different sustainability issues in different socio economic contexts (https:// harmonious-entrepreneurship.org/). All demonstrate the applicability of the model and under such circumstances perhaps the most urgent need is for action research that involves the creation and monitoring of new harmonious enterprises for, as Tilley and Young (2009, p.91) have acknowledged, there has been an "explosion of sustainability rhetoric but far too little absolute progress in reducing (never mind improving) the environmental and social problems society faces today." As has been recognised (Parente et al., 2018; Schaltegger et al., 2016) a new entrepreneurship business model is needed not least as "the many environmental and social problems that now loom large on our horizon cannot be solved by carrying on with the very approach that has caused them" [HRH The Prince of Wales et al., (2012), p.3]. Harmonious entrepreneurship, based as it is on systems thinking and the principles of Harmony, appears to offer such a solution. It needs to be tried and tested but it needs, also, to be remembered that it will not be until 'harmony prevails' that 'all things under the sun will flourish' (Xun Zi 310BC-235BC).

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#### **Notes**

- 1 SEKEM means 'vitality from the sun'.
- 2 These schools provide a holistic approach to education by developing the intellectual, artistic and practical skills of their pupils.
- 3 A system of teaching and helping people to become as mentally and physically healthy as possible.
- 4 Need for achievement, autonomy, drive and determination, risk taking and creativity.
- Total commitment, determination and perseverance, drive to achieve and grow, orientation to goals and opportunities, taking initiative and personal responsibility, persistence in problem solving, veridicial awareness and a sense of humour, seeking and using feedback, internal locus of control, tolerance of ambiguity, stress and uncertainty, calculated risk-taking and sharing, low need for status and power, integrity and reliability, decisiveness, urgency and patience, dealing with failure, team builder and hero maker, high energy, health and emotional stability, creativity and innovativeness, high intelligence and conceptual ability, vision and capacity to inspire.
- While the world's major religions do espouse spiritual values, according to the Dalai Lama XIV (1999) there is a distinction between religion, that is based on faith, and spirituality that is concerned with such qualities of the human spirit "as love and compassion, patience, tolerance, forgiveness, contentment, a sense of responsibility, a sense of harmony..."
- Subsequently on 11th January 2021 at the One Planet Summit in Paris HRH The Prince of Wales launched the Terra Carta a charter for sustainability that recognises the systemic nature of the sustainability challenge (https://www.sustainable-marketsorg/TerraCarta\_summarium\_ Jan11th2021.pdf).