Giving the importance of green entrepreneurs in the transition towards a truly sustainable society, this paper proposes frameworks for investigating the motives of entrepreneurs who set up green businesses. Different perceptions of ‘green’ are explored and although the paper focuses particularly on ‘green-green’ businesses, the scope for investigation encompasses all possible forms of green start-ups. The main approach taken in the paper is to review the literature on entrepreneurs generally, and approaches to classifying entrepreneurs with a view to gaining useful insights for the green context. An exploratory typology of green entrepreneurs is proposed, which has been adapted and developed from Thompson’s four dimensions of entrepreneurship (1998). The terms ‘ethical maverick’, ‘ad hoc environpreneur’, ‘visionary champion’ and ‘innovative opportunist’ are coined to describe different motives or orientations of the green entrepreneur. Frameworks are proposed to investigate the motives of, and influences on, green entrepreneurs. The ultimate aim is to gain insights for policy makers and educators into ways to foster green entrepreneurship.

Key Words: entrepreneur, sustainability, green, start-ups, motivation, champions, typology

INTRODUCTION

This aims of green entrepreneur to establish a framework for investigating the motives of entrepreneurs who set up green businesses. Although the focus for our investigation is ‘green-green’ businesses – that is, businesses that are founded on the principle of sustainability (Isaak, 1998) – our scope encompasses all possible forms of green business. Isaak uses the expression ‘ecopreneur’ to mean individuals who found/set-up green-green businesses. He suggests that ecopreneurs pursue social and ecological goals by means of profit orientated businesses. Developing this theme, we suggest that one can then logically distinguish ecopreneurs from other types of green entrepreneurs who pursue profit goals by means of ecological or socially orientated businesses. In the context of the need to move towards a truly sustainable society, we support Isaak’s view that ecopreneurs are increasingly being seen as crucial change agents, or champions, driving the sustainability transformation process. But we also suggest that it is important to investigate the motives of all types of green entrepreneurs in order to gain insights for policy makers and educators into ways to foster green entrepreneurship. The main approach is to explore the concept of entrepreneurship and existing approaches to classifying entrepreneurs to see whether these can assist us in moving towards a framework for investigating green entrepreneurs. First we offer various interpretations of the expressions ‘green’ and ‘green-green’, before providing our own definition of what we mean in this paper by green entrepreneurs. Drawing on existing entrepreneurship models, we develop an exploratory typology of green entrepreneurs.

What is green entrepreneur?

Green entrepreneur

- Integrates environmental, economic & social axis in core business
- Innovative solutions to the way goods and services are produced & consumed
- Scaling-up of the business model contributes to greening of the economy

Typology of Green Entrepreneurs

Drawing on the review of general entrepreneurship typologies and green entrepreneurship literature, the defining criteria presented in the typology below (see Figure 2) reflect the view that the most relevant explanatory variables for characterising different types of green entrepreneurs are the external context (structural influences) and the entrepreneur’s personal orientation.
or motivation. The ‘orientation’ axis arises from this paper’s earlier exploration of green and green-green businesses, and is influenced by Thompson’s paradigm perspective (Thompson, 1998). A profit orientation and some sort of green orientation are the minimum attributes assumed for the scope of this typology; the ‘economic orientation’ end of the axis represents these minimum attributes. The green orientation could either be a motivation or a perceived market opportunity or both. Since non-profit organisations (green + social orientations, but not economic) are outside the scope of this framework, and green, ethical and social motives are seen as interrelated (therefore, no separate ‘social + economic’ category is identified), the only alternative set of orientations identified in the typology is one that combines all three motives – economic, green and social/ethical – and is represented in the typology as a sustainability orientation. The matrix formed by these two axes – motivation and influences – thus produces four ‘ideal types’ of green entrepreneurs. To appreciate the ‘Innovative Opportunist’ type it is useful to make the connection with Thompson’s paradigm or worldview dimension. It is suggested that Thompson’s description of the innovative paradigm is analogous to a financially orientated entrepreneur who spots a green niche or opportunity. Dana’s ‘arbitrager’ description also seems apposite. This type of entrepreneur is one who has been mainly influenced by hard structural drivers, such as regulation. A likely example of this type of entrepreneur is Evan Connell, of the Connell Group, who is building the first plant in the UK to recycle fridges safely. New EU environmental legislation

ECONOMIC ORIENTATION

Ad hoc

Enviropreneur

Ethical

Maverick

e.g. Organic Pork Producer e.g. Fridge Recycler

Founder

e.g. Natural Skin & Hair Care Producer

Typologies do not provide decision rules (Kolk & Mauser, 2002); instead they identify multiple ideal types, each of which represents a unique combination of the attributes that are believed to determine the relevant outcome. Assuming that the same interpretations can be made of people-orientated typologies – in this case, green entrepreneurs – as with organizational typologies, then the more closely an entrepreneur resembles the ideal type, the more effectively he or she will be described by the typology. However for this green entrepreneur typology, one might challenge the Kolk & Mauser interpretation that typologies do not, or should not, deal with development over time. Given that entrepreneurs tend to ‘re-invent’ their businesses over time, the evolution of a particular entrepreneur might see him or her moving from one ‘ideal type’ to another. For example, an examination of Anita

Structure-Action Framework

Following the work of social theorist Anthony Giddens (1984), Walley & Stubbs (2000) suggested that so-called environmental initiatives could not be understood by exclusively focusing on the actions taken by individuals nor solely in terms of the organisational structures that surround them. Rather, they argued that environmental initiatives should be seen in terms of order
emerging from the mutually-producing relationship between action and organisational/social structure. In other words, structure shapes action and action shapes structure. It is aspects of the emergent order from this self-organising relationship that become recognised as environmental initiatives. Structure from this perspective is seen as rules and resources, apparent only when they are acted upon. As individuals interact, aspects of one person’s ways of seeing and doing are interpreted and thereby contribute to the notions of structure held by others.

Structure------>Action-----\rightarrow structure

As individuals are considered skilled actors, continually engaged in reflexively monitoring their interactions with the world around them, his theory allows for prevailing structures to be either reinforced or changed through the day-to-day behaviour of individuals (Figure 3). In other words, individuals may reproduce the status quo or choose to act differently. However, the challenge for appreciating ‘greening’ is to follow Giddens’ structure-action ideas beyond specific fleeting instants in which an individual action might either reproduce prevailing structures or perform something new. To appreciate the greening process, one must make the conceptual leap to see how a mutually-producing model of structure-action would extend across time and space to account for widespread social phenomena; for example, the greening of organisations (Walley & Stubbs, 2000) or in a wider context, the greening of society in general. So relating this perspective to the phenomena of green entrepreneurs, these individuals will be both influenced by the evolving economic and social structures around them, and are in turn, influencing those structures.

**Influence and Motivation**

The review of entrepreneurship research indicated that interactions between personality and such factors as past experience, existing competence and the immediate context have proved decisive to the understanding of entrepreneurship (Blundell & Smith, 2001). The integrated social-psychological approach to entrepreneurial behaviour outlined earlier in this paper (Chell et al 1991), focuses, amongst other things, on the way people respond to experience and crucial dimensions of the business context. This approach resonates strongly with the structure-action perspective on greening outlined above. We see influences and motivation as clear elements in this structure-action dynamic,

In other words, it is elements of the hard (eg. economic) structure of society and softer structures (such as personal networks) that influence potential entrepreneurs and motivate them to start a green business – the action! On a more practical level, Hendrickson & Tuttle (1997) present (based on US case studies and context), an environmental classification scheme that can be used to categorize the mission or market strategy for different environmental enterprises. This framework contains both internal and external variables as defining criteria. As regards external context, they draw on the work of Post & Altman (1994) who identify, from a macro sociological perspective, three drivers for change: (NB. these are not drivers/motivators of the entrepreneurs)

- compliance-based environmentalism – improving the environment through government regulation and sanctions
- market-driven environmentalism – inducing more ecologically beneficial behaviours through various positive incentives; and
- value-driven environmentalism – bringing about change through consumers’ willingness to act on their environmental values

These drivers need not be mutually exclusive at the organizational level and an environmental entrepreneur may take advantage of all three drivers to promote interest in their product. Hendrickson and Tuttle (1997) use these drivers as one of the criteria for their classification scheme. In total they use four factors to classify the environmental focus of the market strategy adopted by the four case study environmental enterprises they analyse:

1. the type of environmental business or businesses addressed - ie. do the products or services relate to the inputs or resources, to the transformation process or to the output of goods.
2. the extent of the environmental emphasis of the overall product/service mix (eg. percentage of total business geared to environmental product)
3. the type of customer – consumer or commercial/industrial or institutional
4. the types of incentives – free market vs. government – offered to customer to buy/use the product or service. The first two criteria are internal variables and the latter two are external. It is an example of a green framework that recognises the interplay of external context or influences with organisational characteristics.

**Some green implementation**

**Egypt Vehicle Scrapping and Recycling Program**

- Launched in 2009, the national program aims to reduce greenhouse gas emissions (GHG) and air pollution associated with aging taxi vehicles in Greater Cairo.
- 41,000 vehicles have been replaced through the program since 2009
- In 2012, tax and customs exemptions given through the program reached 1300 $ per taxi.
- Average fuel efficiency achieved through the program is 9.39 liters/100 km for fueled cars.
- An average of 60,000 tons of carbon dioxide (CO2) will be reduced annually.
- This is equivalent to taking 10,000 cars of the street annually.

**Egypt Adapt Egypt**

Developing low-cost, environmentally-friendly housing for squaier and other low-income/neglected remote areas in Egypt, reducing the cost of housing by 30%.

Founded by Arch. Hany El-Miniawy, 1998

**Economic** Housing costs reduced by 30% and Ministry of Housing adopting methodology.

**Social** 13,000 improved living conditions, and hundreds trained on sustainable, local, and environmentally-sound building methods.

**Environmental** Use of local resources and minimum waste

**Conclusions**

Having reviewed the concepts of entrepreneurship and greening, approaches to classifying entrepreneurs and the literature on green entrepreneurs, a typology of green entrepreneurs has been constructed. In this paper we have argued that the definition of green entrepreneurs should be wide, encompassing not only ecopreneurs (individuals who set up businesses founded on the principle of sustainability) but also opportunist entrepreneurs who happen to have found a green niche. Although we support the view that ecopreneurs are crucial change agents driving the sustainability transformation process, we suggest that it is important to investigate the motives of all types of green entrepreneurs because—from structuration logic (Giddens 1984)—all green businesses contribute towards the move to a sustainable society. Secondary research has suggested that entrepreneurs are best characterised by a combination of internal motivations and external (hard and soft) structural influences. The resulting typology produced four ‘ideal types’ of green entrepreneurs: innovative opportunists, visionary champions, ethical mavericks, and ad hoc enviropreneurs. This typology is intended to provide a useful framework for further research into their influences on and motivations of green entrepreneurs. For example, to what extent do opportunists, champions, mavericks...? A typology of green entrepreneurs: new green entrepreneurs fit these theoretical types and (if they do), what is the relative proportion of opportunists, mavericks, champions and ad hoc enviropreneurs? Policy-makers interested in encouraging a greener society would find it useful...
to know to whatextent potential green entrepreneurs are encouraged by economic incentives in com-parison with intrinsic sustainability motivations. Similarly, the typology has potential value in understanding why existing businesses decide to become greener. This paper also points towards an interesting debate on the connections between entrepreneurship and Isaak’s firm–society concept of green-green as a dominant production–consumption mode for a future society that would be vastly different than today’s ‘business-as-usual’ mode. Dominant modes of production and consumption create and are created by the action of firms. The two-way nature of this relationship could either reinforce the status quo or be the engine of change. The role that green entrepreneurs and green SMEs play in this interactive relationship between firms and society warrants further investigation.

References


What is Green Entrepreneurship and why is it the key to achieve sustainable development in business? Are you ready to become a green entrepreneur? Over the past few years, the concept of green entrepreneurship has emerged and it appears to be growing larger and larger. Now, a lot of people are confused by the term, seeing as simply hearing about green entrepreneurship one imagines a business that uses only recycled materials and operates its systems with the use of alternative power sources.