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“WHAT DRIVES SUSTAINABLE ENTREPRENEURS?”

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ABSTRACT

Over the last decade a new idea has emerged within scholarly discussion about entrepreneurial theory and practice which deals explicitly with sustainable entrepreneurship. Sustainability as it has been conceptualized by the Brundtland-Commission in the late 1980ies is orientated towards a threefold set of objectives: society/ethics, economy, and ecology. An important research question within the sustainable entrepreneurship discussion which is also addressed in this paper is to understand the nature, motivation and drivers of so-called ecopreneurs, green entrepreneurs, or sustainable entrepreneurs. Our findings from a field study of ten start-up firms confirm that a main characteristic of sustainable entrepreneurs is a strong emphasis on ecological aspects in their business vision as opposed to the traditional entrepreneurial aspiration to grow and create profits. In addition, they suggest that the main drivers for a sustainable entrepreneurial motivation may be structured along the social and ethical dimension. The findings are synthesized in a proposed set of more balanced entrepreneurial objectives within a sustainable entrepreneurship context and the research as well as managerial implications are discussed.

INTRODUCTION

Entrepreneurship in a Schumpeterian view is defined as an attitude of helping innovative ideas become reality by establishing new business models and at the same time replacing conventional business systems by making them obsolete (“creative destruction”, Schumpeter 1934). Ecopreneurship has been described as a catalyst for economic and social change with respect to the vision of a sustainable human society. Ecopreneurs in particular have been defined as entrepreneurs committed to realizing their ideas of changing the economy in order to make it more sustainable (Robert Isaak 1998, 2002).

Scholarly discussion has attempted to define what type of entrepreneurial behaviour can be described or characterised as “sustainable”. The idea of “sustainability” was first introduced by the Brundtland commission in 1987 (World Commission on Environment and Development 1987). Sustainability stresses the need to balance three central objectives for the future development of humankind: society/ethics, economy and ecology (popularly quoted as “the triple-bottom-line: People – Profit – Planet”). However, only few attempts have been made to investigate the factors motivating entrepreneurial founders to undertake a start-up that may qualify as sustainable in the comprehensive sense as defined by the Brundtland report (see for instance Clausen 2005).

Moreover, from its beginnings, environmental innovation has been investigated as a corporate phenomenon, the objective being a change of corporate behaviour to pay more respect to ecological requirements. Starting in the early 1990ies the discussion turned to entrepreneurial personalities picking up ideas from the ecological movement (Schaper 2002, 28; Clausen 2004, 144).

A contribution by Schaltegger (2002) may be seen as an example for this change in perspective. In his framework entrepreneurial behaviour is conceptualized mainly on the firm level by positioning ecopreneurship in relation to other forms of environmental management. Whilst the dynamic evolution of the company towards practices that are more environmentally sound is seen as caused by entrepreneurial attitudes within the firm (ie “intrapreneurial”, respectively), the defining criteria are the *priorities of ecology as a business goal* in general on one side and the *market effects of the business* as a whole on the other. Ecopreneurship in this view applies to companies aiming at pulling the whole market towards more environmental progress, in the ideal case by changing industry rules and thus forcing competitors to follow up into the same direction. Moreover, from this perspective, sustainability is literally reduced to ecological aspects, as can be seen from the fact that the notion of “ecopreneurship” is constructed as a combination of the terms “ecological” and “entrepreneurship” (Schaltegger 2002, 48). It is thus distinguished from other forms of corporate environmental development by the company’s environmental commitment and its strong desire for business growth.

Like Schaltegger (2002), other authors investigated the drivers motivating entrepreneurs to undertake a sustainable venture, and much of the scholarly discussion has since dealt with this question. Walley and Taylor (2002) suggest a typology founded in entrepreneurship theory (Thompson 1998; Post and Altmann 1994; Giddens 1984). Based on two dimensions that represent external and internal influences on observed entrepreneurial behaviour four ideal types of “green entrepreneurs” are derived. First, *external factors* are conceptualized as “soft” (such as personal networks) opposed to “hard” structural influences (eg economic structure of

society). Secondly, *internal factors* of the entrepreneur vary between predominating economic objectives with a minimum green orientation on one side, and a sustainability orientation combining economic, ecological and social/ethical objectives on the other. Green entrepreneurs in this view show different levels of commitment to sustainability issues and their motivation can be differentiated along distinct context variables.

An empirical approach to conceptualize entrepreneurial objectives is proposed by Linnanen (2002). From his large sample of green start-ups two categories of drivers of eco-business sectors are deduced: *external drivers* in this view are first the geographical influence (ranging from local, to regional, to global), secondly the reason for market emergence (by regulation or by voluntary decisions of market actors), and thirdly the degree of enforcement of environmental standards. *Internal drivers* are deduced from the entrepreneurial motivation structure. Accordingly, sustainable entrepreneurs follow either their predominant desire to change the world, or their predominant desire to make money, or a combination of both.

Table 1 summarises influencing factors that may give rise to the phenomenon of entrepreneurial behaviour oriented towards sustainability from the literature.

Table 1: Conceptual dimensions in sustainable entrepreneurship theory

Conceptual dimensions	Schaltegger 2002	Walley and Taylor 2002	Linnanen 2002
External	Market choice	Structural influences	Geography, market, and regulation
Internal	Priority of environmental business goals	Orientation of entrepreneurial mindset	Entrepreneurs' desires

Whereas current knowledge on influencing factors of sustainable entrepreneurs provides a good starting point, they also have shortcomings which need to be addressed. Firstly, the factors suggested within the external dimension are too general and do not appear to be valid for sustainable entrepreneurs exclusively. And secondly, regarding the methodologies applied precise outlines of sample selection and/or data collection procedures are lacking.

As regards the first point mentioned, a common characteristic lies in the assumption that bringing an innovative idea to life depends of structural environmental factors and of the entrepreneurial attitude regarding a sustainable vision for business development. These dimensions represent the traditional approach to conceptualizing entrepreneurial behaviour: a combination of factors reflecting contextual factors on the one hand, and the entrepreneurial personality on the other.

As a consequence, the resulting typologies do not appear to be valid for sustainable entrepreneurs exclusively. All of them may just as well be applied to a variety of different entrepreneurial situations that do not necessarily have anything to do with the triple-bottom-line concept. For instance, Michael Dell's successful entrepreneurial career would fit into any of the three frameworks when stripping off their environmental value base: Dell had a clear vision of becoming a player in the mass market and saw his role in changing the competitive system to better serve customers' needs; there were structural influences from the economic domain (eg, global market potential) and his mindset was profit-oriented combined with a clear desire to change the world.

Given that the external dimension doesn't sufficiently differentiate between sustainable and traditional entrepreneurship, "sustainability" would mainly be explained by internal factors, ie by the entrepreneurial mindset. This conclusion is also supported by the findings of a study of entrepreneurial start-up processes in Germany, which showed that the most crucial factor for environmental considerations is the entrepreneur him- or herself (Schick et al. 2002). Similarly, based on a profound analysis of the relevant entrepreneurship literature Spence et al. (2005) argue that the vision and entrepreneurial orientation of an owner/manager of a small and medium sized enterprise (SME) are instrumental in the integration of sustainable development practices in its business model.

Secondly, the studies give rise to methodology concerns. For example, Walley and Taylor's (2002) suggested factors are not supported by any empirical data. Schaltegger's framework has only stood a preliminary test by a sample of seven case studies. Linnanen's concept seems most advanced in this respect. He has spent more than ten years creating and managing environmentally oriented business ventures in Finland (Linnanen 2002, 72).

In addition, we observe that some of the empirical studies seem to suffer from a sampling bias. For example, the case study results in Schaltegger's sample appear to validate the suggested framework in the first place. Quite unsurprisingly however, since their selection is biased by the fact that all were taking part in the RIO Management Forum in Lucerne, Switzerland, in the year 2000, and can thus be seen as belonging to the group of leaders in environmental management (Schaltegger 2002, 53). Similarly, Linnanen (2002) offers no detailed description of how the data were actually gathered.

As a result, we suggest that advancing our knowledge on the influencing factors of sustainable entrepreneurship needs to be based on empirical studies with a sound research design, sampling approach and data analysis.

By acknowledging the findings from the reviewed studies as well as their shortcomings discussed above, our own study focuses on the internal factors differentiating sustainable from other forms of entrepreneurial behaviour. In addition, we conducted a comprehensive empirical field study including ten case studies. Special care was given to the sampling procedure, the operationalization of the research question, and the data collection and analysis. The research question investigated can be formally stated:

Which are the internal factors motivating sustainable entrepreneurs "to take it the hard way", ie to start a business venture which attempts to balance the three objectives of sustainability from the outset?

The empirical research presented in this paper is outlined as follows: In the next section we will first develop a set of criteria for sample selection. Subsequently, the sampling and data collection procedure is described in detail. In the data and results section we will then report our findings regarding the effective motivational factors and visions of sustainable entrepreneurs as well as their resulting business concepts. Finally, based on our findings we will draw some basic conclusions regarding the nature of sustainable entrepreneurship and present implications for further research as well as for management practice.

EMPIRICAL STUDY

Sample Selection Criteria

In this paper, start-ups are defined as small and medium-sized companies that have been founded no earlier than 5 years prior to this study. This restriction makes it more likely that the founder-entrepreneurs are not only still part of the new company whilst the study was carried out but also have a clear picture of how the start-up process was realized.

Walley and Taylor (2002) confine their study to founders of green businesses which all have economic profit-maximising or -optimising objectives, thus excluding charities, voluntary and public-sector organisations. We believe that this is a somewhat arbitrary and overly narrow definition. Indeed, we found there are public-sector triggered initiatives meant to foster sustainable management practices which have as an objective to establish self-sustaining businesses. Thus, when adhering to the narrow definition some interesting insights into the nature of sustainable entrepreneurs would get lost.

Furthermore, as we have observed above none of the suggested conceptual frameworks clearly pinpoint the relevant criteria for selecting empirical examples which could be used as case studies of sustainable entrepreneurship. In particular, in the green entrepreneur typology proposed by Walley and Taylor (2002) structural factors such as 'soft' or 'hard' influences can be applied to any start-up in any domain of economic activity. Therefore, acknowledging its fundamental relevance we still believe that an investigation of the sustainable entrepreneurship phenomenon must more clearly focus on the elements differentiating green start-ups from other categories of business concepts.

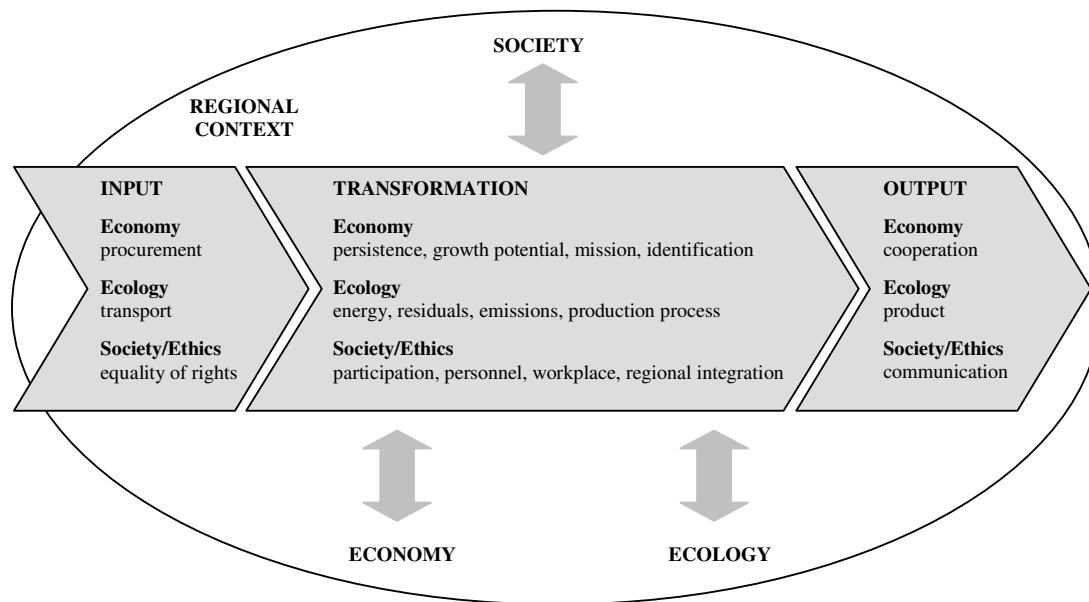
In their internal dimension Walley and Taylor (2002) concentrate more plainly on the sustainability aspect: the respective criteria are 'economic' and 'sustainability orientation'. As a matter of fact, in coherence with the triple-bottom-line concept the core of sustainable entrepreneurship can be discerned in the way entrepreneurs envisage business concepts that offer innovative answers to the basic question of how these objectives can be met simultaneously, thus circumventing their partly contradictory nature. Therefore we propose a set of selection criteria that combines the fundamental aspects of sustainable entrepreneurship by undoubtedly focusing on the sustainability perspective.

As a consequence, relevant criteria must in the first place reflect the social-ethical, economic, and ecological dimensions. Sustainable development has been defined by the Brundtland commission as: 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987). Ever since this concept has been formulated and made public a rapidly growing body of literature has been dealing with the challenge of its operationalization. Several authors have made attempts to operationalize sustainability at the national and/or regional level (see for instance Hart 1999, Liepach et al. 2003, and especially for Switzerland Bundesamt für Raumentwicklung 2004, Kanton Berne 2005, Kanton Solothurn 2004).

With respect to sustainability reporting for existing companies indicator systems have been developed (see for instance Clausen et al. 2002). Surprisingly however, the need of start-up companies to evaluate their business models from a sustainability point of view has not yet

been addressed. An approach to this task on one side clearly needs to be coherent so as to reflect the multi-faceted nature of sustainability comprehensively. On the other it needs to be sufficiently simple and pragmatic in the sense that it can easily be applied to entrepreneurial mindsets. Given the practical nature of the task our model integrates the input-transformation-output view of the firm with relevant indicators for the three dimensions of sustainability (fig. 1).

Fig. 1: Sample selection model



Following is a brief outline of the indicators and criteria used to select the start-up firms for our sample (table 2).

Tab. 2: Criteria applied to select case study sample

Area	Indicators	Description of criteria
Economy	Procurement	- use of input factors from regional suppliers
	Persistence	- clear perspective for company development in the long term
	Growth potential	- economic growth objectives, investment and innovation orientation
	Mission	- sustainability orientation is an integral part of company value system
	Identification	- employees share a common understanding of sustainability objectives
	Cooperation	- lasting relationships with local and regional partners support credibility
Ecology	Transport	- use of ecologically sound transport systems
	Energy	- alternative sources of energy and efficient use of energy consumed
	Residuals	- minimizing resource throughput, avoidance of residual and waste materials
	Emissions	- minimizing emission levels, exclusion of toxicity
	Production process	- methods of production management are environmentally sound
	Product	- adoption of ecological product life cycle perspective
Society/Ethics	Equality of rights	- addressing gender and generation issues, jobs for handicapped people
	Participation	- shared establishing of business objectives, support of community activities
	Personnel	- active development of employees' competences, fair rewarding schemes
	Workplace	- offering safe and hazard free jobs, health programs for employees
	Regional integration	- exchange with regional economy and local/regional cultural activities
	Communication	- honest and transparent information of the public about business activities

The criteria applied are in part quantitative; the majority, however, are qualitative in nature due to the fact that important characteristics of sustainable business models cannot be precisely measured (see Schaltegger 2002, 53). These criteria permit a rough screening of entrepreneurial initiatives and start-ups in order to derive a sample of case studies which offers relevant insights into the nature of sustainable entrepreneurship.

Data Collection

In March 2006, a preliminary list of start-ups located in Eastern Switzerland was developed. Besides information sources that are available to the public (eg internet, business index) we used contacts from personal networks to complete a list of 120 SMEs deemed as potentially relevant. From this list, a rough screening was performed to extract a sample of 20 firms which were then evaluated against the sustainability criteria by use of a scoring model. As a final result, the case study sample was defined for closer investigation. All of these 10 cases were founded after the year 2000 and had high potential scores on the relevant sustainability criteria.

After making contacts with the companies, the case study research was initiated by a self-assessment of the founder-entrepreneurs to ensure sample validity. In April/May 2006 semi-structured interviews were carried out focusing on the firms' historical development, the relevance of innovation, entrepreneurial mindset and value creation from the sustainability perspective, and managerial problems during the start-up process. In addition, available documents were analyzed to develop an in-depth and comprehensive picture of the individual cases.

DATA AND RESULTS

Profiles of case studies

In almost all cases, the start-ups were co-founded by two or three personalities. All have strong personal ties with Eastern Switzerland, either as natives or as long term inhabitants of the region. The start-up teams having varied intentions for their business development, all of them saw their ventures as undertakings involving high levels of risk. In order to effectively deal with this factor a variety of solutions can be observed regarding their respective legal constitution: three of them were limited liabilities, two owner-managed, one business corporation, one cooperative, one foundation, and two of them were voluntary associations.

In combination with their enhanced risk positions, founders had to solve major problems in terms of financing their projects. For the case of Switzerland, all of the constitutional solutions mentioned offer specific advantages as regards the raise of initial funding. In nearly all cases, these funds were predominantly raised from private sources. Initially, they were evaluated as standing too far outside of the conventional focus of business projects apt to public subsidies. However, for the remainder private start-ups were seen as a means to provide a base for gaining access to public financial resources in later projects stages.

Given that the dominant industries in the region of Eastern Switzerland are tourism, services, and agriculture, start-ups in our sample roughly represent its economic structure: four of them are in distribution and marketing, two in tourism and hospitality, two in retailing and services,

one in manufacturing and one in construction. The firms had between 1 and 20 employees and an annual turnover from kCHF 50 up to CHF 1 mio.

In the following we will first give an outline of some of the essential context variables and then discuss the findings concerning the motivation of the interviewed entrepreneurs, their entrepreneurial vision, and finally their business concepts with regard to sustainability objectives.

Context variables

The region of Eastern Switzerland is situated in between three main poles of economic activity delimiting the central European Alps within the triangle of Zurich, Switzerland, Munich, Germany, and Milan, Italy. Its topographic diversity is distinguished by the alpine environment, the intra-regional configuration of which represents a layout dominated by natural borders. Thus its principal mode of economic development can be characterized as non-agglomeration. As a consequence, economic activities are concentrated more along the edges of the region as compared to its central space. Like in other parts of the Alps, migration of economic activity follows centrifugal forces to its boundaries.

Within the alpine expanse a high dependence of the tourism industry is a historical peculiarity. However, the region has traditionally had important economic stakes regarding the trans-alpine shipping of goods, thus giving ample opportunity for the development of trade- and service-oriented industries. Moreover, there are important assets as far as its natural environment is concerned. An intact nature, the beauty of its alpine scenery coinciding with market trends demanding biological nutrition, environmentally sound products, and health oriented leisure. The necessity of long-term survival in an alpine environment being deeply rooted in its culture, its claim for sustainable development is perceived as highly authentic. In particular, in its cultural heritage strong links to the idea of sustainability can be discerned. After all, the population in the Alps has always been forced to adapt its lifestyle to the prevailing scarcity of natural resources.

Only recently, Swiss regional policy instruments for preserving and developing the economy in the alpine region have been evaluated and are concurrently under complete revision. As a result, economic actors are about to re-position themselves with the intention of maintaining their access to the respective public subsidies.

Sustainable entrepreneurs' motivation

Against this background the sustainable entrepreneurs' motivation we have explored in our case studies may be delineated as self-sustained initiatives aiming at preserving and furthering the local and/or regional economic activity. In many cases this simply translates into keeping the value creation within the region instead of letting it migrate to the agglomerations and towards the boundaries. The intention in the first place is to create jobs for the inhabitants and to prevent the region from degenerating any further. Many entrepreneurs said they wanted to give back something of value to their region. In their eyes, the best way to do this is to proactively create a future-oriented sustainable economic activity and employ people.

In addition, some of them had an even more demanding intention in that they actually "want to change the world" (Linnanen 2002), at least in a regional context and/or in certain

industries. Also, a continuous improvement of their business systems was found to be a motivation in order to keep the longer term perspectives for their businesses intact.

Entrepreneurial vision

The entrepreneurial vision for the most part of the cases was to create something innovative that was hitherto inexistent. The concept of sustainability in their eyes offers a more demanding set of objectives as compared to simply 'build a business that makes profits'. Many of them were looking for the explicit challenge to demonstrate to the world that its promises can be met only in a creative and radically new way. In so far, there was a strong resonance to be found with the idea of becoming pioneers in a regional context. When talking about their future perspectives they expressed images of a flourishing alpine environment with respect to the sustainability criteria (see also Rockey 2005).

Surprisingly, fundamentalist approaches to sustainable venturing were found to be a clear minority. Most of the entrepreneurs had an outright pragmatic perspective on building their business and showed a strong commitment to make their projects happen. As a typical trait of the entrepreneurial mindset, they all showed a total identification with their visions. A common expression was to envision a future where the greater public would pay respect to the pioneering entrepreneurs in that they made something true that was thus far viewed to be impossible.

Business concepts and sustainability objectives

As a result, regarding business objectives entrepreneurs consider economic objectives more as a restriction in the sense that if profit goals cannot be met in the longer run, their venture will be unsuccessful. Similarly, in the majority of the cases ecological objectives were seen more as a constraint as opposed to subordinating all other aspirations to the goal of environmental protection.

Over all, in coherence with the triple-bottom line concept all objectives emerged to be quite outbalanced. However, a relative dominance of social and ethical objectives can be recognized. We believe that one reason for this lies in the fact that our sample consists of rather young enterprises in a domain where clear conventions regarding how to measure success have not yet been established. Moreover, since sustainable entrepreneurs are starting their ventures into 'uncharted waters', few guiding experiences have been made before and therefore continuing support from the public and all relevant stakeholder groups appears to be fundamental.

As a consequence, business models reflect this circumstance by emphasizing the need for effectively generating and enhancing network relationships not only with business partners, but also with the local and/or regional communities and the general public. All of them contain a clear perspective on creating value for the region as a whole.

SUMMARY AND CONCLUSIONS

The discussion of a selected number of conceptual models from the literature has shown these approaches are adaptations of general entrepreneurship models to the specific preconditions of green, environmental, and/or sustainable oriented management practices. They are not generic in the sense that from a sustainability perspective basic innovative approaches to entrepreneurship are deduced. Consequently, we have argued that regarding the concurrent state of conceptualization 'sustainable entrepreneurship' can be viewed as a sub-form of general entrepreneurship models which merely emphasizes certain value sets. In other words, if the attribute 'sustainable' is substituted for any other value system, the basic insights into the (internal and external) drivers of entrepreneurship will stay the same.

By more narrowly focusing in on sustainable ventures according to the triple-bottom-line concept our findings from the case study sample suggest first that sustainable entrepreneurs obtain a strong motivation from the catalyst role they can play in regional development. Above all this stresses the values they help create for the regional economy as well as the social system they form integral parts of.

Secondly, we found that sustainability as an entrepreneurial guiding scheme can be viewed as a way of balancing business objectives by moderating various groups of stakeholders, including the ecological environment. On a general level, no clear predominance of any of the sustainability objectives may be determined. Thus the entrepreneurs' contribution lies in the fact that their over-arching objective entails precisely the intricate balancing of all three dimensions.

Finally, in a very basic sense the pre-eminent role and the ensuing mission of entrepreneurs have been defined as generating and enhancing economic activity which in turn increases welfare for the economy and the society as a whole. The patterns of entrepreneurial behaviour we have derived from our case studies render support to this view. Sustainable entrepreneurs are social activists who promote and conduct activities which generate social and economic values on a regional level.

Regarding further research on sustainable entrepreneurship we suggest first that the set of criteria applied for sample selection in our study should be validated from a normative as well as from a theoretical point of view. Secondly, enlarging the case study sample should offer more profound and detailed insights into the nature of sustainable entrepreneurs. In particular, the catalyst role this sort of entrepreneurs seems to play in a regional context according to our findings should be tested in empirical studies from other regions, on a European as well as on a global level.

With respect to managerial implications we suggest that entrepreneurs who wish to start up sustainable ventures in the first place should come to terms with the various aspects that will determine the triple-bottom-line of their business concepts. Our proposed set of criteria may help as a starting point to proceed with this sort of assessment. Finally, start-up entrepreneurs will find it useful to evaluate their own entrepreneurial mindset as regards the system of sustainability values applied in practice. Here, the findings from our study offer some basic insights for self-evaluation.

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