ENTREPRENEURS AS CHANGE AGENTS TO MOVE COMMUNITIES TOWARDS SUSTAINABILITY

Laura MacKay
Ann Scheerer
Tomomi Takada

School of Engineering
Blekinge Institute of Technology
Karlskrona, Sweden

19 November, 2005

Abstract:
This thesis argues that since the current global economic system contributes to the degradation of local economies and communities, alternative economic models based on multiple self-reliant economies led by community-based entrepreneurs could create a basis for a more sustainable global society. The research questions work to clarify how this vision of an alternate economic structure could become reality, and identify a gap in the skills base of current progressive entrepreneurs. Employing the method of backcasting and using an iterative research dynamic between the current reality of progressive entrepreneurs, as understood through case study interviews in four countries, and a vision of entrepreneurs as community-based change leaders, a new concept of entrepreneurship emerges in community sustainability entrepreneurship. The results point to four interactive skills for entrepreneurs, specifically that entrepreneurs a) hold and realize a vision of sustainable enterprise within sustainable community, b) support community needs through an ability to capitalize on community assets, c) develop competency in sustainable development and d) participate effectively in networks. Conclusions detail specific steps that can be taken by entrepreneurs, community development professionals and academics to realize the vision of entrepreneurs as community-based change leaders.

Keywords:
Sustainable development, sustainability entrepreneurship, community development, social entrepreneurship, eco-preneurship, community entrepreneurship, entrepreneurship, sustainability.

Acknowledgements

We would like to thank all of the people who made this thesis research possible, for their time, valuable assistance, and generosity of intellect. In particular, we hold respect and gratitude for:

- Progressive entrepreneurs Anders Abrahamsson, Hiroshi Aoyama, Liz Crocker, Hans Eek, Suzanne Fielden, Vic Opperman, Alicia Silva, Petter Sjöström, Ian Thomson, and Steven Villegas, who took time out of their busy schedules to help us understand their work.

- Henrik Ny and David Waldron, our academic advisors, who afforded close scrutiny to successive drafts and assisted us in development of clear structure.
- Saralyn Hodgkin of The Natural Step Canada, for her insight, positive energy, good advice, and inspiration.
- Dr. Karl-Henrik Robèrt, Dr. Göran Broman, and the team at the Blekinge Institute of Technology for their courage in development of a Masters program based on strategic approaches to sustainable development.

- Dr. Bengt Johanisson, who connected us with his own research, entrepreneurship PhD students, and a wonderful seminar opportunity with William Gartner at Växjö University.
- Chris Lindberg and the staff at Simon Fraser University's Centre for Sustainable Community Development, for their support and generosity of time at the Super Sustainable British Columbia conference.
- Alan AtKisson, for expertise lent to us in formulating our research approach and focus.
- Per Carstedt, for a courageous and inspirational path to follow in biofuels and entrepreneurship.

- Wayne's Café in downtown Karlskrona for their embrace of our Masters class - English-speaking wireless-seeking sustainability freaks!

Executive Summary

System: Current Global Economic Paradigm

Based on neoclassical economic theory, the current global economy promotes economic growth often at the expense of society and the biosphere on which it depends. Driven primarily by achieving financial returns for shareholders, transnational corporations within the current global economic paradigm contribute to a global monoculture, weakening the social fabric of communities and compromising the health of the biosphere.

The current neoclassical economic paradigm is challenged by ecological economists and sustainable development professionals who believe economic systems should be driven by human scale development. In shifting attention, ecological economic models attempt to more fully value and account for the individual, the community, and the natural world [2, 3, 12].

Success: Healthy Local Economies

Economic systems composed of locally-rooted, self-reliant economies create a basis for a more sustainable global society. Healthy local economies engage locally-owned enterprise, community stakeholders and institutions that encourage sustainable development as the foundation of local policy.

It is increasingly understood that economic, social, and environmental sustainability are highly interrelated. This integration takes place naturally in healthy communities, demonstrating that local linkages – matching a community's needs with its own resources – are critical for sustainable community development.

Local economies are a valuable means for the creation of healthy communities. The revival of healthy local economies is referred to in recent literature variously as glocalization (Colin Hine), local living economies (David Korten), economies of place (Michael Shuman), the new economy (David Korten), the restorative economy (Paul Hawken), economic democracy (Michael Shuman), local self-reliance (Michael Shuman), and the next industrial revolution (Amory and Hunter Lovins, Paul Hawken).

Community leaders who realize the needs of local people and leverage the community's assets – such as entrepreneurial capacity - demonstrate the power of possibility. In light of the need to develop healthy local economies, it is proposed that communities encouraging development of innovative entrepreneurial efforts addressing local issues support movement in the direction of sustainability.

Strategy: Support for Community Sustainability Entrepreneurs

The unit of analysis used in this study is the individual entrepreneur. The research questions examine how entrepreneurs can use their drive and ability to innovate new forms of sustainable enterprise in the best interest of their communities and the planet. This study proposes a new type of entrepreneur – a *community sustainability entrepreneur* (CSE) – as a change agent who has the creativity and drive that motivates new possibilities, while informed by an assessment of local needs and assets, operating through the local market, and guided by socio-ecological principles of sustainability.

Actions and Tools: Key Interactive Skills

A new frame of reference for entrepreneurship is presented, for those engaged with sustainability, local economic development, and sustainable community development. With the goal of developing more effective leaders in the role of community change agent, opportunities to strategically

develop community sustainability entrepreneurs are identified, analyzed and discussed.

Research Questions and Methodology

An initial information search and analysis led to the following research questions:

1. What type of entrepreneur will move communities towards sustainability?
2. Compared with this type of entrepreneur, what is the current reality of progressive entrepreneurs? and;
3. What are recommended interactive skills to strategically guide entrepreneurs in a new role as change agents to move communities towards sustainability?

Entrepreneurs are analyzed from their own perspective as well as the perspectives of academics and professionals, and from an international viewpoint including Canada, Japan, Sweden, and the United States. Data sources include literature review and primary case study interviews. Results are drawn from many perspectives on what is presented as an emerging entrepreneurial phenomenon.

A scientifically relevant principled framework for sustainable development is adopted and a vision of sustainable entrepreneurship within a sustainable society is derived from this framework. A comparative analysis examining current progressive entrepreneurship as distinct from a vision of community-based sustainability entrepreneurship informs the work. The authors move iteratively between a desired future vision of community sustainability entrepreneurship and the current reality of progressive entrepreneurship in order to identify interactive skills listed below which could bridge the gap; skills considered essential for an ideal type community sustainability entrepreneur to lead change towards sustainability in their respective communities.

It is proposed that community sustainability entrepreneurs benefit from four interactive skills and abilities:

- to hold and progressively realize an impassioned vision of sustainable enterprise within a sustainable community and world;
- to be able to identify community needs and capitalize on community assets;
- to understand and continuously develop competence in sustainable development;
- to participate eagerly and effectively in networks

Conclusions and Further work

In conclusion, recommendations are offered for the further development of community sustainability entrepreneurship, addressing entrepreneurs, community economic development professionals and academics:

For Entrepreneurs
- Develop recommended interactive skills;
- Network with other entrepreneurs and stakeholders with an interest in moving communities towards sustainability;
- Develop as a role model for other entrepreneurs and industry by shaping future business models and new technologies;
- Develop a 'glocal' vision (think globally, act locally) to expand inspirational influence beyond the local community;
- Lead the cutting edge of the market in sustainability innovation; and,
- Consider developing public-private partnerships to integrate across sectors.

For Community Development Professionals
- Recognize and support the role of community sustainability entrepreneurs;
- Adopt policies to address leverage points in the system that encourage sustainable community development, such as tax incentives and other market mechanisms; and,
- Provide incentives for new businesses to create solutions for local issues; and,
- Use available resources to provide sustainability education for entrepreneurs.

For Academics – Further Research
- Describe systematic methods of approaching community-based sustainability innovation; and,
- Identify sector-specific strategic leverage points for entrepreneurs, especially in transportation, energy and agriculture.

Finally, we show that development of community-based sustainability entrepreneurship, through interactive skill-building, is a key leverage point for local and global sustainability, while recognizing that diversity is essential as no one entrepreneur is going to change the whole world.

Contents

List of Figures and Tables

List of Figures

List of Tables

1. Introduction

Context

1.1.1 Globalization and Local Communities

Globalization can be considered to be the ever-increasing integration of local and national economies into the global economy through trade, investment rules and privatization, aided by technological advances. The rules of the global economy reduce barriers to trade and investment and, in the process, typically reduce democratic controls by nation states and their communities over their economic affairs. The process of globalization is driven by the growth model of neoclassical economics, and is occurring increasingly at the expense of society, the natural environment, and labour, resulting in rising inequality in the world [1].

As the current global paradigm supports the growth of multi-national industrial corporations, it does not traditionally take local communities' values and needs into account. In the dynamic of globalization, many communities around the world, representing microcosms of society-at-large, have been adversely affected both socially and ecologically [2].

According to Chilean economist Manfred Max-Neef [3], human scale development is "focused and based on the satisfaction of fundamental human needs, on the generation of growing levels of self-reliance, and on the construction of organic articulations of people with nature and technology, of global processes with local activity, of the personal with the social, of planning with autonomy, and of civil society with the state."

Max-Neef offers five postulates describing a new economic paradigm [4]:

1. Economy serves people; people do not serve the economy.
2. Development focuses on people, not objects (i.e. the more you consume, the more you are).
3. Development is not only about growth. Growth is not only about

development.
4. No economic progress is possible in the absence of ecosystem services.
5. The economy is a subsystem of a larger finite system so permanent growth of the physical aspect of the economic system is not a possibility.

Some experts assert that in order to reverse the current trend of globalization, local economies of place must be developed that provide the means for satisfaction of basic human needs locally, within the constraints of socio-ecological principles for sustainability [2, 3, 5]. Addressing the transition towards a more sustainable global society at the community scale is most relevant because: collaborative decision-making is more feasible between local sectors, organizations and disciplines; direct democracy is most feasible at this level; local community authorities are most often the decision-makers around transportation, water supply, energy supply, waste management and land use planning; the reliability of information and economic signals increase on a local level; and the localization of supply and demand is a key strategy in the dematerialization of the total net global economy. [6].

Reclaiming the power of local economies is a significant area of research, within the context of globalizing trends. Increased interest in this area can be witnessed in the increasing amount of material published around glocalization by Colin Hines, local living economies by David Korten, economies of place by Michael Shuman, the restorative economy by Paul Hawken, distributed economies by Thomas B. Johansson, and the next industrial revolution by Amory Lovins, Hunter Lovins, and Paul Hawken.

1.1.2 A Vision of Sustainable Communities

We propose that any vision of success for a sustainable community is guided by basic socio-ecological principles of sustainability, with respect for and understanding of the limits of natural ecospheric systems. A vision of success would not contribute to the increased consumption of resources that adversely affect the health of the environment and society. Instead, a sustainable community is continually adjusting to meet social and economic needs of its residents while preserving the local environment's ability to

support it [7]. Basic principles of sustainability provide outer constraints for a community's specific long-term vision and values, often grounded by the culture and history of place. A community may initiate a process to explicitly articulate its long-term vision, such as Vancouver, Canada's 100-year plan by cities[PLUS] (cities Planning for Long-term Urban Sustainability). [8] Alternatively, a community vision may be held implicitly within the community's social fabric and local stories of meaning.

The success of a sustainable community can be understood as its resilience to outside circumstances, such as power outages caused by unforeseeable climate events and financial market collapses. Community resilience is often motivated by a strong sense of shared vision and values and continuous movement towards sustainability. The figure below provides visual representation of factors influencing community resilience.

Recovery of humanity

- Foster meaningful job and life – self-fulfilment
- Create social networks and sense of community

Solving Social Problems

- Provide services to satisfy local needs
- Preserve nature and reduce impact on environment

Community Resilience

Succession and Creation of Local Culture

- Stock local knowledge and techniques
- Maintain local infrastructure

Establishment of Economic Bases

- Utilize local resources and knowledge
- Sustain and create employment
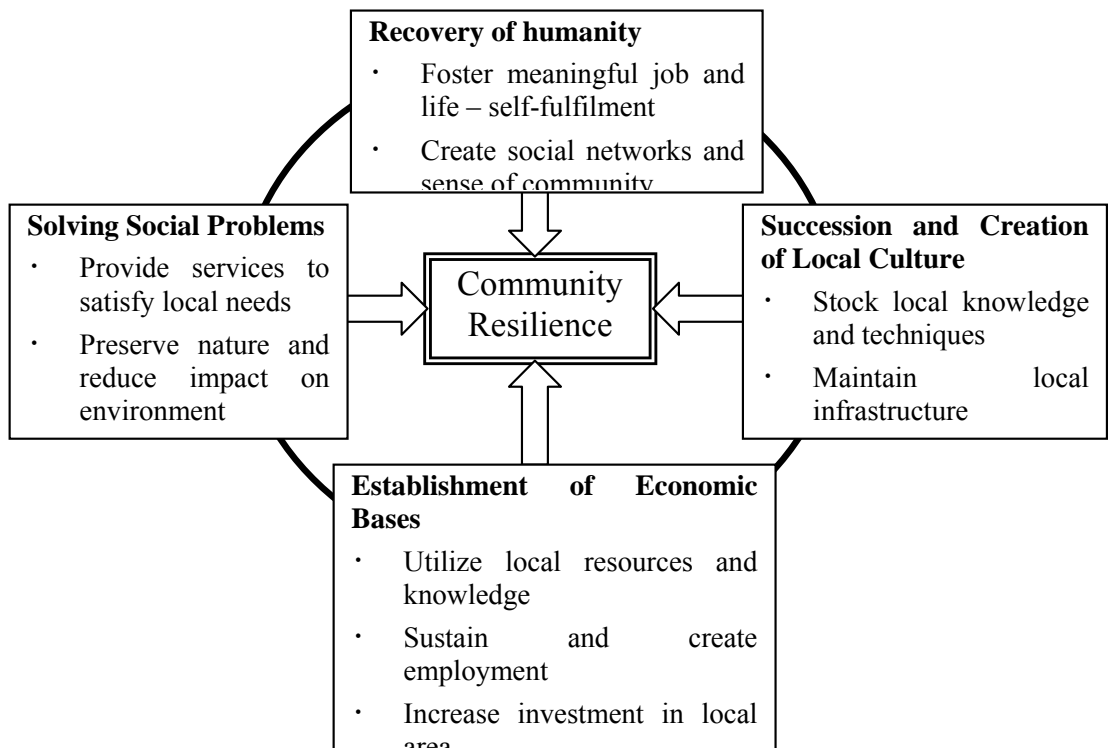- Increase investment in local area

Figure 1.1 A model for community resilience
Reference: [9]

Local community success is considered within the context of the global trends and dynamics described above. Glocalization is an innovative strategy addressing the issues of globalization and facilitating empowerment of local community response. "Glocalization is of enormous importance because it brings us from the global question down to issues at the human scale, and to issues of humanity and people" [10]. A glocal view implies consideration of global reality within local decision-making. Additionally, glocalization implies the promotion of local and regional diversity, and networking among localised business units as the origin of and basis for collective entrepreneurship that can exploit global opportunities [11].

### 1.1.3 Local Enterprise in Movement towards Sustainability

Local communities may be able to move most effectively towards sustainability by developing localized economies based on community enterprise. One of the keys to community resilience, as demonstrated above, is the development of local economies, and the synchronistic fulfilment of cultural, social, and environmental aspects as most intelligently orchestrated by those "close to the ground": local entrepreneurs. In competition with globally operating corporations, small local enterprise may be at a disadvantage in the short term due to limited economies of scale, marketing and media power. At the same time, small locally-rooted enterprise has the potential to thrive, building community resilience and moving communities towards sustainability by effectively utilizing local pools of knowledge, resources and social networks [12]. Entrepreneurs with a sustainable community vision may have a unique ability to identify an innovative niche [12] in creation of local enterprise, simultaneously fulfilling community needs and enhancing local economic development. We propose that entrepreneurs with such a vision are the change agents capable of moving communities towards sustainability.

Often communities embrace change initiatives prompted by local crisis, such as loss of a major employer in the local economy or increased industrial pollution in local watersheds. As distinct from community reaction on these types of events, local entrepreneurs create local enterprise and encourage a more proactive approach, inspiring rather than

necessitating community movement towards sustainability. Entrepreneurs are change agents in communities through their will to create new goods or qualities of goods, new methods of production, new markets, new sources of supply, and new organizational forms. [13]

1.1.4 Entrepreneur – Community Dynamic in Movement towards Sustainability

The dynamic between local entrepreneurs and their communities in a healthy system is a mutually reinforcing relationship that operates in a positive feedback loop (Fig 1.2). The values and goals of the entrepreneur enhance and reinforce the goals of the entire community. For example, a description of the figure below, from one end of the loop, shows the values and vision of the community inspiring the entrepreneur, stimulating the energy and creativity for enterprise formation, and the new enterprise is designed to move the community towards sustainability in a way that also satisfies the entrepreneur's own drive and motivation. The new enterprise inspires community members in its commitment to sustainability and community vision, inviting people to change the way they think about the future of their community, and deepening the reality of the perceived shift towards sustainability. Community movement towards sustainability consequently increases and the enterprise thrives due to its anticipation of increased community movement towards sustainability.
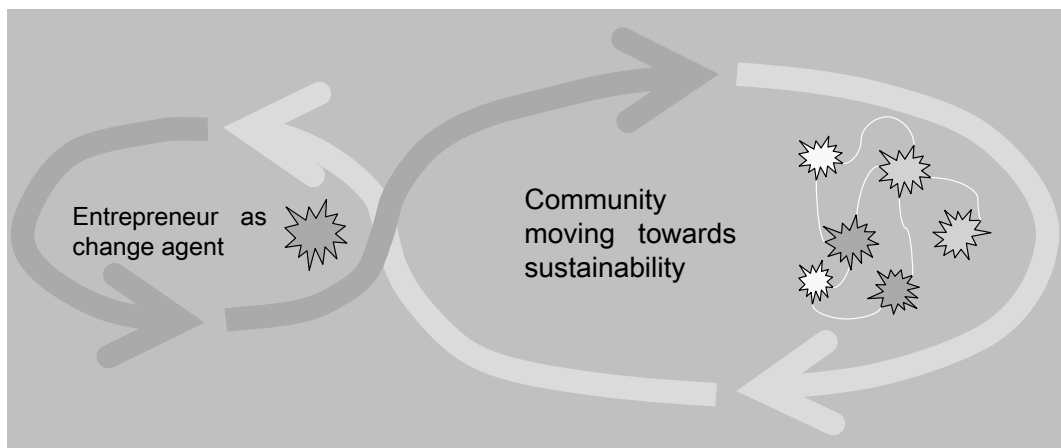
Figure 1.2 Mutually reinforcing dynamic relationship of entrepreneurs and communities they operate within in movement towards sustainability

1.1.5 Entrepreneurs as Change Agents in Community

Entrepreneurs have the potential to lead the mutually reinforcing relationship with their community towards sustainability; to be change agents catalysing movement in the direction of increased local market power. They recognize local economies as a means, not a goal. The goal is sustainable communities. The path is sustainable development. We introduce the term community sustainability entrepreneur (CSE) to refer to entrepreneurs with this understanding.

In light of the need to develop healthy local economies, it is proposed that communities that encourage and develop innovative entrepreneurial efforts to address local issues can support movement in the direction of sustainability. In particular, this study identifies key interactive skills supporting progressive entrepreneurs in movement towards a new role as change agents in their communities (Figure 1.3). Recommendations are made for the enhancement of these key interactive skills in the progressive entrepreneurial population.
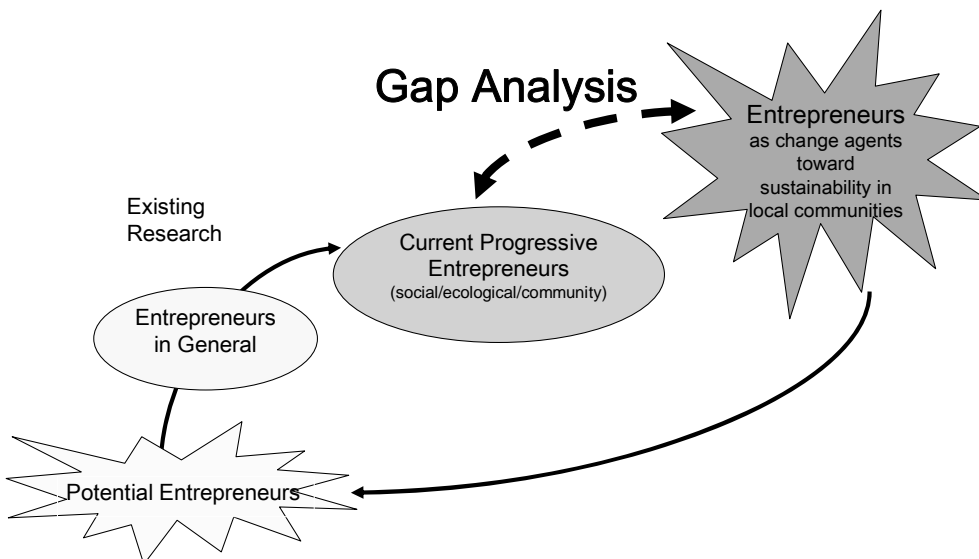
Figure 1.3 Gap identification between current progressive entrepreneurs and future vision of entrepreneurs

Entrepreneurs may benefit from this study, seeking alignment with and understanding of emerging reality. The recommended interactive skills provide a solid basis to guide entrepreneurs and communities strategically towards success in the long term.

Community economic development professionals and local policy makers may take an interest in this study for the potential it suggests, identifying a rich new area for local community growth and capacity building. The development of the skills and abilities of individuals as community-based entrepreneurs is a flexible platform for decentralized and enduring positive change in communities.

Academic interest in our work may focus on the emerging phenomenon of sustainability entrepreneurship and the entrepreneur's role within the glocalization of economies and cultures. Another new area of research describes systematized approaches to innovation towards sustainability.

Research Questions

In order to better understand the role of entrepreneurs in community movement towards sustainability, the following questions were devised to guide our research:

Question 1 (Q1): What type of entrepreneur will move communities towards sustainability?

Question 2 (Q2): Compared with this type of entrepreneur, what is the current reality of progressive entrepreneurs?

Question 3 (Q3): What are recommended interactive skills to strategically guide entrepreneurs in a new role as change agents to move communities towards sustainability?

Scope and Limitations

Reflecting our diversity - Canadian, American, and Japanese - and our situation of studying in Sweden, we collected data from these four countries to offer a multi-cultural perspective of progressive entrepreneurship and community sustainability entrepreneurship. However, with just three months for research and limited travel, our thesis is based mainly on literature review and interviews with a small sample of experts and progressive entrepreneurs in these countries. At the outset, we had hoped to gain more insight on cultural differences, but realized that our proposed conclusions in a multi-cultural respect may be lacking verifiability.

We interviewed ten progressive entrepreneurs and have attempted to offer broad conclusions based on this limited sample size, as we believe these progressive entrepreneurs to be representative of the larger population. However, we hold ourselves responsible for any misrepresentation of the current reality of progressive entrepreneurs and acknowledge that there are many sectors that we have not represented in this study.

2. Methods

This section provides detail on the means of answering the research questions.

Research Approach

2.1.1 Iterative Research Design

We designed our research approach including the method of backcasting from basic principles of success [5]. This method is used alongside establishment of a common understanding of the broader system and three-step iterative process described below. The specific iterative steps include: visualizing and describing the desired future; understanding and describing the current reality: and developing strategies or pathways to make the desired future a reality, working creatively with the tension between current reality and the desired future.

First, Understanding the System and its Sustainability Constraints: by sharing the researchers' mental model of the broader system including entrepreneurs within communities within the global economy and biosphere for readers in the Introduction, understanding is established around the context and meaning of the research.

Then, Three-Step Iterative Process
1. Identifying Desired Future: Identifying visions and solutions in a desired future is the next essential element of our iterative process. In our study, Research Question 1 primarily involves brainstorming solutions and visions that comply with sustainability constraints, or success principles, of the wider system as defined above. In the case of this research, principles of success for sustainable community development and interactive skills for community sustainability entrepreneurs as change agents moving communities towards sustainable development are the desired future. Since the desired future can be informed by leading aspects of current reality, an

iterative process begins through the joint identification of current reality and desired future.
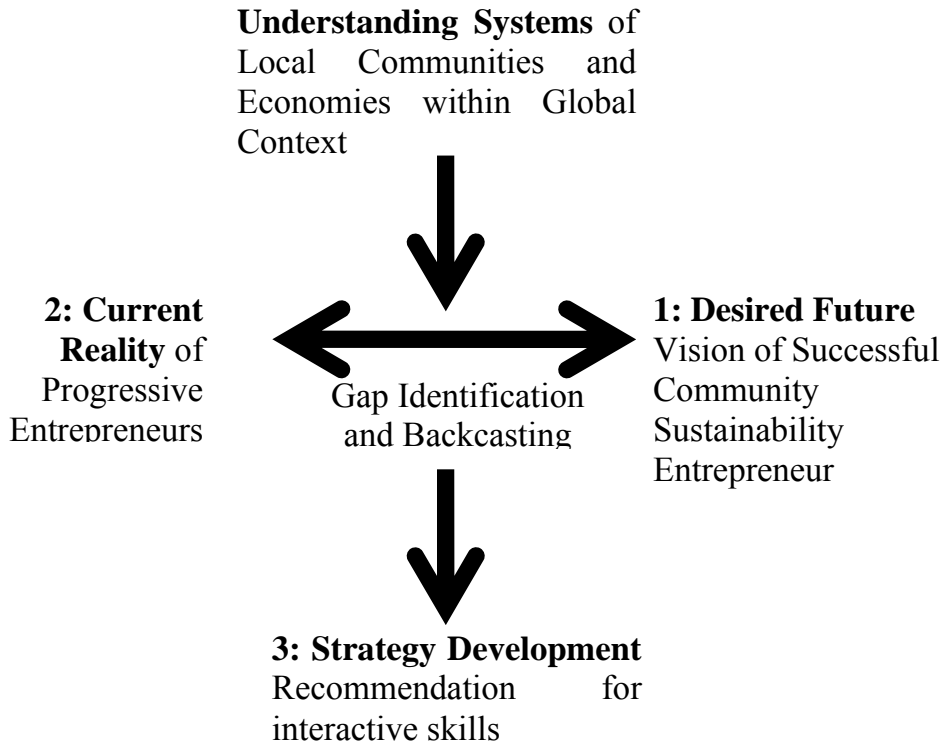
And

2. Identifying Current Reality: Exploring and benchmarking the current reality of progressive entrepreneurs is the next essential element of our iterative process. By backcasting in Research Question 2, current reality is scrutinized from the lens of a desired future ideal type of entrepreneur that would move communities towards sustainability, established in results for Research Question 1. The visioning exercise is required to gain an accurate picture of current reality, that is, everything that is principally wrong when viewed from a desired future success point of view. Seeing the fullest possible picture is a prerequisite for avoiding new problems, while fixing perceived current problems.

3. Finally, Developing Strategies: There are many ways of moving from current reality towards the desired future, from status quo towards success in the defined system in compliance with principles and endpoints for success. Asking strategic questions prioritizes various proposed pathways to success. In the case of this research, the result is strategic prioritization of interactive skills for entrepreneurs based on an understanding of current reality viewed through the lens of the desired future. In Research Question 3, interactive skills are selected based on a "yes" answer to three key questions:
1. Will this interactive skill bring entrepreneurs closer to compliance with the desired future of an entrepreneur that moves communities towards sustainability?
2. Is this interactive skill possible to develop further, so that it doesn't lead into a blind alley (i.e. is it a 'flexible platform') and,
3. Is this interactive skill likely to generate a good return on investment such as building business relationships, strategic partnerships, etc.?

By using this approach, our iterative research design is structured as in figure below.

Understanding Systems of Local Communities and Economies within Global Context

↓

2: Current Reality of Progressive Entrepreneurs

←→

Gap Identification and Backcasting

1: Desired Future Vision of Successful Community Sustainability Entrepreneur

↓

3: Strategy Development Recommendation for interactive skills

Figure 2.4 Iterative research design

The iterative nature of our approach is based on the understanding that the practice of generating strategies through forecasting without backcasting has two major problems: (i) it may perpetuate current problematic trends into the future, and (ii) it may lock participants into studying details of a future that is uncertain anyway, rather than focusing on the major issues of concern. And it is also understood that backcasting without forecasting puts unnecessary constraints on the process of decision-making. In our approach, then, backcasting and forecasting necessitate each other. [14]

2.1.2 Logic and Inference

In this thesis and particularly in the development of an ideal vision (Q1), collective experience and individual team experiences in entrepreneurship development, community development and sustainable development inform and influence the presentation of information. Team expertise is used in the

logical and deductive development of the ideal type of entrepreneur that moves community towards sustainability.

2.1.3 Triangulation

In order to identify the current reality of progressive entrepreneurs (Q2) and test our model of recommended interactive skills (Q3), concepts are examined from three different perspectives. We interviewed academics, consulting professionals, and progressive entrepreneurs to gain differing perspectives on the same phenomenon. This approach makes triangulated analysis possible with a more rigorous and broad examination of the hypothesis.

Methodology for each Research Question

The following section provides details of the methodology used for each research question.

Question 1: What type of entrepreneur will move communities towards sustainability?

To answer Question 1, we developed a definition of the ideal type of entrepreneur who moves communities toward sustainability.

The approach used to develop a definition was to:
- Collect sources through:
  - Literature review on entrepreneurship, innovation, sustainability, sustainable development, community and local economy;
  - Interviews with experts concerning the main concepts; and,
  - Attendance of sustainability conferences on business, community development, and entrepreneurship.
- Apply these various theories and findings to create a definition of the type of entrepreneur who moves communities towards sustainability.

Question 2: Compared with this type of entrepreneur, what is the current reality of progressive entrepreneurs?

To answer Question 2, we wanted to understand the current reality of progressive entrepreneurs.

The approach used to investigate the current reality of progressive entrepreneurs was to:
- Collect sources through:
  - Literature review on ecological entrepreneur, social entrepreneur, and community entrepreneur;
  - Interviews with experts concerning the main concepts; and,
  - Case study interviews with progressive entrepreneurs.
- Apply the definition of a community sustainability entrepreneur to the current reality of progressive entrepreneurs and identify the gap between them.
  - Cross comparison between case studies to identify trends, and comparison of trends with ideal type.

Question 3: What are recommended interactive skills to strategically guide entrepreneurs in a new role as change agents to move communities towards sustainability?

To answer Question 3, we explored and identified recommended interactive skills to support entrepreneurs moving communities strategically towards sustainability.

The approach to explore interactive skills was to:
- Collect data:
  - Literature review on networking, community development and resilience, principles of sustainability and business management;
  - Interviews with experts concerning the main concepts; and,
  - Case study interviews with progressive entrepreneurs.
- Analyze the gap between a set of "ideal" interactive skills of CSE based on literature review and input from experts, and those skills currently used by some progressive entrepreneurs.

Data Collection

Initial data collection began with literature reviews of social, ecological, and community entrepreneurship. At the outset of the thesis project, it was clear that these types of progressive entrepreneurs are currently active in creating enterprises to address social, ecological, and community problems and that society was in turn supporting such enterprises proving that these types of change agents are making a difference. Clearly though, even with a passion for a sustainable world, these types of entrepreneurs are not necessarily grounded in a common framework of sustainable development. With this realization it was decided to conceptualize through literature review and knowledge of the socio-ecological sustainability principles a definition of an ideal CSE (Q1) and find out what progressive entrepreneurs may be lacking in order to strategically move towards sustainability (Q2 and Q3). Thus, four interactive skills of a community sustainability entrepreneur were determined based on a review and discussion of current academic literature around social, ecological and community entrepreneurs.

In order to test the appropriateness of our understanding of a community sustainability entrepreneur, progressive entrepreneurs, and the desired interactive skills (Q1, Q2 and Q3), interviews were conducted with professionals and academics in the field (see interview questionnaires in Appendix B) and with ten progressive entrepreneurs from Canada, Japan, Sweden, and the United States. Case studies were developed highlighting ten progressive entrepreneurs and examined through the lens of the desired future of community sustainability entrepreneurship.

2.3.1 Literature Review

In conducting the literature review, we used periodicals, Internet resources, organizational reports, popular literature, and business literature. We also acquired information from material presented in the Masters Programme for Strategic Leadership towards Sustainability at Blekinge Institute.

The key words we used for searching academic databases and the internet were: entrepreneurship, innovation, change agent, intrapreneur, sustainability, sustainable development, community, social entrepreneur, sustainability entrepreneur, ecological entrepreneur, community entrepreneur, local economic development, sustainable community development, network, concepts, vision, strategic management, etc. We searched with these key words individually and in combination.

2.3.2 Interviews with Experts

We conducted interviews with supporting professionals concerning the main concepts. We identified supporting professionals for entrepreneurs within academic research institutions, for-profit organizations, and non-profit organizations through literature review and from recommendations made by interviewees and academic advisors throughout the data collection process (Table 2.1).

Table 2.1 Professionals interviewed

Name	Organization	Location	Date	Viewpoint
Marilyn and Alexandre Mehlmann	Fenix Gruppe	Stockholm, Sweden	17 March, 2005	Professional
Kazuhiko Kawasaki	Hokkaido Tokai University	Stockholm, Sweden	18 March, 2005	Academic
Alan AtKisson	AtKisson, Inc.	Stockholm, Sweden	18 March, 2005	Professional
Cindy Butler	Community Capital Development	Seattle, Washington, US	March 23, 2005	Professional
Chris Lindberg	Simon Fraser University Centre for Sustainable Community Development	Vancouver, BC, Canada	March 23, 2005	Academic
Mark Pomerantz	Social Profits	Seattle, Washington, US	March 22, 2005	Professional
Roy King	Social Venture Group	Seattle, Washington, US	April 6, 2005	Professional
Harriett Stevensen	Seattle University Center for Entrepreneurs	Seattle, Washington, US	April 7, 2005	Academic

Saralyn Hodgkin	The Natural Step Canada	Ottawa, Canada	March and April, 2005	Professional
Alex Steffen	WorldChanging.com	Seattle, Washington, US	March 23, 2005	Professional
Bengt Johannisson	Scandinavian Institute for Research in Entrepreneurship	Växjö, Sweden	23 May, 2005	Academic

2.3.3 Case Studies

The first step in formulating case studies of progressive entrepreneurs was to generate criteria concerning which type of entrepreneur would be appropriate to include in the study.

Criteria for selection of progressive entrepreneurs for case studies. Each progressive entrepreneur selected was chosen based on the following criteria:

- Accessible and willing participants: The case study candidates are voluntarily willing to participate. They are also accessible, meaning they have the time for the necessary interviews either in person, on the phone, or over the Internet.

- Enterprises in Canada, Japan, Sweden, and United States: The choice of these countries reflects our team's diversity of nationality (Japanese, Canadian, and American) and also the advantage of our study period in Sweden. The intent of choosing case studies from different countries was to foster cross-cultural findings and to develop relationships with like-minded professionals in our respective home countries.

- Entrepreneurial initiatives: Those who transformed their ideas into enterprises, adding value not only economically but also socially and environmentally.

- Community-based: The term describes entrepreneurs of a particular locality who own and operate an enterprise that is considered an

asset to the community. Community-based entrepreneurs do not only work for the community, but are or choose to be integral.

- Sustainability-focused: Each of the progressive entrepreneurs interviewed stated in their business purpose a desire to be sustainable.

- Small or medium size business (SME): The definition of SME differs widely from country to country, and depends on the phase of economic development as well as prevailing social conditions. Various indices are used to define an SME, such as number of employees, invested capital, total amount of assets, sales volume and production capability. For example, according to the European Commission's recommendation report [15], the category of SME is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.

After developing these preliminary criteria, the second task was to find and select case study participants. Case study candidates were suggested by contacts at some national offices of The Natural Step (TNS), by consultants, by academics, and through personal meetings at conferences attended.

In order to gain knowledge of how progressive entrepreneurs operate, interviews were conducted with ten progressive entrepreneurs that met the criteria above. Interview questions were created based on an initial definition of a CSE and the four interactive skills. (See Appendix B)

After completing the interviews, the information was synthesized into case studies (for abbreviated versions, see Appendix A). The case studies were developed to address key findings and common themes around the definition and key interactive skills of a CSE.

2.3.4 Conferences and Workshops

As exhibited in the table below, seven conferences and workshops were attended in Canada, Denmark, Italy, Sweden, and the United States concerning sustainable development in order to broaden our collective

knowledge of the current reality of community sustainability efforts and to identify the perception of sustainability issues in enterprise activities. The information gathered from these events provided varying perspectives, insights, and knowledge about sustainability and sustainable development in business, academic and municipal arenas.

Table 2.2 Conferences and workshops attended

Event	Host organization	Location	Date
Society for Organizational Learning (SoL) European Sustainability Group Forum	SoL European Sustainability Group	Bari, Italy	22 March 2005
4th International Conference on Business and Sustainable Performance	World Business Council for Sustainable Development	Aalborg, Denmark	14-15 April, 2005
Northwest Sustainability Conference	NW Center for Sustainability Education	Seattle, Washington, US	22 April, 2005
Sustainable Business Practice Circle	EcoPraxis	Seattle, Washington, US	26 April, 2005
Sustainable Seattle Indicators Workshop	Sustainable Seattle	Seattle, Washington, US	30 April, 2005
Super Sustainable British Columbia	Simon Fraser University, Centre for Sustainable Community Development	Vancouver, Canada	5 May, 2005
The FSF-NUTEK Awards seminar – William Gartner	Växjö University	Växjö, Sweden	23 May, 2005

We applied various theories and findings from the data collection phase to create a definition of a community sustainability entrepreneur and to strengthen the argument for the recommended interactive skills of a community sustainability entrepreneur. The initial versions of the CSE definition and interactive skills provided a basis for establishing criteria that were used in selecting ten entrepreneurs for case studies, demonstrating the iterative approach used throughout the research process.

Data Analysis

2.1.4 Application of Triangulation

In order to articulate an appropriate visionary definition of a community-based sustainability entrepreneur and recommended interactive skills, we drew from and consulted many sources. This multi-perspective approach of triangulation [16] in social science research provides a more rigorous understanding of reality, as a phenomenon is viewed from different perspectives. We considered four perspectives in our research, informing an iterative dialogue in order to add depth and verifiability to the thesis:

1. From an academic perspective, we conducted a literature review and interviews with academics regarding progressive entrepreneurship, and applied a systems level understanding of sustainability.
2. From a collective personal perspective, we drew upon previous experience in the areas of entrepreneurship and community development and our common knowledge of a whole systems approach to sustainability.
3. From a professional perspective, we interviewed experts in the fields of entrepreneurship, sustainability, and community development, and vetted our understandings with them.
4. From a practical perspective, we interviewed ten progressive entrepreneurs and analyzed the nuances and subtleties of their realities in contrast with our theoretical understanding.

When viewed from many perspectives, an emerging phenomenon such as community sustainability entrepreneurship is understood in a more comprehensive and subtle way. The academic pursuit of truth moves toward a 360-degree perspective on the object of study. In this research, the limitation of number of experts interviewed may provide less than a 360-degree perspective.

2.1.5 SWOT Analysis of Progressive Entrepreneurs

We identify and present strengths, weaknesses, opportunities, and threats (SWOT) through the analysis of interviews with ten progressive entrepreneurs. We framed the entrepreneur questionnaire (Appendix B) with the goal of comparability among responses. The sample size is small at ten and not statistically significant within the larger population of progressive entrepreneurs so the analysis points to limited conclusions and encourages future research.

2.1.6 Comparative Analysis on Recommended Interactive Skills

In particular, we analyzed the presence of key interactive skills within the population of progressive entrepreneurs. On an individual basis and as a collective population, we backcast to see progressive entrepreneurship from the lens of an ideal vision of community-based sustainability entrepreneurship and analyze the gap in moving current entrepreneurs strategically towards the vision, through capacity building in key interactive skill areas.

3.   Results

Community Sustainability Entrepreneurship (Q1)

In a visioning process and inquiry into the type of entrepreneur that serves community movement towards sustainability, key concepts in academic research, such as entrepreneurship, innovation, sustainability, sustainable development, community and local economy, informed an emerging profile. This profile was subsequently reflected and confirmed with experts in entrepreneurial development and participants at sustainability and business conferences.

A comprehensive literature review explores the concept of entrepreneurship and a developing sub-category of progressive entrepreneurship (which includes social entrepreneurship and eco-preneurship). Also presented is a growing body of research in sustainable development and sustainability, scientifically informed by socio-ecological principles and models of ecological economics. The definition of community is examined in an academic context, and community-based entrepreneurship is introduced.

3.1.1 Community and Sustainable Community Development

Community is commonly used in two very different senses. Each is quite reasonable, but they need to be clearly differentiated, especially when it comes to determining who the beneficiaries are and what the benefits are.

One meaning refers to any category of people who are related to each other by specific common interests and values: for example, the disabled, the members of the Catholic Church, women, immigrants, low-income people, artists. The other meaning specifies a category of people who are related to each other by living in the same particular locality, which implies that they

also have some shared values and interests, arising from their common locality. In this paper, we use the word community in the second meaning and define as:

> *A group of people who pool resources - such as natural resources, infrastructure, social systems, business and government services - to meet their needs within a specific geographic region.*

Sustainable community development, ensuring that the tools of economy can be built and maintained locally by a group of people through attention to social and ecological well-being, insuring their own long-term economic viability, is sometimes also referred to as movement towards local living economies or localization. [17] Sustainable community development is a strategy in response to economic globalization [2] and requires a range of small, local initiatives as diverse as the cultures and environments in which they take place. When hand-in-hand with policy shifts away from globalization, these small-scale efforts begin to leverage significant systemic change.

3.1.2 Sustainability and Sustainable Development

If communities are to move towards sustainability, it is helpful to have an understanding of both the goal and the means to meet that goal. A principled framework and definition of socio-ecological sustainability [5] was chosen for its compatibility with our methodology. Backcasting and our iterative research process benefit from the use of principles rather than scenarios defining the desired future. The principled definition of sustainability we use has also gained credibility through a process of scientific consensus building and offers a systems level approach to understanding the goal. By taking an upstream approach to sustainability, and understanding the broader systems within which problems occur, decision-makers are enabled to address problems at the source. Sustainability is the goal and sustainable development is the process of reaching the goal.
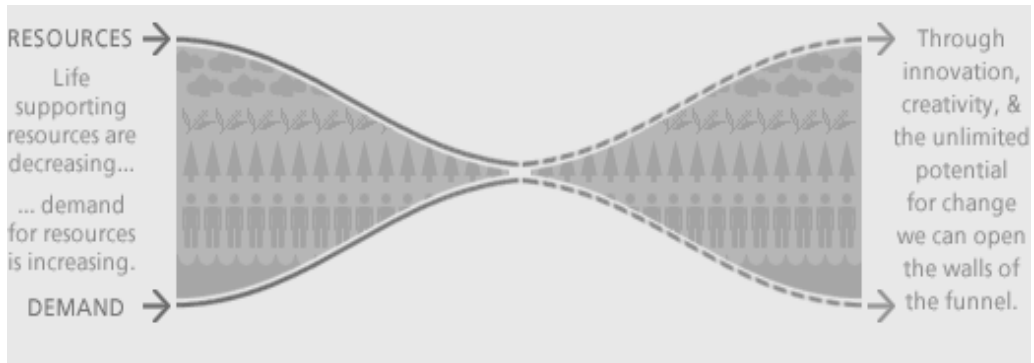
Figure 3.5 Funnel metaphor describing the biosphere system moving from unsustainability to sustainability and restoration
reference: [18]

The current global reality is depicted in Figure 3.5 as the decline of essential life-supporting resources for society's and nature's continued existence on the planet, such as clean air, clean water and productive topsoil. At the same time, society's demand for life-supporting resources is increasing. These conclusions are based on research developed by the International Geosphere Biosphere Programme (IGBP) and The State of the World reports by the Worldwatch Institute. Metaphorically, the current situation for people on the Earth can be viewed as a funnel where the walls are nearing intersection and there is diminishing room to manoeuvre.

With the awareness that all of life is subjected to this closing funnel – entrepreneurs, individuals, businesses, governments, families, schools, and natural systems – we have the opportunity to alter the course and be more strategic when making choices and long-term plans. Innovation, creativity and the unlimited potential for change can catalyze a shift toward sustainability and begin to open up the walls of the funnel to a restorative capacity.

Sustainable development is understood as creating new ways to live and prosper while ensuring an equitable, healthy future for all people and the planet. The widely referenced Brundtland Commission definition of sustainability elaborates, "…development that meets the needs of the present without compromising the ability of future generations to meet their own needs. [19]" The long-term perspective in all development activities is emphasized.

A working definition of sustainability includes four scientific principles that guide society to sustainability. These principles, also referred to as system conditions, must be met in order to achieve a sustainable society. They are as follows: [5]

In the sustainable society, nature is not subject to systematically increasing

1.   … concentrations of substances extracted from the Earth's crust
2.   … concentrations of substances produced by society
3.   … degradation by physical means
     and, people are not subject to conditions that systematically
4.   … undermine their capacity to meet their needs.

These four conditions provide clarification of the goal of sustainability. Sustainable development, then, or progress towards sustainability, refers to the creative and innovative pathways forward through non-violation of these conditions.

3.1.3 Entrepreneurship and Innovation towards Sustainability

Communities moving towards sustainability may be able to rely on local entrepreneurs to lead the movement. Entrepreneurs are leaders who have identified themselves as willing and competent enactors of innovation. A huge body of research on entrepreneurship consistently identifies the work of Joseph Schumpeter [20], whose concept of creative destruction informs the dynamic of economic cycles. In his view, the entrepreneur engages in a practice of creative destruction that continually revolutionizes and revitalizes the economic structure. Creative destruction is a "process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one." [21]

Further, according to Schumpeter, the entrepreneur is the innovator who implements change within markets through the carrying out of new combinations. The carrying out of new combinations can take several forms: 1) the introduction of a new good or quality thereof, 2) the introduction of a new method of production, 3) the opening of a new

market, 4) the conquest of a new source of supply of new materials or parts, 5) the carrying out of the new organization of any industry. The definition also emphasizes novel combinations of resources. Schumpeter equates entrepreneurship with innovation, when applied in a business context. Entrepreneurship in all economies of scale is the primary engine of development and growth, with innovation as a central dynamic element.

The root of the word entrepreneur comes from the French verb 'entreprendre' meaning 'to undertake' or 'to take between'. Schumpeter's entrepreneur is an innovator and leader, undertaking risk, taking ideas to a practical and demonstrative level, taking value from underutilized areas of the economy to areas of need.

Personal characteristics of entrepreneurs have been extensively documented. The following motivational factors for entrepreneurship have been distinguished [22]:
- need for achievement;
- desire for independence;
- job satisfaction from work;
- presence of entrepreneurial role model; and,
- risk taking

Further, the factors related to entrepreneurial success have been identified [13]:
- task-related motivation;
- skills and expertise;
- expectation of personal gain;
- new technologies; and,
- a supportive environment

Gartner et al.[23] move away from defining entrepreneurship at an individual level, but choose to perceive entrepreneurship as the emergence of a (new) business activity. In this view, entrepreneurship is not necessarily linked to individuals, but to wider organizing endeavours. Along these lines, The Entrepreneurship Centre at Miami University of Ohio [24] provides a useful definition of entrepreneurship:

> *Entrepreneurship is the process of identifying, developing, and bringing a vision to life. The vision may be an innovative idea, an*

opportunity, or simply a better way to do something. The end result of this process is the creation of a new venture, formed under conditions of risk and considerable uncertainty.

While we maintain the individual entrepreneur as the unit of analysis in our research, we also acknowledge this important reframing of the entrepreneurship field.

Entrepreneurs have been studied fulfilling a role within organizations; these entrepreneurial individuals are intrapreneurs [25]. Research focuses on means to increase the entrepreneurial characteristics and activities within organizations, thereby increasing innovation. We recognize the parallel between the new idea brought forward by the entrepreneur on the open market, and the new idea brought forward by the intrapreneur within a company.

To further clarify the role of entrepreneurs, the Diffusion of Innovation theory by Everett Rogers [26] helps, showing the change agents (entrepreneurs) as the carriers of innovation in a system, sparking movement through effective communication of a better way forward. Change agents also serve as intelligent intermediaries [27], bringing new combinations together, a role entrepreneurship students at Saginaw Valley University fulfil in circulating intellectual property developed and discarded by large companies to smaller companies. As communicators of innovation and agents of new combinations, entrepreneurs (and intrapreneurs) fill a leadership role, bringing mainstreamers and laggards forward towards the goals defined by leaders. Entrepreneurs epitomize the notion of becoming [28] and have a special ability to both recognize and actualize emerging realities [29]. Entrepreneurship, as widely defined beyond the individual enterprise, is a powerful instrument for changing society [30].

The entrepreneur enjoys hero status in our current economic paradigm – one whose values and proactivity lead the economy, triggering growth and innovation. The wealth of academic research on entrepreneurship indicates both the interest and the relevance of the topic area for a wide variety of audiences.

So, how do entrepreneurs do what they do? The key activity of entrepreneurs is innovation – "innovation is the specific tool of

entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service…" [31] The key activity for the entrepreneur in community movement towards sustainability is innovation towards sustainability.

Innovation is not simply the introduction of a competing product to the marketplace. Drucker shows that entrepreneurs not only create something new or something different, they change or transmute values, showing creativity on the deepest level. He explains, using McDonald's as a case study: "By applying management concepts and management techniques, by asking 'what is value?' to the customer, by standardizing the product, by designing processes and tools, and by basing training on the analysis of the work to be done and then setting the standards it required, McDonald's both drastically upgraded the yield from resources, and created a new market and a new customer. This is entrepreneurship. [31]"

Drucker explains that innovation does not have to be risky. There are systematic and purposeful approaches to innovation. Systematic innovation consists in an organized search for changes, and in the systematic analysis of the opportunities such changes might offer for economic or social innovation. He proposes seven sources of innovation [31], in decreasing order of reliability:
- The unexpected
- The incongruity
- Process need
- Changes in industry structure or market structure
- Demographics
- Changes in perception, mood, and meaning
- New knowledge

These sources of innovation suggest creative pathways forward, and challenge the entrepreneur to improve product, process, design approach and associated values.

It has been shown in many sectors that innovation, creativity, flexibility, and the multiplication of possibilities tend to increase with the establishment of limitations. T.S. Eliot, the poet, affirms, "When forced to work within a strict framework, the imagination is taxed to its utmost and will produce its richest ideas, given total freedom, the work is likely to

sprawl." Innovation is often increased when strict limitations are placed on both the concept under development and working process.

Entrepreneurs can innovate systematically as described by Drucker, and particularly when using a systems-based principled definition of sustainability they can innovate systematically towards sustainability. Also, as innovation can be triggered by constraints, innovation towards sustainability could possibly be triggered by the constraints of a principled definition of sustainability as provided by the four system conditions described above. In summary, Anne Gerlach explains the opportunity for sustainability-focused entrepreneurs [32]:

> *Sustainable entrepreneurship can be defined in a broad sense as innovative behaviour of actors in the context of sustainability, including actors from governmental and non-governmental, profit and non-profit organisations. In a more narrow sense, sustainable entrepreneurship is defined as innovative behaviour of single actors or organisations operating in the private business sector who are seeing environmental and/or social issues as a core objectives and competitive advantage… Sustainable entrepreneurs identify market opportunities for innovations concerning sustainability, successfully implement these innovations and create new products or services.*

Progressive Entrepreneurship (Q2)

Our interest dictates engagement with those entrepreneurs who have defined for their enterprise a purpose greater than financial return. Establishment of a baseline based on exposure to those entrepreneurs working towards social and ecological goals alongside financial return better informs a vision of the ideal desired future for entrepreneurship. What is the relationship of current progressive entrepreneurship with the type of entrepreneur discussed above who moves community towards sustainability? A literature review revealed the progress made by committed people operating enterprises in the areas of social entrepreneurship, community entrepreneurship, and eco-entrepreneurship. This thesis also provides a series of primary case studies along with expert interviews to fulfil the triangulated theoretical approach.
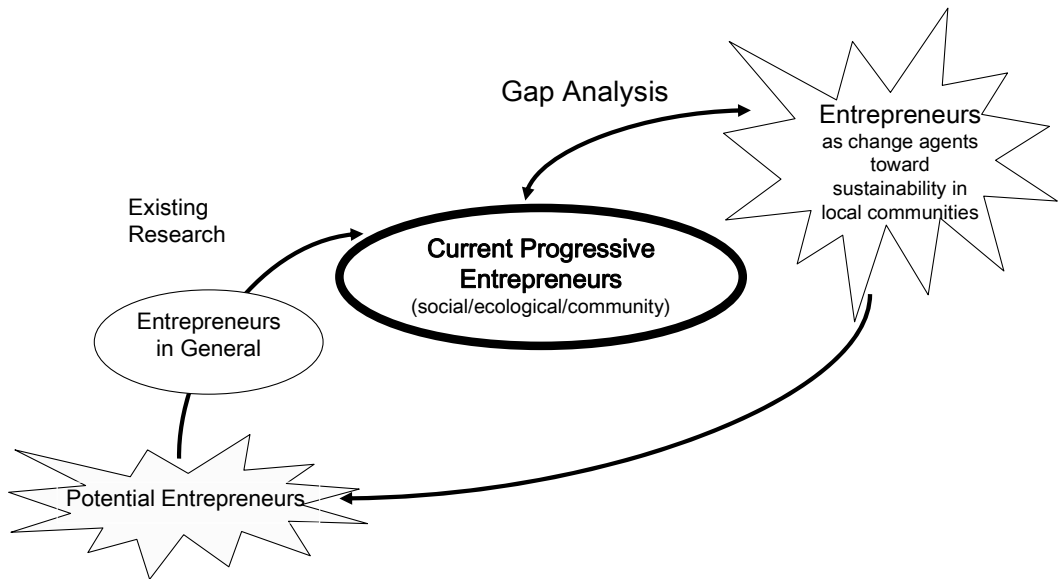
Figure 3.6 Identifying current reality of progressive entrepreneurs

3.2.1 Social Enterprise

Social Entrepreneurship. The Ashoka Foundation for Social Entrepreneurship defines social entrepreneurs as "people whose creativity and drive open up major new possibilities in education, health, the environment, and other areas of human need… just as business entrepreneurs lead innovation in commerce, social entrepreneurs drive social change" [33]. There is a distinction in the literature between researchers and organizations who limit social entrepreneurship to the non-profit arena and those who define social entrepreneurship as the leverage of market-based business models for the satisfaction and enrichment of basic human needs and social change. Our research demonstrates that social entrepreneurs can be socially progressive in both social and business enterprises, using a variety of business models, including for-profit, non-profit, cooperative, hybrid and other combinations yet to be conceived.

In particular, a socially responsible business is one that produces socially desirable products in a socially desirable manner [34]. A social entrepreneur, therefore, is one who starts an enterprise that produces

29

socially desirable products in a socially desirable manner, and further, tackles community social needs through entrepreneurial initiative [35]. The Canadian Centre for Social Entrepreneurship (CCSE) defines social entrepreneurship as the "combination of the heart of business with the heart of the community through the creativity of the individual" [36]. The Institute for Social Entrepreneurs further clarifies the social entrepreneur as the "individual who uses earned income strategies to pursue social objectives, simultaneously seeking both a financial and social return on investment."[37] Finally, J. Gregory Dees provides definition of social entrepreneurship as "the passion of a social mission with an image of business-like discipline, innovation, and determination". [38]

Further, social entrepreneurs play the role of change agents in the social sector, by:

- adopting a mission to create and sustain social value;
- recognizing and relentlessly pursuing new opportunities to serve that mission;
- engaging in a process of continuous innovation, adaptation, and learning;
- acting boldly without being limited by resources currently in hand; and
- exhibiting heightened accountability to the constituencies served and for the outcomes created.

Corporate Social Responsibility (CSR). Related to the concept of social entrepreneurship is a body of research around CSR, which refers to socially responsible missions adopted by large corporate operations. This area is also known as Business Social Responsibility (BSR). The World Business Council on Sustainable Development (WBCSD) defines it as:

> *The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.* [39]

Corporate social responsibility has many different dimensions. A socially responsible business treats its employees with dignity – for example, it pays employees a liveable wage, provides basic benefits, and does not engage in exploitative employment practices. Valuing the work of employees is not just a moral issue; it is also a business imperative. Employees are the most

important resource in any business and valuing their work makes excellent business sense.

Businesses are built into the fabric of communities. They provide goods and services to community members and in return receive continued and loyal patronage. [35] Business is also built into the ecosphere and the wider global context of society at large. Multinational business operations have brought a global focus to societal well-being and focused attention on issues of equity and health due to the development of CSR principles.

Social Venture. Social enterprise can also be conceptualized as a network of like-minded business owners in communities worldwide. The mission of the Social Venture Network (SVN), for example, is as follows: "Too much of today's business and economic activity operates at the expense of our biosphere and future generations. We believe in a new bottom line for business, one that values healthy communities and the human spirit as well as high returns. SVN members are a part of an expanding global network of pioneering entrepreneurs who share this vision and are helping to transform the way the world does business." [40]

Literature around social entrepreneurship, social venture and corporate social responsibility informs an assessment of the current reality of progressive entrepreneurship. Social enterprise can be recognized in business ventures that value community, employee and global well-being.

3.2.2 Ecological Enterprise

Eco-preneurship. Research on environmental entrepreneurship emerged in the late 1980s, with Burke and Elkington [41] showing that innovative business solutions could be used not only to improve the environment, but also to provide the basis for new business prospects overlooked by mainstream firms. The emergence of the concept of eco-efficiency allowed businesses to save costs through diminishing resource inputs. In the early 1990s, Bennett [42], Berle [43] and Blue [44] began to employ the terms green entrepreneur, eco-entrepreneur and its derivation eco-preneur. Others such as Larsen [45], built upon this definition. Most relevant to this research is a description given by Robert Issak at Pace University. He refers to a 'green-green business' as – "green in processes and products from

scratch, as a start-up, and, furthermore, intended to transform socially the industrial sector in which it is located towards a model of sustainable development." [46]

Eco-preneurs generally employ a life cycle approach to their business and product designs and operations, understanding and incorporating concepts of eco-efficiency and net energy balance, and remaining aware of business opportunities arising from government environmental protection regulations. Case studies show that eco-preneurs tend to employ a technological focus in their combination of ecological and profit-oriented goals [47]. Eco-innovation looks to the opportunities available in the shift to a more resource efficient and less ecologically harmful economy; a social, environmental and economic system more in sync with natural systems.

Literature around eco-preneurship informs an assessment of the current reality of progressive entrepreneurship. Ecological enterprise can be recognized in business ventures that reduce input of resources, intensify their use of necessary resources, reuse resources when possible, and substitute benign materials for those that are toxic and persistent and scarce in the ecosphere.

3.2.3 Community Enterprise

Following on the definition of community provided in the previous section, the term community-based entrepreneur refers to a resident of a particular locality who owns and operates an enterprise that is seen locally as improving the community. Community-based entrepreneurs do not only work for the community, but additionally choose to be an integral part of it [48]. It is this integration that allows a synergy to emerge in the dynamic between community and the local entrepreneur.

Community-based entrepreneurs understand the state of the community's social capital [49], see where it is damaged and in need of repair, and take action to restore strength. Furthermore, they work to empower others, create space for creativity and celebration, and gain strength from a wide network of alliances [48]. These entrepreneurs are often successful change

agents through their deep understanding of community and will for action and renewal.

Community-based entrepreneurs grow their enterprises in new ways, satisfying basic needs locally, creating more fulfilling and diverse jobs, building community self-reliance, providing new opportunities for ownership and keeping capital within the community [50]. There are a myriad of local benefits from the activity of community-based entrepreneurs.

Bengt Johannisson expands with this view of an entrepreneuring community member [51]: "The community entrepreneur makes the individual would-be entrepreneur aware of how his or her capacities as a member of the local community can be turned into a business venture. The community entrepreneur also provides the emotional commitment needed for action and helps the entrepreneur to concretely launch a venture."

Literature around community entrepreneurship informs an assessment of the current reality of progressive entrepreneurship. Community enterprise can be recognized in ventures that strengthen the local economy and demonstrate an intimate understanding of community needs, balanced with an ability to make use of often underutilized community assets.

3.2.4 Case Studies of Progressive Entrepreneurs

In order to learn more about progressive (social, ecological, and community) entrepreneurs that are currently making a difference in their communities, ten progressive entrepreneurs were interviewed and case studies were developed.

The biographies of the ten progressive entrepreneurs shown in the table below and the interview questionnaire are provided in Appendix A and B.

Table 3.3 Progressive entrepreneurs interviewed for data collection

Name	Enterprise	Location	Sector	Date interviewed
Liz Crocker	P' lovers Environmental Store	Halifax, Canada	Independent retail	11 May, 2005
Suzanne Fielden	Rocky Mountain Flatbread Company	Canmore, Canada	Restaurant and food manufacture	4 May, 2005
Ian Thomson	Bioenergy Corporation	Vancouver, Canada	Energy	4 May, 2005
Hiroshi Aoyama	Aburato Shoji	Shiga, Japan	Energy	3 May, 2005
Anders Abrahamsson	On A Mission	Vaxjo, Sweden and Kawempe, Uganda	Fair trade and Community Development	9 May, 2005
Hans Eek	Swedish Environment Institute	Göteborg, Sweden	Housing	11 May, 2005
Petter Sjöström	Swedish Energy System Transition AB	Göteborg, Sweden	Energy	11 April, 2005
Vicky Opperman	Sustainable Ballard	Seattle, Washington, US	Community development	9 May, 2005
Alicia Silva	Greener Lifestyle	Seattle, Washington, US	Home furnishing	28 April, 2005
Steven Villegas	Utilikilts Company	Seattle, Washington, US	Garment manufacture and retail	10 May, 2005

3.2.5 Summary

Through literature review, expert interviews, and case studies of progressive entrepreneurs, the current reality and emerging trends around progressive (social, ecological and community) entrepreneurship are identified.

The entrepreneurs interviewed are categorized based on our understanding of the type of entrepreneur they most closely resemble, from the progressive entrepreneurship research presented above.

Social entrepreneurs
Anders Abrahamsson is engaged through On a Mission in a search for viable sustainable business models, which build local economic capacity in Ugandan communities, and provide profit, which is managed in an investment fund with a mandate for social capacity building in those same communities. On a Mission addresses the alleviation of poverty in local Ugandan communities through the introduction of jobs, economic infrastructure, and education programs for human development.

Hiroshi Aoyama is operating a local fuel station in Shiga, Japan. He is driven to make a paradigm shift in the petrol station industry. He is transforming his own fuel station to a local ecology station: collecting recyclable waste from customers, selling second-hand automobile goods, and collecting, processing, and selling bio-diesel made of used cooking oil. As the number of fuel stations in Japan is more than that of post offices, he believes that the potential of fuel station to make social change is significant. He identifies as being a social entrepreneur.

Steven Villegas is the founder and owner of Utililkilts Company, which makes durable modern kilts for men. He is driven to create social change and to dare people to question what society tells them to be. The slogan of Utilikilts is "We Sell Freedom". The customers of Utilikilts have a common bond and have formed community as can be seen and felt by looking at the website www.utilikilts.com. The employees have gravitated to the company out of a shared purpose of social change and to create a new business model that celebrates the working class.

Eco-preneurs

Liz Crocker is the co-founder of P'lovers, an environmental department store, which makes dematerialized and environmentally redesigned household and gift items available, inviting people to live more sensitively with the Earth. Liz has been involved as an educator and entrepreneur in numerous volunteer activities in the local community, which leverage wider public movement towards ecological sensitivity.

Hans Eek is an architect based in Göteborg, Sweden with expertise in passive solar design. He has been involved in several passive solar housing projects since the 1970s. He also coordinated a municipal project to draw a vision of sustainable Göteborg in 2050, involving various stakeholders in the community. Currently he is working to disseminate his innovative model of a "house without heating" not only in his community and throughout Sweden, but also in Germany, Italy, Switzerland, and Japan.

Alicia Silva is driven to educate and inspire people towards making more conscious choices for the environment in their daily purchasing decisions. She inspires the community by offering natural, quality products at Greener Lifestyles. The choices of home accessories range from flooring made of abundant bamboo and cork, lamps of teak, to furniture made of natural materials such as natural latex rubber, organic cotton, and Forest Stewardship Council certified wood.

Petter Sjöström is driven to accelerate the transition of energy systems from dirty power sources (nuclear, fossil fuels) to clean power sources (solar, wind energy). He has been instrumental in the development and management of a feasibility study for a number of solar photovoltaic projects in cooperation with local city planners and regional county councils.

Ian Thomson's business, Canadian Bioenergy, provides alternative fuel choices produced from biological feedstocks to reduce dependence on fossil fuels. He is concerned about climate change and is driven to provide ecologically benign fuel alternatives for the people of British Columbia, Canada.

Community entrepreneurs

Suzanne Fielden and her partner started Rocky Mountain Flatbread Company pizza restaurant as a gathering place for the community of

Canmore, Canada, and as a way to promote the taste of sustainability, in the form of oven-baked organic pizzas. The company initiated a number of innovative community programs in the first year of business, including a Zero Emissions project connecting local businesses with high school researchers, a Local Heroes project connecting kids and community members, and a Responsible Entrepreneurship course in local junior high schools.

Vicky Opperman is all about bringing together the people in her community of Ballard to work towards sustainability and values building community self-reliance. She encourages sharing stories and building relationships through community projects such as community gardens, "buy local" campaigns, and community outreach events. It is just as important to Vic that people in the community connect and get to know each other as it is to accomplish community projects.

All of these progressive entrepreneurs share a passion for social change. They are all pioneers in providing products and services to improve their community and the world.

In general, the progressive entrepreneurs and experts that were interviewed shared insights about the current state of progressive entrepreneurship in relation to their community. The following points are a summary of these findings:

- Entrepreneurs speak of the intense personal growth they experienced as they increased their understanding of themselves and their role within the world in the start-up phase of their respective enterprises.

- Entrepreneurs would benefit from regular refreshment of a whole systems approach to sustainable development.

- Economic development authorities are driven by short-term agency goals to bring more jobs to their region, often focused on encouraging large industrial firms to relocate to their region. There is little attention paid to the long-term external costs of this type of economic development strategy (from interview with the Economic Development Authority of Greater Vancouver) and the possibility of community-oriented sustainable development.

- Community economic development authorities provide funding and support for disadvantaged communities often without education on sustainable development or an understanding at the institutional levels of the broader perspective of sustainable community development (from interview with Community Capital Development of Seattle).

- Professional consultants, support organizations, and venture capitalists have been developed in the past decade to further social entrepreneurship (i.e. Social Venture Network, Social Enterprise Group, Social Profits, and Triple Logic) and sustainable communities (i.e. Business Alliance for Local Living Economies, EcoPraxis, Sustainable Seattle, Sustainable Ballard, SeKom).

- An increasing number of progressive philanthropically- and entrepreneurially-oriented people are putting their money to work for the betterment of society and the environment and developing enterprises and/or supporting other entrepreneurs to start enterprises that address community sustainability issues (Joel Solomon of Renewal Partners, John Sage of PuraVida Coffee Company).

- Local business and development policies tend to favour corporations and status quo business operations rather than small and diverse firms addressing sustainability issues. At the same time, progressive enterprises are seeing the opportunity for change and are affecting policy and industry standards.

- Enterprises are structured as non-profit, for-profit, cooperative, or some combination thereof, such as hybrids. Anders Abrahamsson of On A Mission uses the hybrid approach, combining for-profit and non-profit operations under one umbrella Enterprises can also expand into franchises like P'lovers. No particular business structure holds advantage for the progressive entrepreneur.

- New technologies to solve sustainability issues are encouraged and are being developed at progressive universities (i.e. Blekinge Institute of Technology, Chalmers University, Göteborg University, Lund University, and Växjö University in Sweden, Simon Fraser

University in Canada, Bainbridge Graduate Institute and Antioch University in the United States).

- Progressive entrepreneurs are involved in a diversity of sectors, as can be seen in Table 3.1.

Key Interactive Skills for Entrepreneurs Moving Communities towards Sustainability (Q3)

To become a successful entrepreneur, it is important to encompass all aspects of the entrepreneurship pyramid illustrated below in Figure 3.7.
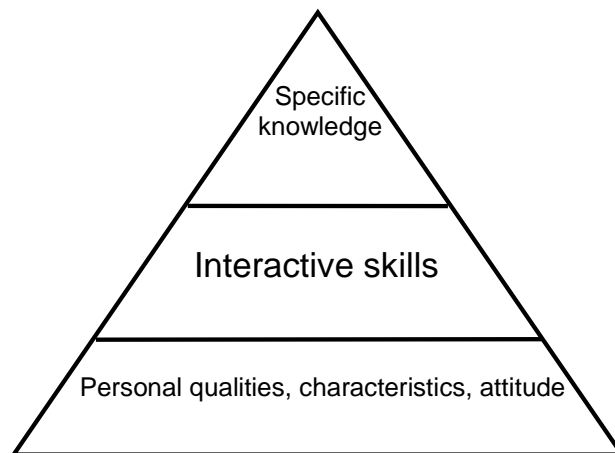
Figure 3.7 Entrepreneurship pyramid
Reference: [52]

The base of the pyramid relates to the personal qualities, characteristics and attitudes of an entrepreneur such as openness to new ideas or taking risks. A set of interactive skills, the middle layer, builds on this base. Interactive skills allow the entrepreneur to adjust to new situations, in a way that is in harmony with the base. Finally, as illustrated in the top level of the pyramid, the entrepreneur needs specific knowledge that will allow the most informed decisions to be made and the most appropriate operations to be formed with respect to the middle and base of the pyramid.

From the perspective of a CSE, the base of the pyramid includes characteristics such as personal passion with strong sustainability values, energy and motivation for sustainable development, use of profit as a tool for values, ability to visualize a sustainable future for the world, comfort as role model community leader, communication with a wide range of stakeholders, ability to innovate, keen observational skills, and continuous improvement through trial and error.

The middle of the pyramid, the interactive skills of a CSE, forms the focus of this study. Interactive skills allow an entrepreneur to adjust to new situations and to develop their capacity to be flexible in order to create a successful business. To move their communities towards sustainability, we identify four interactive skills considered necessary for a CSE to develop to handle the unpredictability in entrepreneurship and emerging knowledge around sustainability.

For CSEs, the specific knowledge at the top of the pyramid relates to their specific business niche. This may include renewable energy products, alternative fuels, organic agriculture or food products, manufacture from recycled materials or organic materials, or grassroots community change, to name just a few.

While all three areas are essential and interrelated for successful entrepreneurial development, this research focuses the middle of the pyramid, the interactive skills of a community sustainability entrepreneur. Through literature review and reasoning from socio-ecological principles, we identify four key interactive skills that we believe to be important to support the emergence of CSEs.

 The identified skills are all based on interaction allowing adjustment to changing environments and innovation to occur; interaction in the way an individual's desired future informs and shapes current reality, interaction of an individual's vision of sustainability with emerging scientific research in sustainable development, interaction of an individual with their community, and interaction of an individual with a broad range of stakeholders in enterprising activities. Interaction based on a compelling vision is common to entrepreneurs, as is their noted ability to interact with stakeholders. We add the skills of interaction with community and interaction with best

practices for sustainable development, as particularly important for the community sustainability entrepreneur we have identified.

First, as a foundation, a CSE needs an inspiring personal and professional vision based on sustainability principles. Their vision guides them in daily operations and is essential in keeping the bigger picture in mind as the stress and risk build in the start-up phase of new and unique enterprises in uncharted territories. The vision keeps the dream alive and inspires others to believe in and support their enterprise.

Second, a CSE is grounded in their community and possesses a deep understanding of the community's needs and assets. As a top priority, they consider how they can benefit their community through their business activities, through activities such as educating about sustainability, providing jobs, and providing a place for the community to connect.

Third, a CSE has a curiosity and willingness to continuously learn about sustainability. They are aware that sustainability means trying new approaches and being creative as they strive to be a role model for sustainability. They realize that community sustainability is really about coming together on how to make their community stronger and more resilient through the pursuit of sustainable development.

Fourth, CSEs are connected to networks in their communities and the world in order to be informed and share information with others. Communication through networks is essential for a CSE to keep pulse on their business and community, to adapt to meet emerging needs, and to maintain an enterprise that is culturally relevant.

The desired future is based on the development of these four proposed interactive skills, which are described in detail below.

3.3.1. CSEs hold and realize a vision of sustainable enterprise within a sustainable community and world

Theory Framework. Community sustainability entrepreneurs are visionary leaders. They are driven by their vision of a sustainable community and

world. They possess a clear view of current reality and a powerful vision of the future [53] and communicate it in every aspect of their personal life and enterprise. A community sustainability entrepreneur embraces a strong personal vision that permeates their enterprise, creating an atmosphere to create social change. Their vision inspires others to work together towards sustainable community development. Community sustainability entrepreneurs embrace the socio-ecological principles of sustainability along with their core ideology: their unique purpose, values, and strategic goals [54]. Their core ideology exhibits a strong sense of responsibility to their community.

Their long-term vision provides a compass for the business or organization within the community within the world. Competitive advantage goes to fast-moving people and organizations that embrace change and welcome innovation brought about by new advances in knowledge and understanding, technology and globalization. [55]

Roy King [56], Director of Social Venture Group, a consulting firm for social enterprise in Seattle, Washington explains that there are three tier questions that he recommends his social entrepreneur clients consider when structuring a social enterprise. The first is: "What are you trying to accomplish? What is your mission? Why do you exist in the world?" The second question is: "How do you operationalize that? What is your business model, your operational model to turn inputs into value?" The third question is: "What is the most appropriate legal structure for you to be able to do that?"

What are you trying to accomplish? What is your vision, your mission? Why do you exist in the world? There are two aspects to vision for a CSE: a personal vision that intrinsically drives the entrepreneur and a vision of the enterprise that they enthusiastically share with stakeholders to move towards the desired future of their enterprise and the community.

A CSE's personal vision comes from within. The ability to focus on ultimate intrinsic desires, not only on secondary goals, is a cornerstone of personal mastery and the vision of a CSE. Real vision cannot be understood in isolation of the idea of purpose, and individual's sense of why (s)he is alive. It is the goal pulling the CSE forward that makes all the work worthwhile [57]. CSEs are people with high levels of personal mastery.

They are extremely committed to their vision. They have a broader and deeper sense of responsibility in their work and in their community than others. They have a special sense of purpose that lies behind their vision and goals. For such a person, a vision is a calling rather than simply a good idea. They see current reality as an ally, not an enemy. [57]

How do you operationalize your vision? What is your business model, your operational model to turn inputs into value? In Built to Last [57], one key concept that conveys the most information about what it takes to build a visionary company is "Preserve the core, stimulate progress."

CSEs are visionary in how they strategically plan for long-term success. They are guided by their overarching vision and stimulate progress by being creative and flexible in their business model. They aspire to be role models for building sustainable communities as they educate their communities in sustainability issues covering off all aspects of their business. The builders of visionary companies seek alignment in strategies, in tactics, in building layout, in job design, in everything. [57]

As explained in Built to Last [57]: Instead of being oppressed by the tyranny of the OR, highly visionary companies liberate themselves with the genius of the AND – the ability to embrace both extremes of a number of dimensions at the same time. "A visionary company doesn't simply balance between preserving a tightly held core ideology and stimulating vigorous change and movement; it does both to an extreme."

Dee Hock, who has inspired the concept of chaordic organization, believes that there is a clear need to re-evaluate long-held notions of institutional organization and offers organizational possibilities for the future. He believes that there is an emergence of opportunities for complex groups to interconnect in ways that would have been difficult to imagine forty or fifty years ago. Hock points out successful groups are enacting a new way of thinking, managing on the verge of chaos and order to achieve their purpose. "Management expertise has become the creation and control of constants, uniformity, and efficiency, while the need has become the understanding and coordination of variability, complexity and effectiveness." [58] Hock explains, "Extraordinary insights emerge when there is realization that any concept of relationships that can be imagined can be codified and legally brought into being. The organization of the

future will be the embodiment of community based on shared purpose calling on the higher aspirations of the people."

Hock, in agreement with Roy King, explains that forming a chaordic organization begins with an intensive search for Purpose, and then proceeds to Principles, People, and Concept, and only then attends to Structure and Practice [58].

What is the most appropriate legal structure for you to be able to do that? CSEs realize that the legal structure of their enterprise may take on a variety of forms. They may organize their enterprises as consumer cooperatives, worker owned corporations, community corporations, partnerships, or family businesses [59]. In line with the principles of chaordic design, this third tier question can be equated to Dee Hock's Structure and Practice, which is considered only after Purpose, People, and Concept are determined.

According to David Korten, regarding community enterprises, "the excluded legal forms of enterprise are those that give a controlling interest to absentee owners, legally define organizational purpose primarily in terms of financial returns to shareholders, or confer special rights and immunities on its owners and officers not available to ordinary citizens." [59]

According to Roy King, there are a lot of trade offs in different types of legal structures, from legal restrictions to tax issues to funding issues. If a CSE has an idea, a vision and an idea of how to implement it, nine times out of ten they can feed themselves into an existing legal structure. While hybrid models exist, King feels that combining legal structures into new models needs to be researched more fully. However, CSEs are often willing to be innovative and test out new models as they are re-conceiving the way to make a difference [56].

Current Reality of Progressive Entrepreneurs. Key findings from progressive entrepreneurs in relationship to their idea of vision are presented below.

Liz Crocker
- Vision implies repositioning of retail as a space for dialogue, giving retail more of an educational role, as P'lovers helps people learn about "living more sensitively with the Earth".   - Push and pull dynamic between organizational form, strategic planning and vision.
Suzanne Fielden
- Very big vision of market potential for frozen pizza – providing a very high quality convenience food item, with an inspiring and enduring story of meaning derived from the enterprise's local community.   - Visioning process took three years to complete before business start-up phase.
Ian Thomson
- Realized a niche that was not being filled and had the vision and ability to innovate and create an enterprise to fill this niche. Ian explains, "It's about seeing an opportunity: looking at the situation and saying 'why not us?' You must have a vision that grabs people so that people in your networks want to support you."   - Views biofuels as a flexible platform for larger future vision of sustainable energy alternatives.
Hiroshi Aoyama
- The company has a strong traditional core value called "Sanpo-yoshi" (in Japanese, which means good for three directions, employees, customers and society.)   - Personal mission is to cause a paradigm shift in petrol station industry.   - Establishment a new business model of petrol station as local ecology station.
Anders Abrahamsson
- Really big mission, without the business there is "one force less to reach towards sustainability in a multi-local / inter-local process with, in the end, 6 billion plus co-workers".   55 member cooperative association organizationally flexible around changing strategies for fulfilment of the mission.
Hans Eek
Mission to create a good living environment for people and world, through planning and building energy-optimized houses.

• One of his famous works, terraced housing units without heating, has inspired many other architects and city planners.
Petter Sjöström • Mission of Switch is to accelerate energy system transition, switching from dirty (nuclear power and fossil fuel) to clean (solar and wind energy) power. • He has been involved in various non-governmental activities, but is now trying to create a business model by showing "doing good and doing well".
Vicky Opperman • Envisions that Sustainable Ballard is "a blueprint for every town USA." • Vic explains, "It tickles my brain to imagine what we as a community can do to make change together."
Alicia Silva • Depth of personal vision can be felt in the way she expresses the "need to develop our selves and raise our consciousness to really create an impact in society." • Alicia states her values as "sustainability, ecology, caring for the earth, creating a better place to live, and really making a difference in society."
Steven Villegas • The kilt represents a "flag for social change" by making people reconsider the way they were trained, starting to believe that there can be a better way for society to emerge. • Steven experienced a major personal transformation in his first few years of business in how he relates to the world. As he creates a new and unique business model, he deepens his vision of making real social change through his business.

3.3.2. CSEs are supportive of community needs through ability to capitalize on community assets

Theory Framework. CSEs are motivated and accountable to create new solutions for community problems. As CSEs tend not to be satisfied with the status quo, they are often creative in satisfying local needs. They

address the deeper needs not only of their employees, but also the needs of the community in which they operate.

CSEs are adept at finding new ways to re-energize under-utilized (and often discarded) local assets, such as people, buildings and equipment to satisfy unmet and often unrecognized needs. Even though community-based enterprises are often small or medium sized, they can compete with larger corporations and large production systems under new circumstances: utilizing new, small-scale technology, more flexible networks of smaller co-operative units. They supply more adapted solutions. They achieve large-scale benefits through networks of small actors [60].

As the literature and practice in this area demonstrate, community needs and assets can be categorized in various ways. For example, according to Professor Mark Roseland of Simon Fraser University in Vancouver, British Columbia, community capital is organized with community assets falling into natural, physical, economic, human, social, and cultural capital categories. [61] A community capital framework for conceptualizing sustainable community development may aid in assessing the usefulness and potential of various market mechanisms and business ideas for the development of more sustainable communities. A community capital framework may allow entrepreneurs to examine their potential impacts on each aspect of community capital to determine market mechanisms with potential for supporting sustainable community development.

At the grassroots level, the Business Alliance for Local Living Economies (BALLE) [62] has created a concept of "building blocks" to create a holistic vision of a local living economy in which entrepreneurs can understand their place in the diversity of products and services necessary for a healthy local living economy. BALLE's building blocks of a local living economy include enterprises addressing community needs such as food, housing, energy, clothing, community capital (banking, credit unions, investment), health care, well-being & recreation, transportation, habitat, landscaping and forestry, independent media / communications, arts, music, culture, education and advocacy, business development, professional services, technology, maintenance, cleaning products and services, tourism, and waste / recycling / re-use industries. Many of these building blocks are represented by the entrepreneur case studies.

Sharing a clear vision of sustainable community development and using such frameworks to identify needs and assets may help communities to work together, entrepreneurs and citizens of the community. CSEs can look to their communities to identify needs and areas for improvement, and thus bridge individual and community learning with the community as ally.

From the trust that develops between consumers and producers who know each other and share ideas and stories, springs potential to produce new products that offer significant value to a community. The figure below illustrates the potential role of CSEs as creators of a dynamic that results when entrepreneurial activities support community needs, which in turn strengthens community resilience and allows the community to capitalize on unique community assets, reinforcing more entrepreneurial efforts. This reinforcing feedback loop suggests that local enterprises with a connection to place can have a profound effect on community self-reliance.
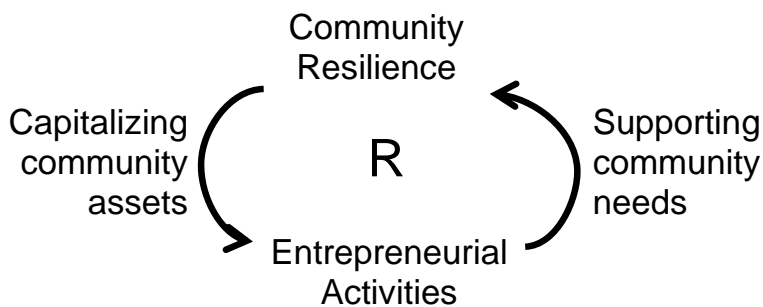
Figure 3.8 Reinforcing feedback loop between entrepreneurs and community

To a greater extent than large corporations with distant ownership, community-based small and medium sized enterprises (SMEs) are affected by the long-term economic health of their community. Local ownership tends to value more deeply the utilization of social capital, natural capital, and physical infrastructure. Because of this, community-based entrepreneurs are more inclined to manage their enterprises in a way that benefits their neighbourhood and the natural environment. They tend to be more involved in their community, and therefore are much more likely to understand the problems and needs facing the local community [50]. "Adam Smith's 'invisible hand' of the market works most efficiently when self-interest is tied clearly to the well being of the community [50]."

CSEs can strengthen community resilience by populating with small units. Flexible and diverse enterprises with the capacity to intentionally mobilize local people and resources can respond to and positively influence social and economic change.

In the establishment of any enterprise based on innovative solutions and ideas, successful entrepreneurs stay informed about demographic, economic, cultural, and ecological trends within their community. Neither retrospective adaptation nor innovation itself guarantees local organisational success; there is a need for future oriented adaptability, here interpreted as a constant external dialogue [63].

Current Reality of Progressive Entrepreneurs. Key findings from progressive entrepreneurs in relationship to their idea of community are relayed below.

Liz Crocker
• Community gains from enterprise – new sustainable local products and start-up businesses are supported with success in the P'lovers retail marketplace.
• Educational role with stakeholders to build local community economic capacity, "we talk about the significance of buying locally with our customers all the time".
Suzanne Fielden
• Eager participant in Early Adopter community program with The Natural Step in Canmore, Canada.
• Innovative programs created by the enterprise: Responsible Entrepreneurship program with junior high students, Zero Emissions based program to link local businesses moving towards sustainability with high school researchers, and Local Heros program to promote connections between kids and community members.

Ian Thomson
   • Addresses his community's need for alternatives to petroleum by understanding the City of Vancouver's energy plan and the current reality that there are no other biofuel sources in the region.
   • Supports the community's need for alternative fuels while at the same time providing employment for farmers and production plant workers.

Hiroshi Aoyama
   • Creating a closed loop system for local recyclable garbage, which has a base in his fuel station.
   • Efforts are expanding with a lot of support by local environmental-conscious housewives.
   • Activities are in synergy with the local community's vision to create "economy based on the rape flower".

Anders Abrahamsson
   • Community economic and social capacity-building projects in Uganda: "we rely on the Ugandan field expertise and deep commitment and experience for the choice of investments".
   • Ugandan partner, Joseph Muwonge, has deep personal connections in community of Kawempe.

Hans Eek
   • Close relationships with local academic community: Göteborg University, Chalmers University.
   • Involved in municipal project as main coordinator, "Göteborg 2050" to create vision of sustainable Göteborg.

Petter Sjöström
   • Has been involved in feasibility study for the construction of Sweden's largest solar photovoltaic system on the roof of Ullevi football stadium in Göteborg, which would have huge positive influence on community of Göteborg and also Sweden.
   • Working mainly with län (region) level of communities.

Vicky Opperman
• Sustainable Ballard's community volunteers, called 'neighbors', create community projects through dialogue and a shared interest in building community self-reliance. Vic's approach allows self-organization, diversity, and interdependence to build social capacity in the community.
• Seeks to serve the community as a catalyst for grassroots involvement in creating a sustainable Ballard, connecting eco-friendly businesses, organizations, utilities, and residents in order to share resources and collaborate on the bigger vision of self-sufficiency.
Alicia Silva
• Engages with the community in her retail space and also through participation in public events where she educates and inspires the community about environmentally friendly consumer choices.
• Supports and educates her native community in Mexico through Fair Trade practices in purchasing natural materials and producing furniture at her family's factory.
Steven Villegas
• The customers are the basis of a worldwide community that promotes positive social change. Steven asserts, "Utilikilts are a flag of social change. When people buy a kilt, they validate, promote, and manifest change by supporting a company that gives back to the world."
• Initiated a community-giving program called Kilt Exchange to help the less advantaged people of the community.

3.3.3. CSEs understand and develop competency in sustainable development

Theory Framework. Human capacity investments are recognized in business as highly strategic investments, in contrast with material investments, due to their flexibility and proven ability to produce added value for the enterprise [64]. The human capacity investment, that is, the investment of time and money by an entrepreneur in gaining understanding and competency in sustainable development, can serve as a flexible

platform in the short and long term. Entrepreneurs often have advantage over established companies in movement towards sustainability, remaining uncommitted to unsustainable processes; maintaining flexibility in the sustainable design of their business approach and operations. The capacity and understanding of sustainable development allows them to better position their enterprise for success. The deeper the entrepreneur's understanding of scientifically-informed concepts of sustainable development, the greater will be the urgency they feel to position their enterprise within an economy that moves towards sustainability. Experts don't agree on when the larger social movement towards sustainability will reach its "tipping point" [65], or what might prompt the acceleration of this movement, but simple science and observation of trends such as decreasing resources and increasing population suggest that limits of carrying capacity will be reached, necessitating a change in the way global society operates its economy. Entrepreneurs and business owners who have understood how to do sustainable development will have a strategic advantage in the eventual adjustment of human systems.

There are also returns available in the shorter term to entrepreneurs who consider the triple bottom line [66] (economic, ecological and social) in design and operation of their enterprises. Bob Willard [67] categorizes seven significant bottom line returns as follows:
- Easier Hiring of the Best Talent
- Higher Retention of Top Talent
- Increased Employee Productivity
- Reduced Expenses in Manufacturing
- Reduced Expenses at Commercial Sites
- Increased Revenue / Market Share
- Increased access to local resources

Along with economic returns, there are also ecological and social returns that can be quantified, and associated with investment in sustainable development capacity. Some examples could include:
- Reduced Risk
- Easier Financing
- Water resources conserved in local area
- Waste reduced in closed loop
- Enhanced image as steward of natural resources and social fabric
- Increased health and resilience of local community

- Sustained population in local area

As regards innovation and competitive advantage, the deeper the understanding of sustainability and the longer the period of time in which that understanding can be applied by a variety of perspectives in a particular geographic place or company, the greater the quality of the sustainability innovation. The story of Gaviotas [68] demonstrates this point clearly – the longer the Gaviotan citizens remained committed to deepening sustainability as applied to their particular context (the llanos grasslands of central Columbia), the greater the value of their adaptations and inventions to the specific place of Gaviotas and also the global marketplace. The citizens' intimate understanding of the principles of sustainability allowed an iterative creative process in dialogue with their natural environment, prompting a series of significant sustainability innovations with wide application in South America and the developing world.

Strategic outlooks that use systems thinking and a structured logical approach have an advantage given the complexity of systems and the urgent need for coordinated action. Particularly, capacity investments in sustainable development gain from a principled framework for movement towards socio-ecological sustainability. Use of an explicit scientifically relevant socio-ecological framework for sustainability as a compass guides communities and entrepreneurs in the right direction of enlightened self-interest within a larger movement towards sustainability.

How could entrepreneurs foster sustainable development?

- A scientific socio-ecological framework for sustainability, utilized from a back-casting perspective may guide all initiatives;
- All employees could be involved and sustainability embedded in the work culture;
- Sustainability assessment may apply to all strategic decision-making;
- Tools and principles for sustainability may be adapted and applied to local context; and,
- All stakeholders could share a common understanding of sustainability.

From the literature review, proposed complimentary tools, principles and concepts for sustainable development, under the socio-ecological framework include Natural Capitalism, Ecological Footprint, Zero Emission, Global Reporting Initiative, Earth Charter, Triple Logic, Local Living Economies, and Fair Trade.

Current Reality of Progressive Entrepreneurs. Key findings from progressive entrepreneurs in relationship to their idea of sustainability are relayed here.

Liz Crocker • Explicitly uses the Brundtland Commission definition. • Has gained better insight into sustainability through volunteer activities – with National Round Table on the Environment and Economy, Sierra Legal Defence Fund, Ecology Action Centre, and Nova Scotia Nature Trust.
Suzanne Fielden • Association of sustainability with quality and long-term competitive advantage, branding in local sustainability leadership role • Familiar with a principled socio-ecological framework for movement towards sustainability.
Ian Thomson • The Natural Step (TNS) system conditions inform Ian's thinking every step of the way. Canadian Bioenergy aims to source from sustainably harvested oil seed. He explains, "We have a strategy around upstream feed stock production. We're looking at how we can support farmers of non-genetically modified and organic feed stocks. We're working on an integrated approach." • Ian believes that biofuels are a bridge, a flexible platform between iterations of alternative fuels as diesel technology will be supplanted by other technologies after the next few decades. He is preparing his organization to transition to sustainable technologies from today's alternative fuels by back casting in his strategic planning.
Hiroshi Aoyama • The company has a strong traditional core value called "Sanpo-yoshi" (in Japanese, which means good for three directions, employees, customers and society.) • Investing minimum and making maximum effects by utilizing existing infrastructure.

• Philosophy of positive thinking is essential. • It is important to appeal to people with conventional thinking by integrating Eco-Eco (Economic and ecologically) advantages.
Anders Abrahamsson • Draws distinction between implicit knowledge of sustainability, which is felt as passion, and explicit knowledge, which is conceptualization and language. • Explicit knowledge of sustainability comes from Swedish learning circle. • On a Mission works with 15 identified "sustainability problems": Poverty, Water and Sanitation, Health, Education, Nutrition – hunger and obesity, Sustainable production- and consumption patterns, Climate change and energy systems, Chemicals, Urbanization, Ecosystems, Biological Diversity and land use, Utilization of sea resources, Food and agriculture, Trade Justice, Social stability, Democracy and good governance, Peace and security.
Hans Eek • Has established own holistic view of sustainability. • Creative in identifying and implementing solutions to minimize/optimize heat loss such as hot water through sewage, transmission through building shell, and heat gain from human body and lighting. • Has been invited by various communities to teach passive solar design to architects and city planners.
Petter Sjöström • Understanding of sustainability based on his educational background in biology. • Uses Bruntland definition. • As PV and renewable energy is new for Swedish market, he feels it is necessary to educate various stakeholders.
Vicky Opperman • Feels an urgency to address energy issues in the community. Her bold goal is to make Ballard energy independent. While she admits that it remains to be seen whether or not that can be done, Vic is certain that the community discussion and resulting awareness from community journey towards self-sufficiency will be invaluable for everyone in the community. • Has developed a Starfish model for Sustainable Ballard, which

represents a familiar creature in the Pacific Northwest. The six legs of the starfish each represent an aspect of community: water, waste, transportation and urban planning, building design and construction, food/health/medicine, and the natural environment.
Alicia Silva • Vision of sustainability goes beyond the space of her retail store. She is working to develop international standards for the furniture industry with the Forest Stewardship Council and the Fair Trade Federation.
Steven Villegas • Feels it is difficult to understand and implement sustainability; has a Seventh Generation philosophy; cites Triple Bottom Line and Social Justice as approaches to sustainability.

3.3.4. CSEs participate effectively in networks

Theory Framework. Entrepreneurs and community sustainability entrepreneurs in particular, build webs of connections throughout their community and business arena to promote their product or service, to create social change, and to diffuse innovation in sustainable development. These webs of connections may be viewed as networks in the system of which the entrepreneur exists. By the act of networking, entrepreneurs make connections that develop their social capital in the marketplace. Making worthy connections to build social capital and momentum towards sustainability depends on the development of meaningful relationships with other people, such as customers, neighbours, other businesses, civic and business organizations, suppliers, partners, and government. [69]

The ability to understand and use networks to move communities towards sustainability and spur innovation is considered to be a key interactive skill for a community sustainability entrepreneur. In this section, definitions of networking and pertinent aspects of the emerging science of networks - such as social network analysis, the power law of networks, and networked economies – are briefly reviewed to explore how community sustainability entrepreneurs can strategically assess the networks in their communities in order to create positive social change in the development of resilient local economies and communities.

Definitions of Networking And Networks. Networking is exchanging information for mutual benefit; the power of networks is making connections beyond traditional relationships to achieve common goals. [70] It is often considered an informal word-of-mouth marketing strategy to develop business relationships. According to Ivan Misner, CEO of Business Network International: "Networking (is used) as a viable, productive, and effective way to market ourselves in our business environment today." [69]

Networking with other organizations and building partnerships and alliances offers the CSE the opportunity to leverage their enterprise – "multiplying its effectiveness, extending its reach, and helping limited human, natural, and financial resources go much farther." [55] The key to a successful start-up is networking -- both personal and professional. Leveraging other people's assets is important when launching a start-up (business). [69]

The authors of Beyond the Limits [70] describe: "A network is non-hierarchical. It is a web of connections among equals. What holds it together is not force, obligation, material incentive, or social contract, but rather shared values and the understanding that some tasks can be accomplished together that could never be accomplished separately. One of the important purposes of a network is simply to remind its members that they are not alone."

Building effective networks requires a level of trust, as some may be reluctant to share turf. [55] Without a bond between networkers, valuable information and resources are not shared and opportunities may be missed that could benefit both parties and those they share further with.

In an interview with In Context in 1991 [71], Dr. Karl-Henrik Robèrt was asked how The Natural Step would create change. Here is his reply:

> *I don't believe that the solutions in society will come from the left or the right or the north or the south. They will come from islands within those organizations; islands of people with integrity who want to do something... This is what a network should do - identify the people who would like to do something good. And they are everywhere. This is how the change will appear - you won't notice the difference. It won't be anyone winning over anyone. It will just spread. One day you don't need any more signs saying "Don't spit on the floor," or "Don't put substances in the lake which can't be processed." It will be so*

natural. It will be something that the intelligent people do, and nobody will say that it was due to The Natural Step or your magazine. It will just appear.

Identifying networks that can further an entrepreneur's, a community's and a global common vision of sustainability is essential if real change is to take place and innovations towards sustainability are to diffuse. Social network analysis [72] experts have studied how sustainable communities can emerge through improving human interactions – internally and externally – and by using network ties to create economic opportunities. [73] Network analysis can help to determine what networks are in play right now and what the implications of those may be and how, if networks are strategically assessed, resources may be utilized and what connections can be formed. [56]

There are a numerous networks in a community. CSEs may take a whole systems perspective of networks as part of their long-term strategy to move communities towards sustainability. A systems perspective allows the CSE to consider all stakeholders, or nodes in a community. Network analysis provides a strategic approach to understanding networking nodes in the different sectors of the community and aids in determining a sustainable community development plan of action.

With the rapid ebb and flow of information and people in this technological age, it is important for the CSE to be connected to diverse networks to keep information flowing and to take advantage of sharing opportunities and innovations. Complex networks in the natural world exhibit a power law that governs the pattern of networks in states of transition. As network size and activity increases in sustainable communities, the power to create social change is activated.

In The Dance of Change, Senge et al explain that there are fundamental reinforcing processes that sustain profound change by building upon each other. One is developing networks of committed people. The others are enhancing personal results and improving business results. [53]

Many studies of the diffusion of innovative practices [53] show the importance of the informal networks through which new ideas and innovative practices spread organically in and across organizations. The role of internal networkers or community builders is tangible, but difficult

to specify because it belongs much more to the informal social networks of the company than it does to a hierarchy.

CSEs aspire to shape an entirely new business-government-community model for the future. A model such as a network economy has been successful in revitalizing local business clusters. In a network economy there are three basic features: engaged clusters of specialization, connected community competencies, and linked economy and community. Strong relationships across sectors provide regions with the ability to respond to negative external shocks and to work proactively on opportunities. [70]

Social Network Analysis. According to Valdis Krebs, network analyst, social network analysis (SNA) is the mapping and measuring of relationships and flows between people, groups, organizations, animals, computers or other information/knowledge processing entities. Network analysis is an emerging strategy to help answer key questions in the community building process [73]:

- Who are playing leadership roles in the community? Who is not, but should be?
- Are communities of interest developing around key regional and economic issues?
- Who are the experts in the area?
- Who are the mentors that others seek out for advice?
- Who are the innovators? Are ideas shared and acted upon?
- Are collaborative projects forming between local businesses?
- Which businesses will provide a better return on investment – both for themselves and the community they are embedded in?
- Are the right connections in place? Are any key connections missing?

From the perspective of backcasting, before one can improve their network one needs to know their current reality. A network map shows the nodes and links in the network. Nodes can be people, groups or organizations. Links can show relationships, flows, or transactions. Network maps provide a revealing snapshot of a business ecosystem at a particular point in time.

Transformation that leads to healthy communities is the result of many, often small, collaborations among network nodes. Complexity scientists describe this phenomenon—where local interactions lead to global patterns

— as emergence. CSEs can guide emergence by understanding, and catalyzing, connections. For example, knowing where the connections are, and are not, allows a community sustainability entrepreneur to influence local interactions. "If you know the network you can focus your influence." [70]

Network Power Laws. Network power laws provide a glimpse of a new and unsuspected order within networks, one that displays an uncommon coherence. This can be a goal of strategic sustainable community development in building the strength of local businesses and consequently local economies. Networks among communities and around the world can trade at the local level. Corporations will lose business to local providers when a tipping point is reached. A tipping point is the result of the power laws of networks in action. [65] Power laws are indicative of systems in transition from chaos to order. An exponential change occurs when connections among numerous nodes in networks are made. This is where system changes occur. When networks are managed effectively and connections are made the social system may be forced to transition. [74]

The Network Economy. Some progressive communities are shaping an entirely new business-government-community model for the future, a network economy. Mostly due to economic slumps in non-resilient economies, civic entrepreneurs are leading efforts to build cooperatives from necessity. The changed business environment, including operations from industrial and resource intensive to technological and sustainable, creates a fundamentally different kind of relationship between regional economies and communities, requiring fundamentally new leadership. Community economic success is the product of continuous collaboration across the traditional domains of economy and community. [75]

The rise of the network economy renews interest in the clustering phenomenon. A networked economy is likely to have several clusters of specialization. Industry clusters are concentrations of competing, complementary and interdependent firms and industries that create wealth in regions through export. Benefits to companies participating in industry clusters include [75]:
- Access to specialized workforce
- Access to specialized suppliers
- Access to networks – access to information flows and technological spillovers that speed innovation

As research, innovation, and marketing become ever increasingly specialized and divorced from each other, we are converging to a networked economy in which strategic alliances are crucial. These fluid alliances, which are periodically renegotiated as the marketplace shifts or the focus of the participants' changes, offer a glimpse of the future of the world's business environment. [74]

The market may be considered a directed network. Companies, firms, corporations, financial institutions, governments and all the potential economic players are the nodes. Links quantify various interactions between these institutions, involving purchases and sales, joint research and marketing projects and so forth. The weight of the links captures the value of the transaction, and the direction points from the provider to the receiver. The structure and evolution of this weighted and directed network determine the outcome of all macroeconomic processes. [74]

In network economies, communities and companies actively engage in articulating their needs and working with the community to meet them. Economic communities view clusters as important customers. Industry both benefits from and contributes to community competencies.

Economic networks and community networks bump against each other and integrate. People from one sphere know and work with people from the other. People move back and forth between the two sectors. These relationships are the glue of strong economic communities. They link industry clusters with community competencies creating a vital cycle in which community processes support the growth of the economy and the economy creates wealth and experience that are invested in the community.

In a network economy, buyer and suppliers are not competitors but partners. The relationships between them are often very long lasting and stable. The stability of these links allows the company to concentrate on their core business. If these partnerships break down, the effects can be severe. Most of the time failures handicap only the partners of the broken link. Occasionally, however, they send ripples through the whole economy.

Hierarchical thinking does not fit a network economy. In traditional organizations, rapid shifts can be made within the organization, with any resulting losses being offset by gains in other parts of the hierarchy. In a

network economy each node must be profitable. Failing to understand this, the big players of the network game exposed themselves to risks of connectedness without benefiting from its advantage. A revolution in management is in the making that requires a new network-oriented view of the economy and an understanding of the consequences of interconnectedness. [73]

Networks do not offer a strategy that makes enterprises invincible in any business environment. The truly important role networks play is in helping organizations adapt to rapidly changing market conditions. The very concept of network implies a multidimensional approach. There are policy networks, ownership networks, collaboration networks, organizational networks, network marketing. It would be impossible to integrate these diverse interactions into a single all-encompassing web. No matter what organizational level we look at, the same robust and universal laws that govern nature's webs seem to appear. The challenge is for economic and social networks to put these laws into practice. [74]

Current Reality of Progressive Entrepreneurs. Key findings from progressive entrepreneurs in relationship to their idea of networks are relayed here.

Liz Crocker
• Strategic approach in choice of networks: "there are 3 things I consider...(1) do I have anything uniquely to offer; (2) what can I learn; and (3) am I passionate about the work they do...and then there's a fourth which is, (4) are they effective?"
Suzanne Fielden
• The Social Venture Network is interesting, although there is no chapter yet in Canmore, and time investment is recognized as a real restraint in being effective member of network. • Opportunities in emerging network through the The Natural Step Early Adopters program, involving cross-sectoral relationships built around collective community movement towards sustainability.
Ian Thomson
• "Networks are critical especially if you are entering a new arena. In Vancouver, there is a group of people working towards sustainability from different fields (government, business, NGOs).

These people have been so supportive. If I put an issue on the table, I get support and ideas immediately from them. There's no way you can do it on your own." • Ian influenced the specifications of the City of Vancouver's heavy-duty vehicle fleets so that all fleets in the cities around the region have the option to buy biodiesel. He explains, "This translates to approximately 80 million litres of blended fuel for the next five years. That's where it went with all these small meetings with the municipalities in the area. We keep pushing it, working it through our networks and contacts."
Hiroshi Aoyama • Inspired other owners of petrol station in his region, and showed them how to transform their activities through meetings and lectures. • Involvement in various committee and study circles for local community and business development.
Anders Abrahamsson • Networks between academic communities and entrepreneurial communities, transferring knowledge from Action to Academic, "the way entrepreneurship has been done, it is an interactive and iterative loop with action<>reflection, quite in real time and with speedy response towards "what really happens out there", the thing is here that I try to transfer what I regard as being "tacit knowledge", and to codify that is quite tough". • Concentration on qualitative networking, establishing strategic meaningful connections with fewer (less than 150) people.
Hans Eek • As a leading expert on passive solar house in Sweden, he has created network of professionals not only in his local community but also national and international level. • Strategically (and intuitively) establishing various collaborations with academic researchers and municipal officials to disseminate his innovation.
Petter Sjöström • Most important network is Photovoltaic (PV) network in Sweden, with a mission to create and expand the PV market. • Another interesting network through a project for sustainability entrepreneurs, the Triple Logic Project.

• Considering joining in Social Venture Network in Sweden to broaden perspective.
Vicky Opperman • Identified the "sparks" in Ballard that she feels are important for knowing what's going on in the community. Her mentor has been a community activist for over twenty years and is a key node in the informal Ballard community network. • Believes in creating small wins with small projects. As neighbours are proud of their accomplishments and share their stories, the word will spread through informal networks. In the past few months, two other Seattle neighbourhoods (Briar and Shoreline) have organized with the Sustainable Ballard model.
Alicia Silva • Admits that networking is a new concept for her, as she gets more involved with changing standards in the home furnishings industry. She is realizing how important it is to know whom the key players are in a network as she strives to make fundamental change in her industry and the community.
Steven Villegas • States his indebtedness to the informal networks that have marketed his product, as Utilikilts does no formal marketing. • Participates in a Sustainable Business Practice Circle where five to ten businesses interested in becoming more sustainable meet to share their stories and common challenges. • Was resistant to the idea of networking, but after the first two years in business, he realized the importance and states, "I cannot change the world in a vacuum."

3.3.5 Summary

From the literature review, interviews with academic and professional experts, as well as observations from interviews with entrepreneurs themselves, characteristics were summarized for each interactive skill.

Vision
- Possesses personal vision to create social change in community;
- Inspires others towards socio-ecological sustainability; and
- Shapes the future of business as role model.

Community
- Creates new solutions to community problems;
- Strengthens community resilience; and
- Bridges community learning across stakeholders.

Sustainability
- Takes a whole systems socio-ecological approach;
- Drives innovations and enjoys competitive advantage; and
- Educates all stakeholders.

Networks
- Shares ideas and resources among various sectors and levels;
- Creates social change and diffuses innovation; and
- Analyzes social networks to leverage assets.

4. Discussion

Community Sustainability Entrepreneurship (Q1)

Through literature review at the outset of this study, we devised a definition of community sustainability entrepreneurs as follows:

> *Community Sustainability Entrepreneurs have the creativity and drive that motivate new possibilities, informed by an assessment of local needs and assets, and they operate through market mechanisms bounded by a socio-ecological sustainability framework.*

The analysis of the current reality of progressive entrepreneurship prompted the following schematic diagram.
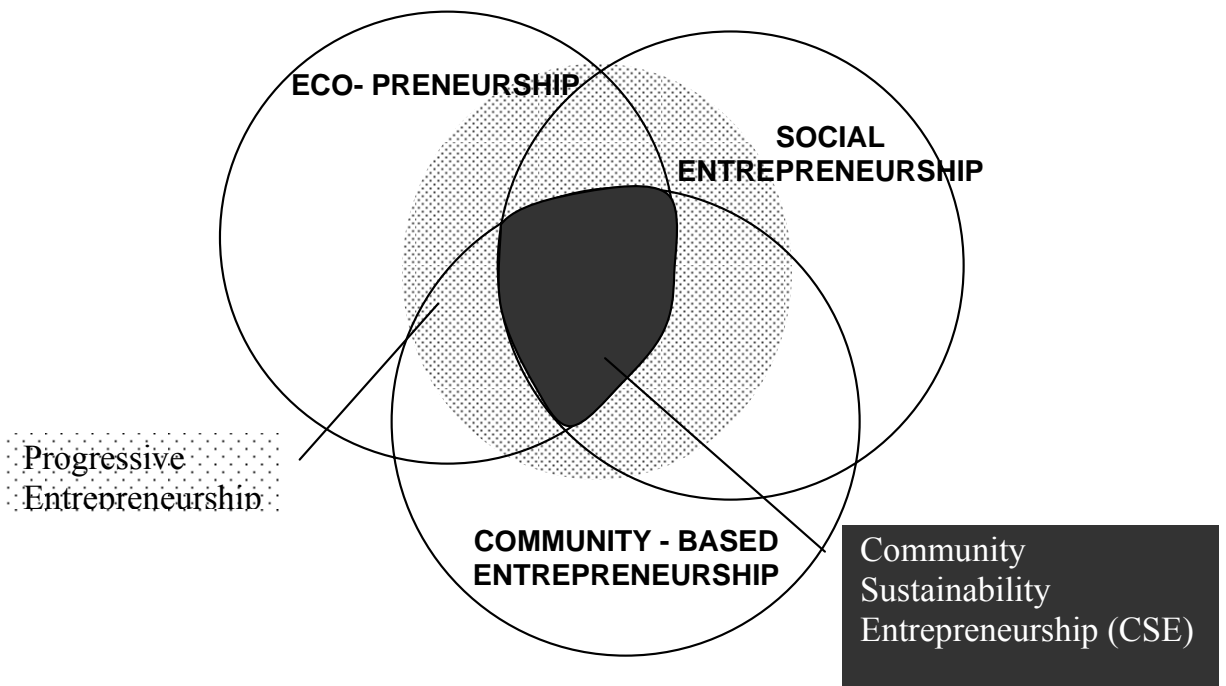

Figure 4.9 Community Sustainability Entrepreneurship

The three circles of this Venn diagram represent the three categories of progressive entrepreneurship that we study. In the centre, where community sustainability entrepreneurship is highlighted, characteristics are shared from these three categories of entrepreneurship, and the concept of the community sustainability entrepreneur emerged. We initially envisioned a community sustainability entrepreneur as possessing the key characteristics of each of the three entrepreneurship categories of social, ecological, and community. Our thinking revolved around the idea that the concept of sustainability included social, ecological, and economic aspects and that emerging these categories of entrepreneurship would provide a more holistic approach towards economic development.

However, as data was collected, it was clear that these categories of entrepreneurship each represent a generalized definition specific to the type of enterprise created by the respective entrepreneur. The intersection where community sustainability entrepreneurship emerges then appeared as a set of interactive skills based on a whole systems understanding of sustainability and the connectedness of any enterprise to their community. So, the intersection is not a separate category of entrepreneur, but rather a set of process skills that any entrepreneur - whether social, ecological, or community - can develop in order to move their community towards sustainability.

Current Reality of Progressive Entrepreneurs (Q2)

After completing case studies of progressive entrepreneurs, individual observations were recorded, codified and then analyzed in comparative analysis. A SWOT analysis was applied to organize the aggregated data.

Case study entrepreneurs are referred to below by their initials: Anders Abrahamson (AA), Alicia Silva (AS), Steven Villegas (SV), Liz Crocker (LC), Ian Thomson (IT), Suzanne Fielden (SF), Vicky Opperman (VO), Petter Sjöström (PS), Hans Eek (HE), Hiroshi Aoyama (HA).

Aggregated observations and analysis are listed in three distinct categories: Community, Sustainability and Entrepreneurship, with additional observations falling outside these categories. Within each category, points are listed in order of their applicability to the widest range of entrepreneurs. Each point is illustrated with an example.

4.2.1 Strengths and Opportunities

Community
- (AS, SV, AA, IT, LC, HA, VO) Progressive entrepreneurs, who inform their work in local communities with a global understanding, are able to perceive and enact unique enterprise models. These unique glocal enterprise models influence the way society thinks and acts. For example:
  o Ian Thomson perceives a global trend towards diminishing fossil fuel resources, and works in Vancouver to promote biofuel as an alternative. The central purpose of his enterprise is to convert as many people as possible to biofuel, and the organizational form of the enterprise is still emerging to best serve this purpose.
  o Vicky Opperman is driven to answer the question, "How can we as a community build our resilience?" She struggles with how to be patient especially with the urgency of the issues. She wants Ballard to be the "blueprint for every town USA." Vic explains that the essence behind Sustainable Ballard is building community. She wants the community to take on a variety of different projects and doesn't feel it's as important what the projects are or how much they resolve an issue, but rather how people are being brought together by working on these projects.
- (VO, SF, AA, IT) Progressive enterprises focused on solving community issues such as energy consumption, water consumption, or transportation may be able to obtain support in the form of funding, partnerships or pilot programs from various levels of government, in compensation for effective market-driven solutions. For example:
  o Suzanne Fielden comments that, while they didn't receive support to start the initiative, now that they have proven a

concept of Responsible Entrepreneurship education in schools, they have the interest of local governments in supporting wider application.

- o Ian Thomson's persistence, belief in his business vision, and natural strategic ability led to the development of a biodiesel pilot program for the City of Vancouver's garbage fleet of trucks. In this pilot program, Canadian Bioenergy imports biodiesel fuel from the US and distributes it to Vancouver's municipal fleets. This pilot has been very successful and is building market demand for biodiesel fuels in British Columbia.

- (LC, SV) Franchising community sustainable enterprises may be a way to move multiple communities towards sustainability. For example:
  - o Liz Crocker's P'lovers has now been franchised in Ontario, promoting choices to live more sensitively in Ontario communities.
  - o Steven Villegas' business, Utilikilts, is growing rapidly. He is faced with how to grow the business without selling out to a large corporation and in the process losing the core values that are the foundation of the business. He is currently going through a visioning process to develop a long-range plan for Utilikilts to provide meaningful employment. He is grappling with the issue of product distribution and working on determining a new business model to protect the business from a hostile corporate take-over.

- (IT, PS) Progressive entrepreneurs may affect local policy to move their community towards sustainability. For example:
  - o In just three years, Ian Thomson's Canadian Bioenergy has made big strides in moving their community towards sustainability. They have affected local policy by getting the City of Vancouver and other municipal fleets to put together a new set of regulations that have been in effect for almost one year. Says Ian, "We needed to help the fleet managers get biodiesel into their purchasing contracts. We affected the specifications so all fleets in the cities around here have the option to buy biodiesel. That translates to approximately 80 million litres of blended fuel for the next five years. That's where it went with all these small meetings with the municipalities in the area. We keep pushing it, working it. We

got all taxes exempt from the purchase of biodiesel for municipalities."

Sustainability
- (LC, HA, VO, AA) Progressive entrepreneurs have their own locally adapted language of sustainability. For example:
  o Liz Crocker (P'lovers) references the piping plover, an endangered bird in Eastern Canada, in her business name, and the name also short for Planet Lovers. She comments, "the understanding of sustainability has deepened over years of business practice, and the language we use to communicate our vision is now more nuanced through interaction with customers and the local culture, but the passion has always been there."
- (AS, IT) Progressive entrepreneurs have the ability to lead their industry towards sustainability through the establishment of standards and certifications for sustainable products and services. For example:
  o Alicia Silva explained that they are constantly working to improve their furniture designs at Greener Lifestyles by finding textile suppliers with high quality, environmentally friendly materials that comply with Fair Trade principles. Alicia explains how they are building relationships with suppliers who are like-minded and doing business in a socially and ecologically conscious way, such as being Forest Stewardship Council (FSC) certified: "We have discussed the seals of FSC wood. We check with the people and how they are doing this. The social aspects are a very big part of this. We are asking them to partner with us for more education and to raise their standards. We are trying to get them to write specifications and international standards to create an international seal that recognizes packaging and all environmental aspects, like incorporating better materials such as natural latex rubber. Europeans may have this type of seal. There are role model companies, but they don't have the social aspects integrated, so we want to go a little bit farther in this respect. Our thing is that we are writing these standards as part of our business model. We want that to become a common practice for every business, not just for us. We want every company to have this as a first priority because this is the way that the market should be for

everybody: to create better business, which in turn creates a better society."

Entrepreneurship
- (ALL) Progressive entrepreneurs are generally optimistic by nature and view challenges as opportunities and weaknesses as potential strengths. For example, taking on social and ecological issues in mainstream society is a challenge, but all interviewed entrepreneurs have seized opportunities to face these challenges.
- (SV, HA, HE, SF, LC, AS) Progressive entrepreneurs create a paradigm shift in their local communities and stakeholders are adapting to their progressive vision of reality. For example:
  o Hiroshi Aoyama has inspired his community to recycle used cooking oils, tires, wind shield wipers, thus creating a paradigm shift towards the closed loop aspects of recycling.
- (HE, AA) Progressive entrepreneurs connect with academic institutions to access and advance innovations and new technologies. For example:
  o Hans Eek's relationship with Göteborg University, Chalmers University, and Lund University has enabled academic support to rigorously demonstrate the viability of his passive solar designed houses.
  o Anders Abrahamsson started his business through a relationship with Växjö University and continues to be informed by faculty of entrepreneurship at the university. He is also working on a master's thesis using On A Mission as a case study and role model for "sustainopreneurship." He practices action research, which combines real life action with academic codification of knowledge in a learning loop.

General
- Role Model Development: There are not very many role models for progressive entrepreneurs to emulate. Businesses like Ben & Jerry's and The Body Shop are often referred to as role models for progressive social and ecological entrepreneurs, but they may not represent a whole systems perspective.
- Fluid Enterprise Structure: The typical organizational structures do not necessarily apply in this new world of emerging technologies for sustainability. The business environment is very fluid; flexible

organizations that can best organize to maximize innovation will succeed in creating technologies and ideas that have duration.

4.2.2 Weaknesses and Threats

Community
- (SF, VO, IT, PS) There is a lack of understanding from the local economic development authorities around sustainable community development where entrepreneurs could be encouraged to form businesses to solve the local environmental, social and economic problems based on the community's needs. For example:
  o Petter Sjöström has faced the challenge of introducing an unknown new technology to the market. In looking for support from local government to advance his energy technology, he's been faced with resistance due to the unknown risks and high cost of developing new technologies.
- (SF, HE, AS) Progressive entrepreneurs may feel a push-pull when trying to obtain government support since you must prove yourself, or in other words, typically be in business for over two years, before they will seriously consider a business for funding. For example:
  o Alicia Silvia explained that she had no help with loans. She and her partners have checked with Small Business Administration, but they require businesses to be in operations for at least two years to qualify for support. "A catch 22. It is so funny because I think once you've been in business for two years you have survived. It's really challenging!"
- (LC, IT, PS) Progressive entrepreneurs may lack strong support from the beginning of starting their enterprise. As Alan AtKisson explains, an entrepreneur may be the change agent or innovator and often needs transformers to make things happen. For example:
  o Liz Crocker comments "there were times when it was so tough, it looked like we wouldn't get past two years in business!" Select community members supported the very new business, but a critical customer mass of support was required for it to really thrive. This often requires a paradigm shift in the thought patterns of the local community.

Sustainability
- (ALL) Benefit from refreshment of whole systems perspective. Progressive entrepreneurs struggle with how to incorporate sustainable development into their every day operations. Because of the confusion around what sustainability really means to the daily operation of the enterprise, varying approaches can be taken.

Entrepreneurship
- (ALL) Progressive entrepreneurs are driven individuals who are sought out by others as role models and may be subject to burn out and/or exhaustion if they are not careful and strategic in their use of time.
- (SV, VO) Progressive entrepreneurs may experience an internal shift from being an independent creative to becoming a community sustainability leader. This shift requires a deep personal commitment to something greater than their business and may result in taking on a community leadership role which some progressive entrepreneurs may resist or not feel comfortable with. For example:
  - When Steven Villegas started UtiliKilts, he said that he was anti-society and didn't believe in anything. He didn't want to pay taxes. He soon realized that this attitude does not help society. So he profoundly changed himself. He said he reversed his whole person. He gave away his old person and took the risk of losing his autonomy. He now realizes that all the great people he has met have expanded him as a person. "I couldn't have dreamed that my life would be filled with such rewarding people."

General
- Balancing Passion and Know-How: Passionate visionaries may need to invest also in business and entrepreneurial skills.

Since progressive entrepreneurs are the role models of an emerging trend, we suggest that these entrepreneurs refresh their whole systems approach based on shared sustainability principles. This is not to say that some of the progressive entrepreneurs today do not attempt this approach, but rather that specific socio-ecological principles of sustainability can ground their enterprises within a common goal and understanding of sustainability. Entrepreneurial understanding and adoption of common socio-ecological

principles of sustainability will strategically move communities towards sustainability.

Use of Key Interactive Skills (Q3)

Investigation of the ideal type of entrepreneur and their opportunities and strengths made possible an identification of key interactive skills which help entrepreneurs achieve and connect each component of the vision: community-based, sustainability-focused, and entrepreneurial, as shown in figure below.
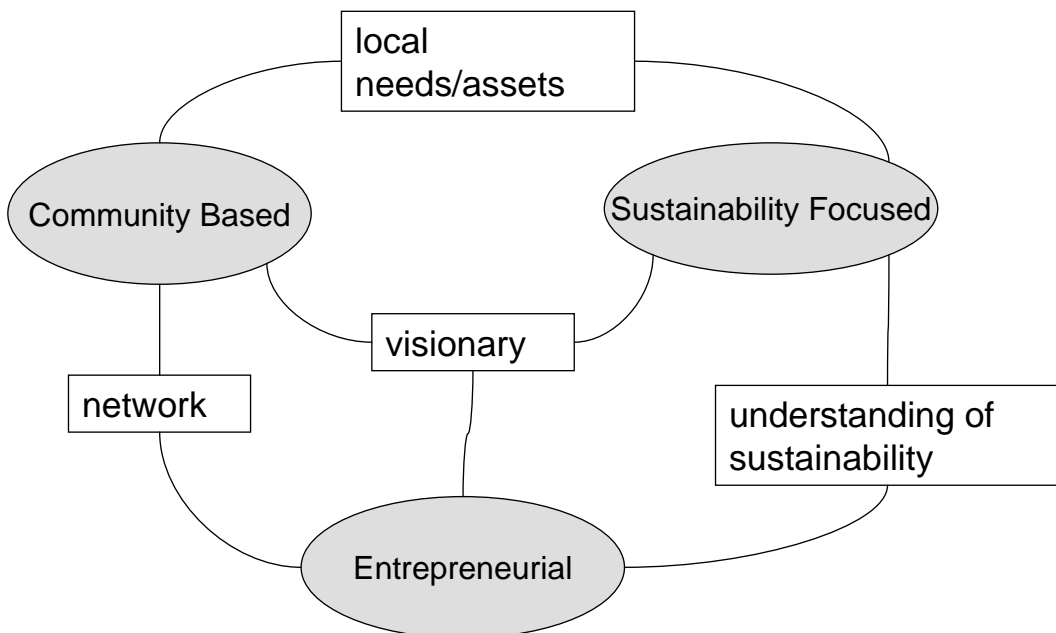
Figure 4.10 Bridging between components of ideal CSE and interactive skills

To further understand these interactive skills, we conduct a comparative analysis between an ideal set of interactive skills based on the research, and observations from interviews with progressive entrepreneurs.

4.3.1. CSEs hold and realize a vision of sustainable enterprise within sustainable community and world

- Vision is a leading force in all cases incorporating a mix of sustainability and business success.
- A progressive entrepreneur's vision is strong but may not necessarily be communicated clearly with all stakeholders.
- There are many opportunities for innovation in communities when working towards solutions in sustainability, but these niches may not be recognized fully in the vision of progressive entrepreneurs.

4.3.2. CSEs are supportive of community needs through ability to capitalize community assets

- Progressive entrepreneurs find many ways to serve community needs, but may not necessarily take advantage of informal connections in their communities to help them make a difference and utilize resources more effectively.
- Progressive entrepreneurs not only use their enterprise to solve community issues, but also are involved personally in many ways that may create burnout, depriving the community of a valuable asset in the long run.
- Progressive entrepreneurs may have difficulty connecting to community in start-up years as they are still clarifying their vision and establishing customer and stakeholder relationships.

4.3.3. CSEs understand and develop competency in sustainable development

- Concepts used by progressive entrepreneurs vary from Triple Bottom Line and Eco-efficiency, Zero Emissions, Brundtland Commission, to The Natural Step, Sanpo-Yoshi (good for three

directions), Fair Trade, and Social Justice. They seem to be the most commonly recognized guidelines for movement towards sustainability.

- Different regions may view sustainable development differently and use unique localized sustainability concepts and language. Progressive entrepreneurs may lack the ability to recognize among different approaches, a commonality to move towards sustainability.
- If a community is grounded in sustainability, community sustainability entrepreneurs have opportunity to thrive. But not all progressive entrepreneurs live in such communities and must deal with the challenges of local policies and often mainstream attitudes.

4.3.4. CSEs are able to participate effectively in networks

- Progressive entrepreneurs may participate in many networks, but may not necessarily strategically approach what they want from the network and what they can and want to contribute.
- There may be unrecognized opportunities for progressive entrepreneurs to address issues together as a community by establishing network economies, cooperative initiatives and regional business clusters.
- Different sectors of communities are not necessarily integrated to collectively address sustainability issues. Progressive entrepreneurs may connect to nodes in different sectors, but nodes from all sectors need to be represented in community decision-making in order to move communities toward sustainability.

4.3.5 Summary

Trends towards positive social change can emerge if enough entrepreneurs have the personal drive to make the world a better place and are willing to take the risk. We have witnessed many such progressive entrepreneurs making a difference in their communities. Mainstream economic development is not currently sufficiently oriented in the direction of sustainable development, requiring local economic development authorities and entrepreneurial development agencies to re-conceptualize the work they do.

Progressive entrepreneurs today are unique with the passion and skills to improve their community and the world. We argue that support of sustainable community enterprise should be a key strategy for community development, rewarding those entrepreneurs who create solutions to community sustainability problems. Entrepreneurs themselves must understand the important role they have in influencing mainstream community leaders and members.

We know that entrepreneurs are willing to take on sustainability principles and gain training in recommended interactive skills. We are those entrepreneurs. We have met others who are enacting a new paradigm. While it is difficult to predict the tipping point of this emerging phenomenon, we believe that we are identifying a new role for entrepreneurs, which will become the mainstream within ten years, especially in witnessing the encouraging trends towards progressive entrepreneurship over the past ten years.

Conclusion

Development of community-based sustainability entrepreneurship through interactive skill-building is a key leverage point for local and global sustainability, while recognizing that diversity is essential, as no one entrepreneur is going to change the whole world.

We provide specific recommendations for the further development of community sustainability entrepreneurship to entrepreneurs, community economic development professionals, and academics.

For Entrepreneurs
- Develop recommended interactive skills;
- Network with other entrepreneurs and stakeholders with an interest in moving communities towards sustainability;
- Develop as a role model for other entrepreneurs and industry by shaping future business models and new technologies;
- Develop a glocal vision (think globally, act locally) to expand inspirational influence beyond the local community;
- Lead the cutting edge of the market in sustainability innovation; and,
- Consider developing public-private partnerships to integrate across sectors.

For Community Development Professionals
- Recognize and support the role of community sustainability entrepreneurs;
- Adopt policies to address leverage points in the system that encourage sustainable community development, such as taxes and incentives;
- Provide incentives for new businesses to create solutions for local issues;
- Use available resources to provide sustainability education for entrepreneurs.

For Academics – Further Research
- Describe systematic methods of approaching community-based sustainability innovation;

- Identify sector-specific leverage points for entrepreneurs, especially in transportation, energy and agriculture.

It is crucial to find the people who have passion for sustainability to commit to making the world a better place through creation of enterprise. We invite feedback on our recommendations, and invite those who take an interest in joining the growing network of sustainability entrepreneurs and their supporters.

References

1. Colin Hines. 2000. Localization: A Global Manifesto. Earthscan Publications. London
2. David Korten, 2001. When Corporations Rule the World, Kumarian Press
3. Max-Neef, M., 1989. Human Scale Development: conceptions, applications and further development. New York, The Apex Press.
4. Lecture by Manfred Max-Neef for Masters Programme in Strategic Leadership towards Sustainability, 16 November 2004. Blekinge Institute of Technology, Karlskrona, Sweden.
5. Holmberg J, Robert K-H., 2000. "Backcasting from non-overlapping sustainability principles — a framework for strategic planning". International Journal of Sustainable Development and World Ecology, vol. 7: page 1–18.
6. Michael H. Shuman, 2000. Going Local: Creating Self-Reliant Communities in a Global Age, Routledge.
7. Mark Roseland, Sean Connelly, David Hendrickson, and Chris Lindberg, 2005. Making Sustainability Happen Background Paper, Simon Fraser University, Centre for Sustainable Community Development.
8. citiesPLUS (cities Planning for Long-term Urban Sustainability). 2003. A Sustainable Urban System. The Long-term Plan for Greater Vancouver.
9. Nobutaka Hosouchi, 2001. Community Business to revitalize Local Society, Gyosei.
10. James D. Wolfensohn in Glocal Forum, http://glocalforum.existhost.com/gf/New_Glocal_Website/home.asp (Accessed : 2005/05/29)
11. Bengt Johannisson, 2004. Bridging Global Complexity and Local Diversity – Building Glocal Development Strategies.
12. Hawken, Paul, 1993. The Ecology of Commerce, Harper Collins Publishers.
13. Bull I, Howard T, Willard G, ed. 1995. Entrepreneurship: perspectives on theory building. Pergamon.

14. Lecture by Karl-Henrik Robèrt for Masters Programme in Strategic Leadership towards Sustainability, 3 September 2004. Blekinge Institute of Technology.
15. European Commission, Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, www.insme.info/page.asp
16. Massey, A. and Walford, G. 1999. Exploration in methodology, Studies in Educational Ethnography, vol. 2, Stanford, JAI Press, 183-197.
17. Business Alliance for Local Living Economies, http://livingeconomies.org/ (Accessed: 2005/04/26)
18. The Natural Step, www.naturalstep.org (Accessed : 2005/04/21)
19. World Commission on the Environment and Development, 1987. Our Common Future, Oxford University Press.
20. Schumpeter, J. 1911. The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle. Harvard University Press.
21. Schumpeter, J. 1942. Capitalism, Socialism and Democracy. Harvard University Press.
22. Ripsas S., 1998. Towards an interdisciplinary theory of entrepreneurship. Journal of Small Business Economics. 10 (2):103.
23. Gartner, W. B., Bird, B. J. & Starr, J. A., 1992. Acting as if: Differentiating entrepreneurial from organizational behaviour. Entrepreneurship: Theory and Practice. 16 (3): 13-31.
24. Thomas C. Page Entrepreneurship Center at Miami University http://www.sba.muohio.edu/pagecenter/pagecenternew/AboutUs/philos .asp (Accessed: 2005/05/29)
25. Gifford Pinchot and Ron Pellman, 1999. Intrapreneuring in Action. Berrett Koehler Publishers.
26. Everett Rogers, 1995. Diffusion of Innovation. 4th edition, Free Press.
27. Presentation by Prof. George Puia, Saginaw Valley University, at the Euro Sustainability Conference in Aalborg, Denmark, 2005/04/14.
28. Chia, R., l995. From Modern to Post-modern Organizational Analysis, Organization Studies, Vol 16, No 4, pp 579-604.
29. Jaworski, J., and C. O. Scharmer. 2000. Leadership in the New Economy: Sensing and Actualizing Emerging Futures, working paper, Society for Organizational Learning, Cambridge, MA.
30. Kyro, P., 2001. Women entrepreneurs question men's criteria for success. Paper summary, Frontiers in Entrepreneurship.

31. Peter Drucker. 1993. Innovation and Entrepreneurship. Harper Business.
32. Anne Gerlach, 2004. Sustainable entrepreneurship and innovation, Center for Sustainability Management, University of Lueneburg, Germany.
33. Ashoka Foundation, http://www.ashoka.org/fellows/social_entrepreneur.cfm (Accessed: 2005/05/29)
34. Shocker, A.D., and Sethi, S.P., 1974. An Approach to Incorporating Social Preferences in Developing Corporate Action Strategies, in Prakash Sethi, S., ed. The Unstable Ground: Corporate Social Policy in a Dynamic Society. Los Angeles.
35. Hodgkin, Saralyn V. 2002. Business Social Entrepreneurs: Working Towards Sustainable Communities through Socially Responsible Business Practices, Masters Thesis, University of Calgary.
36. Canadian Center for Social Entrepreneurship, http://www.bus.ualberta.ca/ccse/ (Accessed: 2005/05/29)
37. The Institute for Social Entrepreneurs, http://www.socialent.org/pdfs/GLOSSARY.pdf (accessed: 2005/05/29)
38. Dees, J. Gregory. 1998. The Meaning of "Social Entrepreneurship". http://www.fuqua.duke.edu/centers/case/documents/dees_SE.pdf (Accessed: 2005/05/29)
39. World Business Council on Sustainable Development (WBCSD), Making Good Business Sense.
40. Social Venture Network, www.svn.org (accessed: 2005/04/30)
41. Elkington, J., and T. Burke. 1989. The Green Capitalists (London: Victor Gollancz).
42. Bennett, S.J. 1991. Ecopreneuring: The Complete Guide to Small Business Opportunities from the Environmental Revolution (New York: John Wiley).
43. Berle, G. 1991. The Green Entrepreneur: Business Opportunities that Can Save the Earth and Make You Money (Blue Ridge Summit, PA: Liberty Hall Press).
44. Blue, J. 1990. Ecopreneuring: Managing For Results (London: Scott Foresman).
45. Larson, A.L. 2000. 'Sustainable Innovation through an Entrepreneurship Lens', Business Strategy and the Environment, 9: 304-17.
46. Robert Isaak, 2002. The Making of the Ecopreneur, Greenleaf Publishing.

47. Michael Schaper, 2002. The Essence of Ecopreneurship, Greenleaf Publishing.

48. Thake, Stephen and Zadek, Simon, 1997. Practical People, Noble Causes – how to support community-based social entrepreneurs. New Economics Foundation.

49. Putnam, R., 1993. "The Prosperous Community-Social Capital and Public Life." American Prospect (13): 35-42.

50. Wicks, Judy, Local Living Economies: The New Movement for Responsible Business. http://www.ballenetwork.org/_uploads/docs/Wicks%20Why%20LLEs.PDF (accessed: 2005/04/21)

51. Johanisson, Bengt, 1989. Community entrepreneurs: networking for local development. Entrepreneurship and regional development, 3-19.

52. Center for Entrepreneurship Education and Development, (modified by authors) http://www.ceed.info/vision/approach.php (Accessed: 2005/03/31)

53. Senge, Peter, Charlotte Roberts, Rick Ross, Bryan Smith, George Roth and Art Kleiner. 1999. The Dance of Change. Doubleday, New York.

54. Lecture by Jonas Oldmark and Lena Johannsson of The Natural Step Sweden, December 2004.

55. Dees, J. Gregory, Jed Emerson, and Peter Economy. 2002. Strategic Tools for Social Entrepreneurs. John Wiley & Sons, Inc., New York

56. Interview with Roy King, Director of Social Venture Group on April 6, 2005.

57. Collins, James C. and Jerry I. Porras, 1994. Built to Last. HarperCollins, New York.

58. Hock, Dee. 1999. Birth of the Chaordic Age. Berrett-Koehler Publishers.

59. David Korten, Living Economies For A Living Planet. http://www.pcdf.org/Living_Economies/V_Community.htm, (Accessed: 2005/04/21)

60. DE Labs, http://www.delabs.org/background.asp (Accessed: 2005/05/28)

61. Mark Roseland, 2005. Market Mechanisms for Sustainable Community Development. Simon Fraser University.

62. BALLE Network http://www.ballenetwork.org/ (Access: 2005/05/21)

63. Johannisson, Bengt, 2004. Bridging global complexity and local diversity – building glocal development strategies. Växjö University, Sweden.

64. Shengman Zhang, 2001. Human Capacity Building for the New Economy, World Bank Special Report.
65. Malcolm Gladwell. 2001. The Tipping Point: How Little Things Can Make a Big Difference. Back Bay Books.
66. Dixit A.K. and Pindyck R.S., 1994. Investment Under Uncertainty. New Jersey: Princeton University Press.
67. Bob Willard, 2002. The Sustainability Advantage, Greenleaf Publishing.
68. Weisman, Alan, 1998. Gaviotas, A Village to Reinvent the World, Chelsea Green Publisher.
69. Ivan Misner, CEO of Business Network International. http://www.entrepreneur.com/article/0,4621,319285,00.html (Accessed: 2005/04/31)
70. Meadows, Meadows, and Randers, 1993. Beyond the Limits. Chelsea Green publisher, New York.
71. In Context, http://www.context.org/ICLIB/IC28/Robert.htm (Accessed: 2005/03/15)
72. Krebs, Valdis, 2004. Social Network Analysis. Management consultant, developer of In Flow network software http://www.orgnet.com/sna.html (Accessed: 2005/03/14)
73. Krebs, Valdis and June Holley. 2002. Building Sustainable Communities through Network Building, http://www.orgnet.com/sna.html (Accessed: 2005/03/14)
74. Barabasi, Albert-Laszlo. 2002. Linked. Perseus Publishing .
75. Henton, Douglas, John Melville and Kimberly Walesh, 1997. Grassroots Leaders for a New Economy: How Civic Entrepreneurs are Building Prosperous Communities. Jossey-Bass, Inc. San Francisco

Appendices

Appendix A: Case Studies of Progressive Entrepreneurs

Liz Crocker, P'lovers Environmental Store (Halifax, Canada)

Demographic: 12 employees, incorporated business, franchised, 13 years in business for parent company

Ann Caverzan and Liz Crocker opened P'lovers Environmental Store in May 1992. They describe P'lovers as "an environmental department store". As stated in its mission, P'lovers is dedicated to helping people "live more sensitively with the earth". P'lovers' philosophy also includes "mindful living", believing that people who take time to pay attention to their lives also will likely pay attention to and have respect for

Liz (left) speaking at community meeting in Halifax

the world in which they live. By modifying our lifestyles, using our purchasing power to reflect our values, and supporting activities that respect and protect the diversity of life, we can make a difference.

P'lovers is currently working with franchises in Ontario with managers of new locations. The future vision for P'lovers includes a more diversified product line, and greater community engagement on the part of the store. Liz comments, "We would like to become more active on issues than we have been recently - we've been so busy with the franchisees, that we've lost some available time/energy to be proactive..."

Liz Crocker is a businesswoman, writer, teacher and environmentalist. She is a highly regarded and successful entrepreneur (Woozles, P'lovers) and volunteer showing leadership in environmental, educational, children/youth and cultural causes within Nova Scotia and nationally. Among her extensive volunteer activities, she has been on the Boards of the IWK, Neptune Theatre, and Shakespeare by the Sea. Committed to issues of sustainable development, she is a member of the Board of the Sierra Legal Defence Fund and was formerly a member of the National Round Table on Environment and Economy and the Ecology Action Centre Board of Directors. Liz holds a BA in History and Political Science from Dalhousie University and MEd in Special Education from the Atlantic Institute of Education.

Suzanne Fielden, Rocky Mountain Flatbread Company (Canmore, Canada)

Demographic: 10 employees, 1 year in business, incorporated company, restaurant and wholesale food

The Rocky Mountain Flatbread Company realizes a long held vision for Suzanne and her husband; for more then three years they discussed and planned the design of their pizza restaurant, which would also serve as a manufacturing facility for wholesale frozen pizza. Their values invited them to think about how the business model could support a range of functions, including a deep commitment to the well-being of the community of Canmore, and demonstration of best practices in green building, sustainable packaging, organic value-added food production, and recycling.

Today, the business has been in operation for more than a year, and all indications show that it is heartily embraced by the community, both for the values inherent in the business, and the high quality of the pizza and dining experience. Customers rave about the food, supermarket retailers instruct customers to put down the pizza they were thinking of purchasing and try Rocky Mountain, and tourists to the Canmore area are finding this very special restaurant in town.

"Our long term business goal is to be the Ben and Jerry's of the pizza world," Suzanne explains. "Those are two guys that started from nothing, built a brand on social values, and what's more, lived those values". For Rocky Mountain, this means a commitment to the social and ecological value of its operation and the products it makes available to market. "Ben and Jerry's is a strong role model because they didn't just compete strongly, they completely redefined the ice cream market; they were willing to take on the Haagen Dazs". In the same way, Rocky Mountain hopes to redefine the frozen pizza world, making handcrafted pizzas with organic ingredients

available to supermarket convenience customers, redefining choices in the market, offering frozen food products that are "made with love". Fast food, apparently, can be good (nutritious) food.

Suzanne was working as a consultant to large businesses in the UK, as was her partner, when they decided they wanted to do something more meaningful with their skills and abilities. They are happy to be committed to a business that is extremely demanding, while providing opportunity to express their values and concern for community.

Ian Thomson, Canadian Bioenergy Corporation (Vancouver, Canada)

Demographic: Six employees, two years in business, for-profit company, alternative fuels for energy sector

Canadian Bioenergy Corporation is western Canada's first and largest distributor of biodiesel. The company is active in 3 areas:

- Developing technology for pre-treatment of low-value / waste feed stocks
- Planning regional biodiesel manufacturing facilities in western Canada
- Partnering with petroleum distributors to make biodiesel widely available in western Canada

Before starting Canadian Bioenergy three years ago, Ian Thomson spent many years as an organizational consultant doing strategic planning for various businesses and non-profit groups across Canada and the US. Through this work, Ian developed a broad perspective of environmental and business issues and realized that many of the organizations he was working with did not have visions that took into account emerging ecological and social realities. He experienced disconnect between his work as an organizational consultant and his clients' worldviews. In his search for a framework that would bridge this gap, he discovered The Natural Step.

Soon thereafter, he had heard that Karl-Henrik Robert was at Whistler on vacation so he set about organizing a meeting with Dr. Robert and the key stakeholders of Whistler, such as Interwest, the developer that owns and operates Whistler-Blackcomb Mountain Resort. They had an "amazing" meeting and he proceeded to co-facilitate the Early Adopters group of TNS at Whistler. He explains, "That was very much my work, planning, strategy, the ability to work with a diverse group of people and herd them in. This is an asset - getting a diverse group of people together and getting them to work together – that has certainly helped in starting this business."

After the Whistler experience, Ian became very involved in his own community of Bowen Island, located just outside of Vancouver, where he helped devise an energy plan for the community as the Chair of a municipal

advisory committee on sustainable community. In this process, he came across the idea of biodiesel fuel.

Ian was feeling the need for something different to drive in his career, which was a very personal thing. He explains, "It started with a harmless Google search one night. I was looking to see what kind of biodiesel activity was in Vancouver. I was sure there had to be something. I knew it was all over Europe. At the time it was in increasing use in the US. And I couldn't find anything here in Vancouver except for one man doing something at the University of British Columbia."

Ian proceeded to intensely research the biodiesel business. After he developed a strong case, he presented an elaborate and detailed proposal to two prominent business people in his community, one of whom is now the Chair of his Board of Directors. He explains. "I started from a blank canvas. I'm not an engineer. I've never worked in an oil refinery. I have no agricultural experience. I've never done anything like that, things you might think I'd have known for this type of business. So I had to learn an awful lot."

His persistence, belief in the business, and his natural strategic ability led to the development of a biodiesel pilot program in regional municipal fleets. In this pilot program, Canadian Bioenergy imports biodiesel fuel from the US and distributes it to the city fleets. This pilot has been very successful and is building market demand for biodiesel fuels in BC.

Recently he has begun to plan the second phase of the business: the production of biofuels locally. He and his partners have raised close to a million dollars and are "in a race" to get a plant up. He foresees that they will be in production within 16 months, and is backcasting from this as he looks for Western Canadian partners in agriculture, etc.

Hiroshi Aoyama, Aburato Shoji (Shiga, Japan)

Demographic: 10 employees, 8 years in 37-year family business, corporate limited, energy sector

Hiroshi Aoyama is an executive director of Aburato Shoji, a local fuel station affiliated with Nippon Oil Corporation.

He started working at his family-owned fuel station 8 years ago, when he was 25 years old. He likes his family business, but looking from the sustainability perspective, their activities and products are not environmentally friendly at all. As described in their core value "sanpo-yoshi", which means good for three directions, customers, employees, and community, in Japanese, he has been trying to find and implement whatever he can do to make it better.

He first started with collecting various recyclable materials such as cans, milk cartoons, pop bottles, batteries, tires, oil …etc. The fuel station is usually open seven days a week, thus it is easy for customers to bring those recyclable things to the station whenever they want. As there are always employees at the station, it's possible to keep it clean and tidy. As employees usually deal with dirty items such as oil and tires, it's not problem for them to touch those wastes. It has also increases sales of the fuel station, as customers not only bring their recyclable wastes, but also fuel their cars. Therefore, this initiative is forming a new cycling model of materials at fuel stations.

Another interesting service he offers is "eco car wash", using ecological detergent for car wash made of used cooking oil. Usually, sewage from fuel stations are collected and treated in the tank under the fuel station, but the detergent within the waste water for the car wash is not treated at all and just drained away into the sewer or river. In Shiga prefecture, many housewives are involved in the movement to use natural soap instead of synthetic detergent. Learning from this community activity, he started using ecologically-friendly soap made of used cooking oil.

And now he is making a strong effort to promote biodiesel made with used cooking vegetable oil. Biodiesel can be put into usual cars same with usual diesel oil, and it doesn't contains the harmful exhaust, SOx, in the same high percentages as other fuels. He collects used cooking oil at his fuel station, and also receives expired cooking oil from supermarkets and manufactures all around Japan. He established his own refinery plant in March 2003, and since then, he is producing about 100 litres of biodiesel fuel everyday.

In the current automobile-based society, gas stations are closely connected to the lives of many people and rooted in local community. There are 50,000 gas stations in Japan, while there are about 16,000 post offices, and he realized the huge potential of gas stations, which are located in almost all communities in Japan. He is striving to make a paradigm shift in petrol station industry as a whole.

Anders Abrahamsson, On a Mission (Växjö, Sweden and Kawempe, Uganda)

Demographic: 2 employees, 1 year in business, international, cooperative association

On a Mission was developed in association with Växjö University's entrepreneurship development program, growing out of a personal connection between Rikard Jansson, Anders Abrahamsson and a Ugandan student, Joseph Muwonge, at the University. With a view of innovations towards sustainability as enablers for people living in impoverished circumstances, the enterprise was founded to provide integrated social, ecological and financial value to Ugandan communities and Swedish stakeholders.

The current for-profit arm of the enterprise manufactures and wholesales sustainability profile clothing to corporate clients, imported from Uganda and made with fairly traded organic cotton. Clients benefit from profile clothing in external promotion of their commitment to sustainability, and internal strengthening of their corporate sustainability culture. Other for-profit arms are planned for On a Mission in the areas of event management, services, import/export and eco-tourism. Profits from these various ventures are channelled into projects that support social well-being in Uganda. Profits are placed in an investment fund with a mandate to build capacity in five areas: health, education, entrepreneurship, digital unification and decentralized energy. Current capacity building projects include installation of water filtering systems using natural materials, solar powered wireless network devices and computers, entrepreneurship and basic literacy education for adults and children, and train-the trainer programs spreading knowledge of sustainable practices in agriculture.

Anders is the driving force behind the business; his energy and ability to communicate a strong vision motivate business activities.

Hans Eek, Swedish Energy Agency (Göteborg, Sweden)

Demographic: 31 years in business and research, consultant, housing construction sector, passive solar design

Hans Eek is an architect and a leading expert in passive solar design in Sweden, and now around the world.

He established an architect office, EFEM Arkitektkontor, with his friends in 1974, which focused on solving environmental issues. One of his famous works is the terraced housing units without heating located in Lindås, a community south of Göteborg, which has attracted international attention. They were ready for tenancy in 2001 and were recently evaluated in an interdisciplinary university study, both as pertains to technology and tenant-social environment. The basic concept – to minimize heat loss – is based on experience Eek acquired through a series of development projects run since the late 1970s, e.g., Tuggelite in Sweden and Ingolstadt, Germany and Halmstadt, Sweden.

He was working with Göteborg Energi AB from 1999 and involved in the project "Göteborg 2050" from 2001-2004 as one of the main coordinators. This project had various impacts on local community especially providing people with opportunities to think about sustainability, and help them draw the vision of sustainable Göteborg in 2050.

Now he works with Swedish Energy Department for further research and education on passive solar design, to promote those practices not only in Sweden, but also Germany, Switzerland, Italy, Austria, and Japan.

He has been strategically choosing partners to work with time to time, starting as an independent architect, building good relationships and collaborations with local universities such as Göteborg University and Chalmers University, Göteborg city council, governmental agencies, and various international committees.

Petter Sjöström, Swedish Energy System Transition AB (Göteborg, Sweden)

Demographic: 3 fulltime and 1 part-time employees, 1 year in business, incorporated business, energy sector

Petter Sjöström is a co-founder of the renewable energy consultancy, Swedish Energy System Transition AB (Switch AB).

Switch AB's mission is to accelerate energy system transition. This means switching from dirty (nuclear power and fossil fuel) to clean (solar and wind energy) sources. PV and renewable energy are, as he said, still new for the Swedish market. To support this transition, it is necessary for the company to educate all stakeholders through consulting services.

Petter and Lars Hedström, one of his best friends and co-founder of Switch AB, established the company in the autumn of 2004. They have been planning to establish an enterprise to promote photovoltaic systems since they were studying together in University of Linköping. After almost three years of planning, they founded Switch AB with support from the entrepreneurial project for sustainability called Triple Logic.

Petter has been involved in the development and management of a feasibility study for the construction of Sweden's largest solar photovoltaic system on the roof of Ullevi football stadium in Göteborg. Also, he is developing a number of PV projects as part of the national ROT investment subsidy for solar photovoltaic power systems in cooperation with local city planners and regional county councils.

As their enterprise has just started, their operation is still limited, but possesses various opportunities. They have a big long-term vision: to launch the first large-scale photovoltaic plant in northern Africa and to provide clean energy to all of Europe.

Vicky Opperman, Sustainable Ballard (Seattle, US)

Demographic: three volunteer co-directors, 300 community volunteers, two years of operation, non-profit, grassroots community building

Vicky Opperman possesses a warm independent spirit and a passion for bringing people together to make Ballard, Seattle, and the world, a better place. When you talk to Vic, you can feel her concern and sense of urgency for people and the planet. Vic's passion for sustainability and community shows in her green home design business and her years of grassroots community organizing. Vicky is a community activist giving of her time and her business to many great organizations over the years which include Rosehedge, Street Outreach Services, Real Change Newspaper, Ballard Peace Activists and the Greater Seattle Business Association. She is co-founder of a non-profit group, KINGFISHERS Sailing Club, within it developing a special program to empower youth with leadership skills through sailing.

In 1984, Vic started a green building design firm, Opperman Design. In 2003, after intense involvement in local peace activism, Vicky initiated a grassroots neighbourhood sustainability organization, Sustainable Ballard: A Blueprint for Every Town USA.

Opperman Design has specialized for over 20 years in residential design, remodels and additions. She is interested in client-oriented, green home design solutions which integrate thoughtful use of less toxic building materials and practices with a team approach (designer-client-contractor): from initial design through construction. Services include residential and light commercial design, consulting, code-research, permitting and price planning with contractors.

Sustainable Ballard is a non-profit organization developing a grassroots vision of sustainability for the community of Ballard in Seattle. Sustainable

Ballard seeks to serve its community as a clearinghouse of information about sustainable practices, in addition to advocating for those practices. Sustainable Ballard works as a catalyst for grassroots involvement in creating a sustainable Ballard, connecting eco-friendly businesses, organizations, utilities, and residents in order to share resources and collaborate on the bigger vision of self-sufficiency.

Alicia Silva, Greener Lifestyles (Seattle, U.S.)

Demographic: three employees, two years in business, for-profit, furniture and home accessories

Alicia Silva has been an entrepreneur since completing her formal education in architecture and interior design ten years ago in Mexico. Alicia and her family established successful furniture manufacturing and retail businesses in Mexico City, Mexico, where she achieved her goals of strengthening her community by providing local jobs and stimulating the local economy. In 2002, with the urging of Alicia's best friend in Seattle, she and her husband moved to Seattle and soon the three of them opened a retail green living store, first named *Amada Luna* (*Beloved Home* in Spanish) and now - after intensively clarifying their purpose, values, and strategic goals - known as *Greener Lifestyles*.

Alicia is clearly driven to inspire change towards sustainability and feels that the only way for her to do her part is through owning and operating a business to inspire conscious consumer choices. The furniture is made by her family's furniture factory in Mexico and consists of 100% natural materials, such as organic cotton, natural latex rubber and Forest Stewardship Council (FSC) certified wood. She is determined to make sustainable social change in the furniture business both through their customers, i.e. the local community, and their suppliers. Alicia believes that "proposing new ideas on how to be more sustainable is the only the real way that I can contribute to making the world a better place." She is proposing a lot of new ideas around certifications for sustainably made furniture to her suppliers and, in the process, educating them.

In business for just two years in Seattle, *Greener Lifestyles* has become a local source for conscious living as a retailer of high quality sustainably-made furniture, flooring, and a variety of home accessories, all reflecting Alicia's commitment to sustainable spaces that is directly related to her mission to influence people's lifestyles, whether working, playing, or relaxing. Not only is the retail showroom an inspiration of sustainable

living, but also Alicia and her partners are also a voice for promoting conscious consumer choices and educating people on how their choices really do make a difference in creating a better world.

Greener Lifestyles has become a role model green business in Seattle. Alicia is frequently invited to speak at local business and community events. Research associate Scheerer met her at the Pacific Northwest Sustainability Conference held on Earth Day 2005 in Seattle where she was a speaker on what individuals can do to adopt a more sustainable lifestyle. She *is* very inspiring!

Steven Villegas, Utilikilts, (Seattle, US)

Demographic: 15 employees, five years in business, for-profit company, men's skirts as flag of social change

Steven Villegas established the Utilikilts Company in 2000 in order to fund a global arts project, involving seven double deck busses that would travel the world, putting on an interactive road show of music, dance, video art, and drama, and leaving change in its wake. The Utilikilt was one of several designs implemented by Form Follows Function, an original design company, in order to raise money for this Arts project. However, the Utilikilt soon spawned the Utilikilts Company, and right before their eyes, this unique garment began to accomplish the goals that Form Follows Function had originally set out to promote, by becoming a growing social phenomenon, inspiring debate, consistently challenging the media, changing lives, and creating a common symbolism among its wearers.

To even Steven's surprise, Utilikilts has been steadily growing and has achieved goals he has set for the company. Steven's energy and compassion inspires Utilikilts' sense of community, strong customer connection, and commitment to social change. Utilikilts' mission statement is "We are committed to pioneer a comfortable alternative to trousers by producing Men's Unbifurcated Garments (MUG's). Our patented utility design reflects the company's high standards and integrity. Utilikilts seeks to set a global example, defining 'business with a conscience' and channelling company gains and resources back into the community."

Steven is dedicated to promoting environmental sustainability, social justice, and economic prosperity. Steven makes a conscious effort to advance Triple Bottom Line values and his operational decisions are informed by the company's understanding of these values.

Steven is passionate that Utilikilts represents social change. He wants the Utilikilt to embody a flag of change, a uniform for the nonconformist. He is

passionate that the business positively influences others, and therefore influences society as a whole. Utilikilts is completely committed to building strong relationships with their customers, as they believe their customers ultimately embody the corporate identity.

Appendix B: Interview Questions

For Experts

Demographic Info

"We would like to find out more about you and your organization to give context to the questions we will ask later about sustainable community development and entrepreneurship."

Name	
Position of Interviewee	
Organization Name	
Type of Expert *(academics, local authorities, funders, consultants)*	
Phone	
Email	
Location	
What is the vision of success for your organization? *(Does your vision of success include sustainability principles and/or improving the community and/or strengthening their local economy? Does the vision "backcast from success"?)*	

Trends in Sustainable Community Development

1. Is there more concern with sustainable community development from academics, local authorities, funders and consultants now than ten years ago?
    Respondent may describe examples and can prompt for: support programs, policy, and financial assistance
2. Is sustainable community development a priority for you and/or your organization and/or your funders?
    If so, please give examples of sustainable community initiatives.

3.   Which agencies in this region support sustainable community development?

Trends in Related Entrepreneurial Activity

4.   *Share diagram.* Is there a trend towards more "progressive enterprises" in start-up phase now than ten years ago?
    A)   *If so, please describe your perception of this trend.*
    B)   *If so, what are some examples of the purposes of these enterprises and the social or ecological concern they may be addressing?*
5.   What would you estimate to be the approximate success rate of "progressive enterprises"?
        Please comment on assumptions behind your estimate.

Vision / Strategic Management

6.   What kind of support, if any, do you provide to "progressive entrepreneurs" in developing their vision?
7.   What kind of support, if any, do you provide to "progressive entrepreneurs" in their strategic planning processes?
        If any, what is your approach?
8.   Please comment on how "progressive entrepreneurs" may be exploring new ways to structure their enterprises?
        Respondent may comment and can prompt for: trends in legal structure (i.e. non-profit, co-operatives, Limited Liability Corporation, combination) and organizational structure (flat such as chaordic design, mimicing natural systems)

Driven by Community Needs / Assets

9.   What kind of support, if any, does your organization provide to "progressive entrepreneurs" to identify needs and resources in the local community?
        If none, are there other organizations that fill this role?
10.   Please comment on how "progressive entrepreneurs" become aware of community trends and may approach assessing community needs and resources.
        A) How does community awareness and assessment impact the development of their enterprises?

Knowledge of Sustainability

11.   Which concepts, if any, are considered by "progressive entrepreneurs" in the management and design of their enterprises?
- industrial ecology
- eco-efficiency
- manufacture products from recycled materials
- organic food standards
- neighbourhood gathering place
- green building and development practices
- non-toxic garden and agricultural practices
- energy conservation
- transportation
- climate change
- service and flow economy
- salmon or decline of fish stocks
- local living economies
- Natural Capitalism
- The Natural Step
- using local workforce, local companies
- internal operations

12.   Does your organization work towards educating entrepreneurs about sustainability?
> *If not and if so, comment on initiatives you may be aware of that work towards educating entrepreneurs about sustainability.*

Networks, Collaboration, Cooperation

13.   Please describe how "progressive entrepreneurs" participate in networks locally and globally?

14.   Please describe how "progressive entrepreneurs" collaborate with others in the development of their enterprises?

Closing Questions

15. *Share diagram.* Can you comment on the potential role of "community sustainability entrepreneurs"?
16. Any advice for a "community sustainability entrepreneur" just getting started?

Optional questions:

Sustainability - perception

17. How do you view the trends of movement towards sustainability? Please check ONE you most strongly agree with:
    - Obligated by compliance with regulation
    - Motivated by opportunities to find new market
    - Long lasting trends which will change the way the economy functions
    - Others (   )

18. Please describe your view of public/private partnerships in the development of community sustainability enterprises. What are the benefits of PPPs? What are the drawbacks?
19. Do you have additional comments: you would like to make?
20. Can you recommend anyone else I should talk to? Other organizations or people who work with local entrepreneurs or in sustainable community development?
21. Are you interested in receiving a copy of our report?

For Entrepreneurs

Demographic Info

Name of Interviewee	
Name of Enterprise	
Role at Enterprise	
Phone	
Email	
Location	
Within which sector does enterprise operate?	
What organizational structure best describes enterprise? *i.e. NGO, co-operative, limited liability corporation*	
In what year was enterprise established?	
How many people do you employ?	full-time: part-time: seasonal:
What is the gross revenue of your enterprise for the last fiscal year?	
What is approximate growth of your enterprise in past three years?	
Do you identify yourself as…? (state all that apply)	○ social entrepreneur ○ ecological entrepreneur ○ sustainable entrepreneur

Vision/Strategic Management

1. What is your enterprise all about?
2. What is the vision or mission that guides your enterprise?
3. What would the world [and/or your community] lack without your enterprise's contribution? (What is your core purpose?)
4. Are you working toward continual improvement through a strategic planning process?

5. If so, how often and how do you approach strategic planning?

Community Needs /Assets and Networks/Collaboration

6. What kind of community needs are you satisfying through your enterprise? What impact do you feel you've had in the community?
7. Is your enterprise meeting a unique need in the community?
8. How do you involve the community in your enterprise? What community are you defining and for which situations?
9. Do you feel you have community support for your business and/or for you? How has that support been created or developed? Do you feel it's important?

Participation in Networks

10. Participation in networks and collaborative partnerships are a strategic element for successful local enterprises focused on sustainability issues.
    strongly disagree   neutral   strongly agree
      ○   ○   ○   ○   ○

11. What networks do you belong to? locally, internationally… single-sector, multi-sector
12. How much time (%) would you say you spend on building relationships, locally and elsewhere?

Knowledge of Sustainability

13. The concept of sustainability is embraced by your enterprise.
    strongly disagree   neutral   strongly agree
      ○   ○   ○   ○   ○
14. How is your enterprise making a difference regarding sustainability in your community and perhaps the world?
15. What sustainability concepts have you applied to your enterprise?
    May need to prompt with these concepts:
- industrial ecology
- eco-efficiency
- manufacture products from recycled materials
- organic food standards
- neighbourhood gathering place

- green building and development practices
- non-toxic garden and agricultural practices
- energy conservation
- transportation
- climate change
- service and flow economy
- salmon or decline of fish stocks
- local living economies
- Natural Capitalism
- The Natural Step

16. How do you educate your employees and customers about sustainability?

General/Optional

17. What are the primary benefits of being a sustainable community enterprise?
18. What are the primary challenges of being a sustainable community enterprise?
19. What advice would you give to a community sustainability entrepreneur starting up an enterprise?
20. Do you have role models that have inspired you?
21. What barriers or obstacles have you faced in developing a sustainable enterprise? *(could prompt for lack of government incentives to reduce resource usage, tax breaks for use of sustainable technologies, etc... market barriers)*
22. What kind of support would you like to have (*i.e. incentives, regulations*) in order to be sustainable?
23. Any additional comments?
24. Are you interested in receiving a copy of our final report?