Strategic CSR Innovation

Serving Societal and Individual Needs

Edited by
Atle Midttun

Research Report 2/2009

BI Norwegian School of Management
Department of Innovation and Organizational Management

Atle Midttun (Ed).
Strategic CSR Innovation: Serving Societal and Individual Needs

© Atle Midttun
2009

Research Report 2/2009
ISSN: 0803-2610

BI Norwegian School of Management
N-0442 Oslo
Phone: +47 4641 0000
www.bi.no

Printing: Nordberg

BI Norwegian School of Management's research reports may be ordered from our website www.bi.no
(Research – BI Publications)

Contents

PREFACE 5

1. STRATEGIC CSR INNOVATION- SERVING SOCIETAL AND INDIVIDUAL NEEDS 7

INTRODUCTION 7
THINK 7
FIN FASHION 8
OCEAN SAVER 9
CORE STRATEGIC CSR BEYOND DEFENSIVE AND PROACTIVE POSITIONS 10
CORE STRATEGIC DRIVEN CSR INNOVATION: SERVING THE NEEDS OF SOCIETY AND THE INDIVIDUAL 12
INTEGRATING SOCIETAL CONCERNS INTO BUSINESS STRATEGY 15
DYNAMICS OF CORE STRATEGIC CSR INNOVATION 16

2. THINK GLOBAL 19

INTRODUCTION 19
THE COMPANY 19
SOCIAL AND ENVIRONMENTAL DIMENSION OF INNOVATION 21
STORYLINE 23
INNOVATION PROFILE 24
THE ENTREPRENEUR 27
PROFIT CONSIDERATIONS 28
STAKEHOLDER RELATIONSHIP 29
FUTURE PERSPECTIVES 32
CONCLUDING REMARKS 34

3. FIN 35

INTRODUCTION 35
SOCIAL AND ENVIRONMENTAL DIMENSION OF CSR DRIVEN INNOVATION 39
MILESTONES 39
INNOVATION PROFILE 40

THE ENTREPRENEURS 42
PROFIT CONSIDERATIONS 43
STAKEHOLDER RELATIONSHIP 44
FUTURE PERSPECTIVES 45
CONCLUSION 49

4. OCEAN SAVER 51

INTRODUCTION 51
OCEANSAVER- THE STORYLINE 52
SOCIAL/ENVIRONMENTAL DIMENSION OF THE CSR DRIVEN INNOVATION 54
MILESTONES 55
INNOVATION PROFILE 55
THE ENTREPRENEURS 59
PROFIT CONSIDERATIONS 60
STAKEHOLDER RELATIONSHIP 60
THE MARKET- AND POLICY CONTEXT 62
FUTURE PERSPECTIVES 62

5. CONCLUDING COMMENTS 65

REFERENCES 67

APPENDIXES 75

THINK 75

Preface

This report explores the challenges and opportunities of strategic CSR, and is primarily based on three cases of CSR-driven innovation in Norway. The study has been undertaken within the framework of a project on CSR-driven innovation organised and partially financed by the Nordic Innovation Centre and carried out by the business schools in the four Nordic capitals[1].

Some of the central insights emerging from this explorative study are that CSR-driven innovation entails a number of specific possibilities and constraints:

- It allows a move beyond defensive and proactive CSR into a more rewarding synthesis between social and commercial concerns.
- It introduces the paradigm of serving both societal and individual needs, thereby transcending the division between public and private goods.
- It necessitates an alignment between micro-level business strategy and macro-level societal needs.
- It creates new opportunities for finance, organisation, marketing and regulation, and allows new dynamic alignments to drive learning investments, niche markets and product differentiation.

Chapter 1 discusses the core possibilities and constraints of CR-driven innovation, based on the three Norwegian cases that are presented in the following chapters 2 to 4. Chapter 5 provides some brief concluding remarks.

[1]. Copenhagen Business School; BI – Norwegian School of Management, Helsinki School of Economics, Reykjavik Business University, Stockholm School of Economics

Chapter 1

Strategic CSR Innovation- Serving Societal and Individual Needs

Atle Midttun

Introduction

Over the last decade and a half, CR has emerged as a central business agenda, developing into a business megatrend with a global outreach (Midttun 2006). The conceptual content and business practice have gradually been codified, engaging firms to improve governance and to intensify their commitment to social and environmental decency. More recently, emerging new businesses have also engaged in CR as a core focus in their innovation, taking social and/or environmental concerns beyond mere decency and strategically including them in the core business model.

The three cases that this report builds on were selected, after consultation with industrial associations and public agencies involved in CSR and innovation, to represent social and environmental foci, as well as different phases in the innovation process.

Some of the central insights emerging from this explorative study are that CSR-driven innovation entails a number of specific possibilities and constraints:

- It allows a move beyond defensive and proactive CSR into a more rewarding synthesis between social and commercial concerns.
- It introduces the paradigm of serving both societal and individual needs, thereby transcending the division between public and private goods.
- It necessitates an alignment between micro-level business strategy and macro-level societal needs.
- It creates new opportunities for finance, organisation, marketing and regulation, and allows new dynamic alignments to drive learning investments, niche markets and product differentiation.

This chapter presents a brief synopsis of each of the three Norwegian cases and then discusses the core possibilities and constraints of CR-driven innovation, as outlined above.

Think

With its concept of “sustainable mobility”, the Norwegian car manufacturer “THINK” (our first case) has positioned itself strategically to meet the need

for swift urban mobility while also addressing public concerns regarding global warming and CO2 emissions.

The first prototype and predecessor to today's THINK city car was developed in 1991. Drawing on 17 years of experience in development and production of electric vehicles, the manufacturers finally put THINK city into serial production in 1999 with the support of American car giant Ford, which invested USD 150 million in THINK during its four year period of ownership. THINK was sold out of the Ford group in 2003, however, and thereafter struggled to survive.

In recent years, a wave of environmentalism and an increasing awareness of climate change has ripened the market for alternative mobility solutions. In 2006, a group of Norwegian investors bought THINK and an experienced management team entered the scene. Both new and former staff members were added to the team and a new strategy was outlined for the company. Further shares issued in 2007 paved the way for THINK to go into regular serial production of the 5th generation "THINK city".

The company has chosen a business model adapted to low volume production in the startup phase. THINK has retained production plants based on hand assembly of parts from Asia and distribution is based on a self-service concept in which customers order personalized cars online. A concept store has also been established in the centre of Oslo to allow customers to test-drive the car before they order.

Although the company was not the first to develop electric vehicles, it is one of a limited number with the right to call its vehicle a *car* since it satisfies all current safety requirements and crash tests. THINK's novelty lies in the combination of new high performance batteries, a mobility concept and provision of an environmentally friendly transport solution. The aim of THINK is not simply to sell cars; the company wants to change the way cars are made, sold, owned and driven through a new "Mobility Concept".

FIN Fashion

Our second case is FIN Fashion, a high fashion company located in Oslo. The company's uniqueness is its combination of luxurious fashion with environmentally and socially responsible methods of production. The foundations for FIN were initially laid in 2004, when a business graduate from the Norwegian School of Management and a sociology graduate from the University of Oslo set up a consulting company called EtikkTakk. They went on to enrol a designer who tooled their ethical ecological ideas into fashion and design. FIN produces ready-made clothing aimed at the upper-mid price range and combines this with a focus on ethically sound labour

conditions and high environmental standards in a globally distributed supply chain.

The founders of FIN first created Bedre! that manufactured organic cotton T-shirts and subsequently FIN itself in response to the "Green Trend" which encompasses recycling, reducing waste and pollution, an increasing concern over CO2 emissions, a growing focus on business ethics and a consumer preference for "pure" natural ingredients.

FIN's ECO Lux concept has been well received in the market and is viewed as a positive asset for the company. The concept functions both as a guideline for strategic choices and as a constant goal for improvements. According to the company website, ECO Lux implies:

> *"In our path, towards unique results, every step is of equal importance. We carefully select our material to achieve the finest expression. The use of organic cotton provides us the luxury of environmentally friendly textiles. Handspun wild silk gives us beautiful textures. Organic alpaca gives us the rarest and most precious fiber available.*
>
> *To recognize the hard work that has gone into producing the fabric in our clothes, we use Fairtrade certified cotton. To reduce CO2 levels worldwide, we invest in climate credits to reach the global goal of carbon neutrality. To seal it, we let our eminent designer, Per Åge Sivertsen, add passion into his creations."*

FIN's most valuable asset is its expert knowledge, its involvement in the supply chain and its extensive connections. FIN keeps costs at a reasonable level by being actively involved in every step of the supply chain, and as it is in direct contact with suppliers and manufacturers it has eliminated the need for middlemen and agents.

Ocean Saver

Our third case is the company OCEAN SAVER which was set up to develop a new type of ballast water treatment system (BWTS) for the shipping industry. This was a response to the increasing problem of biological pollution caused by invasive species carried in ballast water being transferred to new regions. When introduced to a new environment, an otherwise harmless organism may cause serious damage to a different biotope and unlike chemical pollution, the consequences are irreversible. The seriousness of this problem has led to strong political engagement with

the issue. Cleaning of ballast water is currently high on the political agenda of both the UN accredited International Maritime Organization (IMO) and on the agendas of several governments, including the Norwegian government.

"Hydro Dynamic Cavitation Technology", the combining of cavitation and nitrogen supersaturation, is at the core of the OceanSaver BWTS. It provides a three-step method of eliminating organisms: conventional filtering, cell damage by shockwaves and suffocation by displacement of oxygen. Using the latter two technologies in combination has resulted in very high organism termination rates at very low levels of energy consumption. An additional benefit of the OceanSaver BWTS is that the corrosion to the coating of ballast tanks is considerably reduced, thereby lowering maintenance costs and the risk of accidents resulting from hull deterioration. OceanSaver AS has already won two prestigious awards for its new technology: in 2006, the company won the international Seatrade Award for "Countering Marine and Atmospheric Pollution" and the Norwegian National Environmental Award "Glassbjørnen", in the "Product" category.

Core Strategic CSR beyond Defensive and Proactive Positions

Our three cases of CSR-focused innovation represent a deeper CSR engagement than that present in the ordinary firm. In all three cases, Fin, THINK and Ocean Saver, strategic CSR engagement is at the heart of the core business model. Conceptually, this type of CSR engagement needs to be distinguished from defensive, reactive and proactive CSR, where CSR is essentially treated as a supplementary function to a non-CSR oriented core.

According to Simon Zadek (200) and Tulder and Zwart (2005), one may see d*efensive and reactive CSR* as an industrial response from large companies that are attacked for socially or environmentally unsustainable practices. In this model, CSR engagement is built up as a safeguarding support function and involves changing malpractice in selected parts of the organisation to comply with new social and environmental expectations, while in essence remaining strategically focused on business as usual. The defensive and reactive nature of CSR in this mode gives it limited business potential; it remains a defensive support function and leaves fundamental value creation to other drivers.

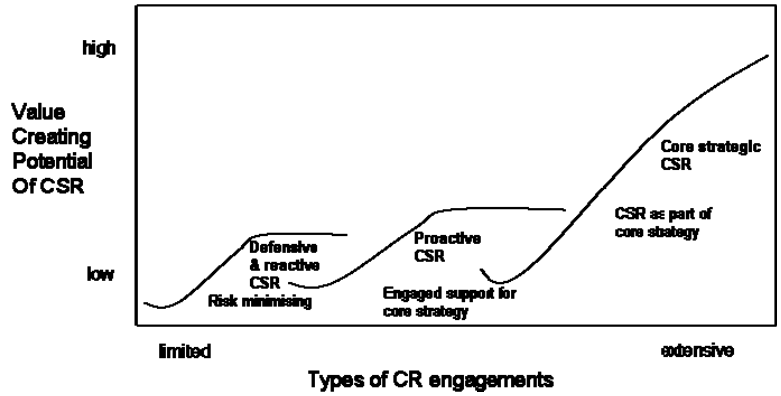
Proactive CSR takes the support function somewhat further, firms being motivated in this case by the perceived advantages of displaying the company as a front-runner in decent business practices. This may include substantive shaping-up of routines and organisational practices, as well as active stakeholder engagement. Although proactive CSR may modify and supplement the business model, it does not dramatically change it, however.

Proactive CSR therefore also essentially remains a support function without strong value-creating capacity.

In *core strategic mode*, CSR is brought into central value creation and becomes part of core strategy. This is evident in how our case firms present themselves: Think's concept of: "Sustainable Mobility"; Fin's concept of "ECO Lux" and the very name of "Ocean Saver" all display strong CSR commitment at the very core of the business model. Here we are using the term more restrictively than Porter and Kramer (2006), who by strategic CSR mean engaging in CSR while drawing on the company's core competencies and resources, but without necessarily making CSR part of its core business model.

By being brought directly into core value creation, *core strategic CSR* has a much larger value-creating potential. By contrast, defensive and proactive CSR have limited potential, in so far as CSR is used to safeguard a business strategy which is essentially built on other premises and where other factors remain central value drivers. With strategic CSR engagement, CSR has significant potential for direct value creation both for business and society, as illustrated in figure 1.

Figure 1: The Value-creating Potential of CSR



Potential advantages of core strategic CSR engagement include a positive impact in the media and eliciting positive attitudes from business partners and consumer interests. FIN regards itself an early mover in the field, and has received considerable media and business interest as a result of its company profile. One may argue that organic clothing is no longer a novelty. However, organic cotton on the catwalk certainly is, and the company can already boast celebrity fans and features in several editions of Vogue Magazine, thanks to its CSR engagement.

A second advantage is the benefit from public goodwill and regulatory support. As THINK explains on its web page:

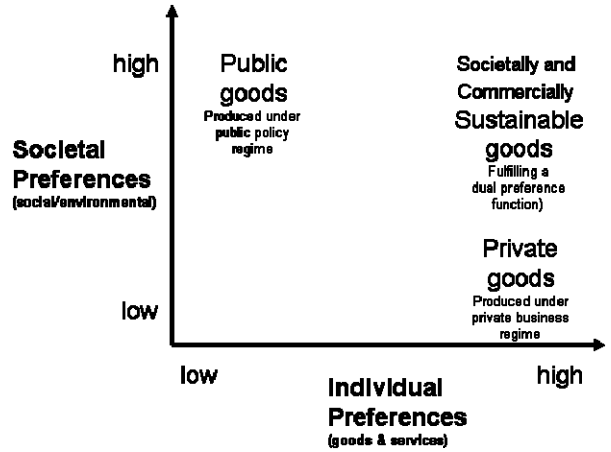
"National and local authorities are increasingly making it cheaper and more convenient to drive electric cars. In London the THINK city is exempt from the Congestion Charge. In Italy access to certain city centres is restricted for vehicles with internal combustion engines but open to electric vehicles. In Norway you can drive THINKcity through all toll booths free of charge and in public transport lanes. Furthermore, you do not have to pay car tax every year either".

Core Strategic Driven CSR Innovation: Serving the Needs of Society and the Individual

Moving from value-supporting to value-driving CR entails a shift in strategic focus and the aim of serving a dual preference function that encompasses the needs of the individual and society as a whole. This represents a radical recombination in strategic focus and a break with the traditional dualist approach taken by mainstream welfare economics (Samuelson 1954; Samuelson and Nordhaus 2005) which makes a clear-cut division between public and private interests. According to this line of thinking, *public goods* are provided by public agencies because they cannot be commercialised and *private goods*, that can be commercialised, are provided by private industry.

Admittedly, mainstream regulation literature recognises that there are spillovers between public and private engagements (positive and negative externalities). However, engagements are primarily undertaken with public and private goods respectively and the spillovers are, in principle, handled as a necessary regulatory side-concern. CSR-focused innovation, on the other hand, seeks to fulfil both preferences at the same time, meeting societal challenges while generating commercial value in private markets. As a parallel to the distinction between public and private goods, we have termed this *societally and commercially sustainable goods*" (figure 2). Here the public good serves as a core strategic focus, yet it must also be commodified to serve private consumption needs. In this combination lies the essence of core strategic CSR innovation.

Figure 2: Core Strategic CSR, Serving a dual preference function[2]



In other words, the production of pure public goods must be financed by public engagement and/or similar collaborative arrangements. The production of private goods implies a strategic focus primarily on preferences of individuals with purchasing power and financing takes place through commodification and individualised market transactions. The production of societally and commercially sustainable goods combines both logics, however. The strategic focus is therefore both on public need and private interest, i.e. solving social and environmental issues of societal concern on the one hand, while meeting private consumer interests on the other.

Innovation, which by definition involves dynamic experimentation, is particularly dependent on the flexibility of private initiatives. Embedding public interests in private commercial engagement therefore makes good sense in this field. Furthermore, privately organised core strategic CSR may more easily enable engagements across national borders than politically organised provision of public goods. An emerging literature on international and global goods (Stiglitz 1999) highlights the dilemma of providing public goods at the international level. Following the 2002 Johannesburg summit, industrial actors have therefore been avidly courted by NGOs and policymakers in an effort to engage them in providing global or international public goods.

This integrated focus on both public goods and private business is evident in all our three cases and particularly so in Fin's ECOLux concept with its double agenda of serving the needs of both society and the individual. The ecology (and social equity) dimension represents the public

[2] From Midttun (2008 b)

good, whilst the "Lux" appeals to individual preferences by supplying private goods in the field of fashion clothing.

One of the ways in which FIN manages to serve both the public and private good agendas is through the attention paid to the entire supply chain. The founders of FIN are actively involved in every stage of production, for example sending agents to monitor suppliers, and this dedication to the whole of the supply chain enables them to control the quality of the raw materials and textiles, which in turn provides the customer with superior quality and a guarantee of responsible manufacturing methods. FIN thus manages to retain strategic alignment around its CSR agenda and credibility in serving the public good, while simultaneously securing efficiency and reliability in production. Profiting from established relations with organic manufacturers in India and Peru, Fin's business plan includes not only environmentally friendly textiles, but also carefully selected production factories and improved conditions for local workers. The commitment to the public good is based on a strong personal commitment: FIN's entrepreneurs all share a strong belief that a successful business model should contain a high degree of CSR. FIN's founders hope to become pioneers in the fashion industry, raising awareness of the many advantages and evident profitability of adapting a holistic, socially responsible approach.

Think's core concept "Sustainable Mobility", like FIN's "ECOLux", also contains an explicit reference to the needs of both society and the individual. There is an explicit focus on public policy concern with CO2 emissions and global warming. The THINK car was displayed in a large transparent bubble at the 2008 Geneva Car Exhibition to symbolize the fact that it does not emit pollution that destroys its the atmosphere. The following quotation from Think's homepage clearly illustrates the company's engagement with public concerns:

> *"We are facing an inconvenient truth, so plug in to a sustainable solution. Electrical vehicles have zero local emission and superior energy efficiency. The THINK city is 95% recyclable and made of recycled materials. Being a sustainable company, we THINK globally and act locally"*[3].

The appeal to consumer interests is equally clear:

> *"THINK city is a modern urban car. With zero local emissions and an energy efficiency three times that of a traditional combustion engine car, it is a car for the environment. And it is a fun car for you. A choice of sodium or lithium batteries allows you to accommodate your car to your driving style, travelling up to 180*

[3] http://www.think.no/think/content/view/full/192; September 8th 2008

kilometres in one charge, with a top speed of 100km/h. Driving a silent car will give you a totally new experience"[4].

The quotation illustrates how customer appeal is based on a combination of a personal contribution to collective policy concerns, but also an appeal to pleasure, efficiency and quality[5].

As mentioned previously, OceanSaver demonstrates its public policy engagement through a clear commitment to addressing the problem of invasive species. The consequences of invasive species carried in ballast water are substantial and abating them is high on the political agenda. Furthermore, OceanSaver emphasizes that it is able to solve this problem without negative side effects, unlike some of its competitors. Yet the appeal to customers is also very clear: OceanSaver aims at providing a flexible solution using a modular design which fits a wide range of vessels and complies with all current and upcoming regulations in the area. The company argues that the cost-saving aspect of the technology, along with undisruptive water treatment, makes it an appealing and affordable choice. The combined solution to the public policy concern regarding invasive species and the problem of corrosion makes the Ocean Saver product attractive on the market. Corrosion of a ship's ballast tanks can have grave repercussions, as evidenced by the shipwreck of the "Erika"[6].

Integrating Societal Concerns into Business Strategy

For CSR-driven entrepreneurship, alignment with policy and public opinion implies a need to orient companies towards the burning political issues of the day: climate change, alleviation of poverty, pollution, human rights etc. Although politics and public opinion affect general framework conditions for all companies, CSR-focused innovators are likely to be more deeply and dramatically affected since public policy and societal concerns are more vitally tied into their commercial core. As the central basis of the business approach of the CSR-oriented entrepreneurial firm depends on engaging in questions of societal concern, it is vital for such firms to develop a sophisticated understanding of politics and public opinion.

Alignment with public interest in a modern mass media society implies not only public policy engagement, but also engagement with civil society and NGOs. In modern media-driven societies, idealistic stakeholders may acquire public legitimacy and bargaining power on a par with politicians.

---

[4] http://www.think.no/think/content/view/full/290; September 8th 2008
[5] http://www.think.no/think/content/view/full/278; September 8th 2008
[6] http://www.total.com/en/press/press_releases/pr_2000/000114_ERIKA_shipwreck_1422.htm; September 9th

Having the relevant stakeholders on one's side therefore represents a crucial factor for the CSR-oriented business enterprise.

Given its tight coupling to public policy, strategic CSR may become highly dependent on public opinion and policy trends. Think, for instance, is highly dependent on a continued policy commitment to climate change abatement and a public opinion that favours "green" cars. Similarly, OceanSaver is highly dependent on the IMO process to ratify the convention on ballast water treatment, and if the IMO fails to do so, this might create problematic scenarios with respect to future commercial development. FIN is also dependent on the trend of eco-social consciousness in the fashion market in order for the company to maintain leverage on the fashion market for improved working conditions in developing countries and higher ecological awareness in industrial production.

Hence on the one hand, business alignment with strong "green" or societal trends may give a significant boost both in terms of regulatory support and market goodwill. On the other hand, any policy reversal may well counteract many of these advantages.

Dynamics of Core Strategic CSR innovation

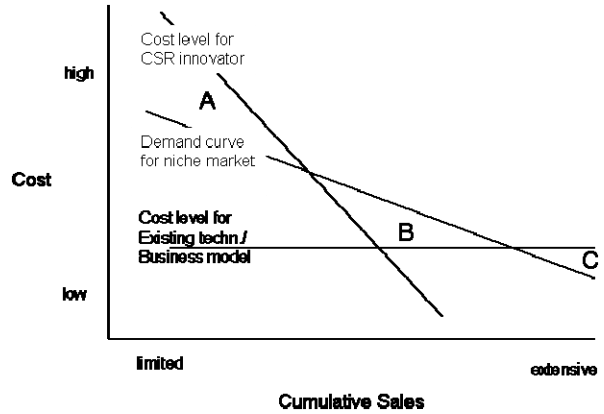
Like any form of entrepreneurship, new CSR-oriented technologies and business models need to go through several stages of learning and product development before reaching the stage of competitiveness, and at each stage CSR engagement offers both potential advantages and potential problems.

As illustrated in figure 3, strategic CSR engagement may strengthen the financial support options in the early idea development and start-up phases (A) before the product is diffused to pioneering niche markets (B). Additional support from specialised venture capital in the early growth and scaling-up phases may obviously facilitate further learning in CSR projects. At a mature stage, a CSR-oriented innovation company may have privileged access to financing from specialised funds.

With respect to marketing, core strategic CSR provides the possibility of engaging idealistic consumers as pioneers in early niche markets (B). This is obviously an invaluable advantage in the early learning phase. At later stages, CSR-focused innovation will generally provide good sales arguments. The dual-needs orientation of CSR-driven innovation allows it to surf on waves of popular concern and to harvest public support for solutions offered to common problems. This may boost customer engagement and allow speedy market penetration.

Political and regulatory facilitation, ranging from favourable support and partnerships in early phases to direct and indirect support in subsequent broader marked diffusion, undoubtedly also boost learning and product development.

Figure 3: Learning Costs and Niche Markets (Adapted from Wene/IEA 2000)



An alignment with public interest and a promising commercial outlook have proven a valuable formula for attracting public support in several of our CSR cases. Think, Ocean Saver, and FIN Fashion have all received generous support from Innovation Norway[7] in critical phases of their development, and the fact that these innovation projects targeted issues of central societal concern may well have increased the likelihood of their gaining support. Such support is obviously a valuable aid to making progress in an early phase before cost levels allow the targeting of niche markets.

At later stages, niche markets have allowed next level financing by engaged customers, well supported in the THINK case by generous regulatory exemptions from taxation and other restrictions on ordinary cars. Ocean Saver, on the other hand, is solving its learning investments through public and private customers who are willing to play pioneering roles. FIN has also succeeded to some degree in attracting goodwill in marketing and from engaged customers, although less conspicuously than the other two cases.

However, there is also a disadvantage in the strong policy exposure of these CSR innovation cases. Under long-term learning and product development, CSR-oriented entrepreneurship with strong exposure to political goodwill may prove to be a weakness. In cases of difficult technological and/or commercial learning, firms may need public support over a considerable time and they are therefore vulnerable to political change. The possibility of increased public and market support for strategic CSR engagement at the core of their business model becomes a vulnerability if the innovation project has not reached mainstream competitiveness before the learning subsides.

[7] Public agency for supporting innovation and startups

Chapter 2

Think Global

Fanny Dutrey

Introduction

The following is a case study of the Norwegian company Think Global; a company that develops and distributes electric cars. This company was chosen due to its interesting environmentally responsible profile.

The following study is based on an interview with the sales manager of the company, Richard Waitz and on different documents provided by the company such as articles, power point presentations, marketing plans and distribution plans. Internet was used to find information about Think and related companies, and websites of automotive specialized magazines. The interview was conducted in English and has been recorded. Finally, this paper is also based on information given by Jan Olaf Willums during his presentation in the Innovation and Sectoral Application lectures at BI.

The Company

Facts and figures

Think Global is a small company based on a concept of mobility; developing, producing and distributing electric cars. Founded in December 1991 in Oslo by Jan Otto Ringdal Think Global was originally called PIVCO (Personal Independent Vehicle Company). After a period of financial difficulties the company was bought by Ford in1999. Between 1999 and 2002, Ford invested $150 million to satisfy the requirements of a mandate of

the State of California which specified that companies had to be involved in environmental friendly projects. Yet, the State of California dismissed the mandate and Ford sold Think to a Swizz Group. In April 2006 Think was back on Norwegian hands, acquired by Norwegian private investors including its current CEO, Jan Olaf Willums.

Key technological or business model concepts

To make the understanding of the innovation easier the definitions of the main technological concepts used in the product description, are explained below.

Hybrid vehicle: a vehicle that combines a conventional propulsion system with an on-board rechargeable energy storage system. It achieves better fuel economy than a conventional vehicle without being hampered by range from a charging unit like a battery electric vehicle, which uses batteries charged by an external source.

Electric vehicle: a vehicle with one or more electric motors for propulsion. An electric drive vehicle needs electricity which could come from sources such as batteries, fuel cells or a generator.

Electric car: to be considered as an electric car, the electric vehicle has to satisfy all the safety requirements of regular cars and pass all the required crash tests.

Zebra battery: a new generation of car batteries and is a mix of sodium and nickel. Due to this melting, the battery has a very attractive energy and power with a lifetime of 5 to 8 years.

The company has chosen to implement a business model adapted to its low volume production. Regarding the production, Think has preferred keeping hand assembly production plants where workers are assembling pieces coming from Asia by hand, a low volume production and mini plants. Think has currently only one production plant in Oslo but is planning to set up additional plants in Denmark, US and in the UK to be as close as possible to potential markets.

he distribution process is Internet based and set up as a self-serving concept where customers can order a personalized car online. A concept store is also established in Oslo city centre so that customers can test drive and get a fell of the car before ordering it . The store includes further a service- and workshop to be closer to its customers.

Following are some “marketing concepts” relevant to the understanding of the business and marketing strategy of Think.

Think-on-demand sales process: inspired by Dell’s internet based selling system, Think wants to offer its customers an opportunity of building their

own, personalized car. The company wants to develop a build-to-order assembly line.
Think Mobility program: provides loyalty membership offerings making the car more accessible through various car financing schemes and mandatory battery lease. Customers can, indeed, buy a Think City by paying for the base vehicle and subscribing a monthly fee for the batteries as well as the provided services. This includes services like insurance, maintenance guarantee, possibility of adding or excluding features (e.g. GPS, Internet access, Media player) whenever they want.

Think connect: interactive Think showrooms for marketing, information and on-line purchase of vehicles.
Think @bout: car sharing concept.

CSR profile

The company has a 15 years old tradition with production of electric car since the first prototype was presented in 1994 during the Lillehammer Olympics. With a completely environmental focus the company has caught the current opportunity of focusing on the emerging electric car market. Due to issues around Global Warming the car market is faced with new challenges and actions regarding CO2 reductions has become a must. Additionally, oil price keeps increasing since resources are running out. Finally, more and more cities are taxing downtown entrance (e.g. congestion charge in London, in Italy some cities are only accessible for zero emission cars).

Think Global wants to provide its customers an environmental solution for transportation which is profitable for environment, since an electric car has no CO2 emission, as well as for customers, since it helps them to save money.

Social and environmental dimension of innovation

The innovation of the Think is an electric car and the mobility concept they want to sell with that car. Indeed, even if the company is not the first one to develop electric vehicles, it is one of the few having the right to call its vehicle a *car* since it satisfied all the safety requirements and crash tests. The novelty consists essentially with new performing batteries and the mobility concept.

The novelty of the product

Since Jan Otto Ringdal created the first model of electric vehicle in 1974, four new models have been developed so far.

In November 2007 Think Global started the production of Think City which belongs to the fourth generation of Electric Vehicles (EVs). Compared to previous cars this car is run by a new generation of battery which provides a bigger autonomy up to 180 kilometers. This means that the car can reach a top speed of 100 km/h and access all vast roads and motorways like regular cars.

Yet, we can not say that the innovative part of Think is launching electric cars. Indeed, other car constructors developed those "green vehicles" before them. Think is innovative in the sense that the company wants to push the Electric Vehicles further by implementing a more innovative business model. Indeed, the business idea is to move from only selling a car to selling a car plus a service and saving the environment and money of the customers. First the company wants to sell its customers a car that completely fits their needs and expectations by letting the them customize their car. Because of the logistics system and service model of the company customer can add or remove features. Customers can select features on the Internet and the company builds the car accordingly.

Think wants to go further than offering its consumers a personalized car, the company wants to sell them a whole package of services called the "Mobility Concept". Customers pay a monthly fee for all the services they want (e.g. battery use, maintenance, insurance).

Prices for the car and the monthly fees are established depending on the market where the car is sold. Considering the US market, the end price is $16,000 with monthly fees reaching from $150 to $200. In the UK market, the company wants to sell the car for $23,500 (£12,500) and the fees are $180 to $270 (£100 to £130). Finally, for the Scandinavian market the car is going to cost $36,500 (Kr195, 000) with fees up to $180 (Kr950).

The social or environmental core mission

Think Global is producing electric cars; the core mission of the company is obviously to provide an environmental friendly transportation solution. The management of the company really believes that times are now come for an electric car and that customers are going to be attracted by that kind of car. Moreover, Think not only wants to sell a car but a whole concept and they want to change the way cars are made, sold, owned and driven. That is why they develop this Mobility Concept.

Storyline

When did the innovation start?

The really first idea beyond Think started during the 1973 International Energy Crisis, when the former CEO Lars Ringdal had the idea for a compact plastic-bodied vehicle to meet urban driving needs. He created only one model of that car. So far, four generations of cars have been developed and the 5th generation is now in production.

How did it evolve?

After the first car was created in 1974, the company waited until 1994 to produce a new car. This car was created especially for the 1994 Lillehammer Olympics and had a pure promotional aspect since the event was supposed to be the communication vector for the company. 10 cars were created for this occasion and marked the start for the company. Indeed, the mayor from San Francisco ordered 70 of them for its town and paid the company in cash. This implied that the company got a huge amount of start up capital to develop a new model.

In 1995 the company started developing a new model. 100 units were produced at the plant in Oslo. Between 1995 and 1998, the company developed the 4th car which was called the first Think City generation. However, the car did not pass any crash tests, which means that the vehicle was not approved as a car but it was still considered acceptable for a low production level. This car was also the first one with which the company developed some marketing activities. The company produced 1,000 units of this model but its development took more time and money than expected and the company went bankrupt.

After this bankrupt, Ford took over Think. The acquisition took place not really because of an involvement in the future of electric cars but because of a State of California mandate which specified that every car constructors should have some low emission activities.. Then between 1999 and 2002, Ford invested a lot in R&D (especially to develop the new Think City generation, the one which is going to be on the road very soon) and paid for the crash tests (which is one of the most important expenses when developing a car).

When Ford gave up Think, it was bought by a Swiss company, KamKorp Microelectronics. But due to mismanagement, this company gave up the Think concept as well.

At the end of March 2006 Think Nordic was acquired by a Norwegian investment group, Inspire. The company is now renamed Think Global.

Where is the company now?

Today, the company has developed its fifth car which started its production in November 2007 equipped with a new generation of batteries, the Zebra battery. The car can be driven up to180 km with a battery fully charged (one hour and a half of charging). The cost of the Think City depends today on the level of services the customer registers for, the amount of fees they want to pay each month and the market where the car is sold.

This car combines an innovative design with comfort and convenience and is a completely clean for the environment. Since it is an electric car there are neither CO2 emissions nor noise. Moreover, the body of the car is in plastic and it is 95% recyclable. Plastic was chosen for two main reasons. First, it is cheaper than steel when producing in low volume, secondly it is more environmental friendly due to no rust and no painting is used to color the material.

Think City car has been ready for the market since the beginning of 2008, and the company intends to sell in Denmark, Norway, UK, and Switzerland, as pilot markets.

The future of the company

Naturally Think Global wants to increase its production level .In 2007 50 cars were produced as a test volume. The plan is to engage in mass production and reach 10,000 units by 2009 and 20,000 to 30,000units by 2011. The company also intends to be a $500 million profitable business by 2011 (see annexes for forecasted expected cash flows). Entering new markets such as Monaco and Sweden is planned as soon as possible.

Innovation profile

Need identification and marketing

The management of the company really believes the times are come for electric cars since there is a need for reduction of CO2 emissions and reduction of energy consumption. Since, oil price keeps increasing and energy sources are running out, there is a real need to find alternative solutions for transportation. The use of this car is supposed to reduce energy consumption by 70%.

Regarding the target market, the company has segmented its customers into 2 main groups; B2C and the B2B customers. The first group can be divided in 3 smaller groups: first, “the trend setters and professionals” who are

looking for a cool car. Then it targets modern women who want a small car for local transportation with one or two seats for the kids. Further "the early adopters and technology conscious baby boomers" for which a two seats car is sufficient and environmental concerns are important. In general, the company wants to target people who are environmentally concerned and who can afford having a second city car

External partnerships

The company has negotiated partnership with famous brands to achieve economies of scale. Think Global has engaged in a relationship with Porsche to be more production efficient, Bosh is providing the company with airbags and A123 is providing batteries. A123 is one of the world's leading suppliers of high power lithium ion batteries. Its patented technology enables the batteries to deliver a combination of power, safety and long lasting life. Think is also working in collaboration with GE Global Research which has put a lot of money in the A123 R&D department to enable the development of new batteries. GE Global Research is the first industrial research lab in the United States and has been developing huge innovation in various fields for more than 100 years. The management team also has discussions with Ford, Volkswagen, and General Motors attempting to develop new partnerships.

Governments and local institutions represent strong potential partners. that can put into force regulations to promote electric cars and push people to more environmental friendly cars. For example, the State of California initiated a Zero Emission Mandate, and an increasing number of cities are implementing congestion charges and tax incentives (e.g. in Norway, Denmark, London, Berlin). Think has engaged in an agreement with the City of Oslo to provide electric for the people working for Oslo Kommune.

Technical aspects and knowledge management

Previously, one of the main obstacle the company faced was improving the quality of batteries. Before the Zebra generation, batteries were of such low quality that customers were dissatisfied because of the short driving time. The company has now come up with more reliable and long lasting batteries. Regarding the knowledge management, the company relies upon intellectual property rights and trade marks. In fact, all components used to build the car are patented by their constructors (most of them are produced in Asia). Regarding the end product, certain parts of the company's foreign trademark registrations (including THINK) are currently registered (world wide) on other entities. A process is initiated to obtain the ownership and registered rights to such trademarks. As of now Think Global has no registered patents

or design registrations, but is in a process of obtaining the necessary and relevant licenses (type approvals) for the production and sale of the car.

Some problems may arise from this model of knowledge management. Indeed, if such rights are not sufficiently protected, Think Global's ability to compete and generate revenue could suffer and the company may face IPR infringement claims that could be costly and result in loss of significant rights.

Economic aspects

After the company went bankrupt the second time, it was bought by its present owners. Among them, there are 2 investment societies: SCATEC AS, Inspire Invest and Jan Otto Ringdal the founder of PIVCO. SCATEC AS is composed of Alf Bjorseth and Reidar Langmo and Inspire Invest is lead by Jan Olaf Willums, the current CEO of Think. All those investors put together 2 billion NOK. The entire ownership group used to work for companies concerned with renewable energy before they engaged in Think Global.

In mid 2007 new investors brought 600 million NOK to the company. These are Norwegian as well as international investors: Canica (Hagen), CG holding (Brynestad), Stordalen (Choice Hotel), Jeff Skoll (E-Bay founder), Rockport (Kleiner-Perkins), Heinz Foundation, Hazel Ventures (Rothchild) and General Electrics.

Founders of Google, Sergey Brin and Larry Page, are electric car enthusiasts and were early supporters of the company. They actively participate in organizing discussions around "rethinking Think" (Reed 2007).
The most expensive part of developing a car is paying for the crash tests, but those expensed were covered by Ford when the company owned Think.
Today, the production cost per car is on average $16,000 and the cost of the Li-Ion battery is $14,000.

So far, the business is not profitable and they need to produce 20,000 cars to breakeven. But, they expect to start to be profitable around 2011, with a $500 million profit.

To lower its costs as much as it can, the company has tried to implement a business model adapted to its low production strategy (hand assembly in mini plants, partnerships for supply and distribution over Internet and a brand store). This business model is definitely adapted to the size of the company and its production level.

Regarding the contribution of the innovation to create a competitive advantage for the company, the "Mobility Concept" is highly important. Indeed, they are the really first one to sell services around the car and to propose monthly fees to pay for the car as well as the services. The fact that customers able to customize their car can also contribute to create a considerable competitive advantage for the company.

The Entrepreneur

Story of an original and his company

The very first person who thought of developing electric cars was Lars Ringdal, a manufacturer of thermoplastic dinghies during the first oil crisis. Later, the company was properly founded by his son, Jan Otto Ringdal, in 1994. Jan Otto is an educated engineer with a MSc in mechanics and engineering.

As previously mentioned, the company chose to launch its first car during the 1994 Lillehammer Olympics as a pure promotional aspect. After the Olympics the company started to develop a new generation of cars. The investment was made possible as a result of increased cash flow from selling cars after the 1994 Olympics. However the company quickly went bankrupt and was taken over by Ford during four years. Ford invested a lot in the company and especially in R&D. Yet, Ford did not see Think as a profitable business and sold the company to Swizz Group KamKorp , owned by an Indian entrepreneur. This relationship did not last for long, and once again bankruptcy struck the company. In 2006 Think was bought by its current owners.

Current entrepreneur

The current entrepreneur of the company is Jan Olaf Willums. He was introduced to the company in 1996, during the "Ford Years". He was attracted by the company due to its environmentally friendly aspect, and he saw Think as a great opportunity for him.
Willums has a MSc in Engineering and a PhD in Ocean Research and before working for Think he was involved in other environmental friendly companies. Previously working with solar energy he realized the opportunity for developing electric cars, because he noticed that people were more and more concerned about that kind of products.

Personal drive and emotions

The CEO Jan Olaf Willums is driven by two main motivations; first he is generally interested in innovative products and secondly he is convinced that the electric car market is a profitable one. He perceives the electric car as "the right product at the right time". He sees a huge opportunity for those

cars considering that all the big players in the automotive industry starts considering developing electric vehicles. Think can benefit from a first mover advantage and the experience it has build up after 14 years of producing electric cars. The company also has a considerable competitive advantage regarding their "Think Mobility" concept.
So, Willums is mainly driven by the opportunity and the passion to run his business.

Willums is very involved in the company, personally as well as financially. Being one of the main shareholders, most of his personal savings are engaged in this project. To invest in the company he received no financial supports, he only invested his own money. In addition, the company receives some help from national governments of countries they deal with. The company is for example exempt for VAT or import taxes, but the shareholders never get any financial help.

Profit considerations

Profit policy and ownership returns

So far, the company is not profitable. As mentioned earlier, they need to produce 20,000 cars to breakeven. However, managers expect the production costs to decrease significantly by 2011 as a result of increased sales. Indeed, the bill of materials per car is expected to decrease from $16,000 (year 2007) to $11,000 (year 2011) and the cost of the battery is also expected to decrease from $14,000 (2007) to $7,000 (2011).

Owners of the company are people who really believe in their product and who really like dealing with environmental friendliness products. So, they know that it is not obvious that the company is going to generate profits and that is why the CEO explained that there is a large barrier when you want to enter the automotive market since developing a car requires such big investments and it is very difficult to be profitable especially when the company has such a low production level. But in the nearest future there seems to be an opportunity of increasing the production level as research indicates an increase willingness in consumer to buy an electric car within the next 2 years. Further, there is a growing need for cars as well as for reduction of CO2 emissions in emerging markets such as China and India.
Should the company not reach its goals on its own and become profitable, one alternative would be patenting and selling the concept to larger car manufacturers.

Tensions between environmental and financial motives

In the past, the company went bankrupt twice due to large investments costs combined with a low production level. This illustrates the tension between

environmental and financial motives. Moreover, when Ford acquired Think the motivation was mainly to satisfy the Mandate erected by the State of California. So, when Ford's managers perceived that there were no profit opportunities, they decided to give up with the project.

But today, managers of Think do not see any tensions between environmental benefits and financial motives even if the company is not profitable so far.

Stakeholder Relationship

A lot of stakeholders are involved in the Think innovation. Besides all the employees of the company, production- and distribution partners are really important. Governments and local authorities have also plays an important role since they can implement policies or incentives to favor the use of the electric cars. The company is also involved with educational institutions. All the Think partners are acting in accordance with the Think Brand essence.

Stakeholder influence

Supply partners

The company has chosen to implement hand assembly plants to be more cost efficient. Think has several suppliers, of which most are located in Asia to be cost efficient. But the company has also partnership with European and American companies.

Regarding the batteries, the company has developed strong partnership with Dassault for battery packaging and battery control systems. The company collaborates with General Electric for testing and developing new batteries in their worldwide labs. A123 is its main provider regarding batteries.
Porsche is a major player which supports manufacturing optimization and helps the company in key engineering areas.

Distribution partners

The company essentially distributes its car over Internet, inspired by the Dell business model. A brand store is also established Oslo, Norway to promote and sell cars. Other brand stores are planned to open other, major European cities. The last option regarding distribution is the Think @bout franchise operation. Finally, the company distributes its car to rental or car sharing companies.
Conclusively, Think has two types of customers, B2B (car rental or car sharing companies) and B2C (Internet and brand store).

Government and local authorities

Governments and local authorities are important partners for Think. Because of the legislations governments can implement, customers can be influenced and given incentives to buy a Think City. For example, if a government or a local authority decides to implement congestion charges or free parking for electric vehicles, it is likely to impact the customer's final decision when it comes to buying a car.

The company does not receive financial help from the Norwegian Government, but it benefits from other forms of supports. For instance, the company does not pay any VAT, any annual fees, any road tax, any import tax and any registration tax (except in Denmark where they have to pay the VAT).

Educational Institutions

The CEO is a full time teacher at BI the Norwegian School of Management in Oslo. Moreover, he is often involved during Innovation lectures to do presentation about the company and the car. He tries to involve students as much as possible to get feedbacks and new ideas.

Communication

Much efforts are put into the promotion of Think, and the company invest a lot of money in marketing and communication. This part of the business is also influenced by the innovative spirit of the company. A lot of the communication is done through the Internet web site (www.think.no) which is definitely innovative and interactive. Customers get the feeling they are the street where Think City cars are running. The company also uses car fairs to promote the car, such as the Motor Show in Geneva where they presented the car in a plastic bubble.

Regarding the marketing, the company has adopted an aggressive strategy, and Think has a strong emphasis on branding. Thanks to car sharing companies under the brand name of "Think Share", they are able to promote the brand to various people. The car is also displayed in the modern brand store .

The communication challenge for the company is to assert to their consumers that the car is completely safe. Because the car is made in plastic some customers find it difficult to perceive the car as safe as a regular car, but Think responds to all EU and American safety standards.

Environmental impact

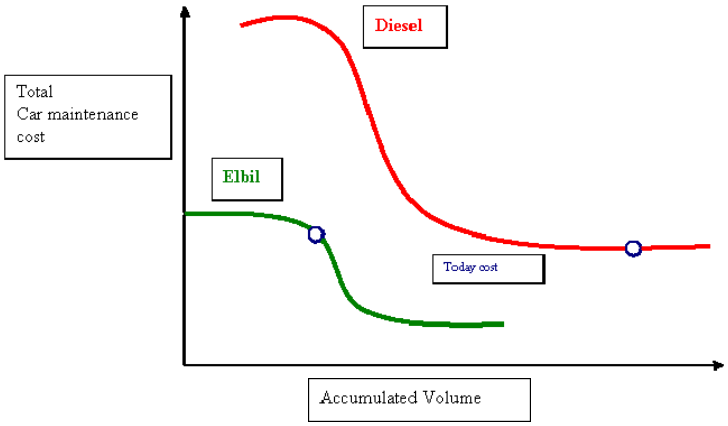
The company and the car Think City have obvious positive impacts on the environment. First, electric cars means low emissions since it is 100% emission free while a car with a combustion engine has emissions of 120 to 220 g CO2 per km. Moreover electric cars are more energy efficient because it uses between 85% and 90% of energy provided whereas a combustion engine use only 20 to 25%. Most of the energy provided by petrol disappears in heat and friction. Additionally, the car is 95% recyclable because of the unpainted plastics and lack of an engine.

The company has made a lot of research to measure the total impact of the car on the environment and concludes that using an electric car will reduce the energy consumption more than 3 times. You can see in annex all studies regarding the total impact of the car on environment.

Economic impact for end-users

There are obvious positive aspects for customers as well when purchasing an electric car. With the rising oil prices, consumers are happy not having to pay for petrol, and in the cities they can benefit from free parking and reserved rush hour lanes. Moreover, the cost of ownership is cheaper than a normal car and people can be exempted to pay any road tax, any congestion charge.

The figure bellow illustrates the economic benefits of owning an electric rather than a regular one:



Exit strategies

Should Think not manage to become profitable, they could patent and sell their concepts to larger players. Then, the company could get royalties on each car sold by the bigger car constructor and generate some profits since it will not have any production costs.

Future Perspectives

Capabilities and Opportunities

A proper car: The Company managed to develop a real car. Thanks to technological improvements such as long lasting batteries, higher top up speed, and bigger autonomy Think can provide its customers with an electric car capable at competing with a regular car.

A growing market: Think is now benefiting from a growing market. Oil prices are risking, CO2 emissions and energy consumption reduction are central to any business, and governments are implementing regulations in favor of environmentally friendly products and services. Indeed, times are come now for electric cars, as well as the market for second owned car are also growing.

Few competitors: Although a lot of car manufacturers are investing in and trying to develop electric vehicles, Think is the only constructor which can call its vehicle a *car*, since it passed all the required crash tests and safety requirements. All of the "competitors" can just call their product a vehicle. According to Richard Waitz, the company is at least 3 years ahead of Asian competitors.

Moreover, the only companies that are paying attention to electric cars are developing hybrid models. But these are not considered as environmentally friendly as Think since these cars use both electricity and petrol to be run. Toyota and General Motors are among those players.

Satisfied customers: So far, the company has around 1,000 cars on the road and according to market studies, most of them are highly satisfied by using this car.

Developing new partnerships: The Company is now working with Porsche Consulting to adjust its 10,000 car-a-year plant. In the future, managers are hoping to develop new agreements with countries such as China for possible joint ventures.

The "Mobility Concept": Think has achieved a competitive advantage its special concept. A lot of customers are likely to be attracted by the possibility that the company can offer leasing of batteries and all inclusive services (e.g. insurance, maintenance, customization of the car)

Exploiting the Car-Sharing opportunity: The Company really wants to promote its cars through car sharing companies, and these companies are

especially targeted. The idea is that people will try it through the car sharing concept, and later purchase a car of their own.

Disadvantages and Threats

Low volume production: This is one of the major problem that the company faces today. Indeed, with such a volume the production costs are still very high and so far the company is still not a profitable business. Moreover, this level of production implies the following question: how will Think cope when bigger competitors such as Renault/Nissan and Daimler come to market with their own electric car?

Not turning into a profitable company: The management of Think really believes that the company is going to achieve a production of 10 000 cars by the end of 2009 and 20 000 by 2011 and manage to become a $500 million profitable business. The main threat is what is going to happen to the car constructor if they do not reach this objective?

Time to be accepted by the market: As the body of the car is 100% plastic made, customers are still not convinced about the safety of the car. It is going to take time for the consumer to accept and acknowledge Think as a regular car run on electricity.

The constraint of plug-in the car and lack of facilities: A lot of people consider the plug-in of the car as a constraint. Furthermore, there is an obvious lack of plug-in facilities in city-centers, thus local authorities also have to make it more convenient by arranging more parking spaces with plugs.

Visions (how will accomplish their future plans?)

The success of the company is going to be highly dependant on their ability to achieve their production goal. As previously mentioned, the goal is to produce 10,000 cars by 2009 and 20,000 by 2011. To succeed in their business, the company has to come up with solutions to limit risks they face today. Since the company has a history with bankruptcy, Think really has to work on cutting its production costs and on improving its sales to sustain their business model and become profitable. The company has to put a lot of efforts in marketing to make customers accept the car and build up a trust in the product, since it still suffers from an “unsafe” image. The company has to develop stronger and long term relationships with its suppliers since it is highly dependant on them. Finally, Think has to, and the managers are currently working on it, to develop partnerships to distribute and promote the car. Those partnerships have to be either companies or governments that can implement incentives.

Inspiration for other SMEs

How can other SMEs get inspired from Think? This question is not obvious even if dealing with more environmental friendly cars is today a real need and even if the market is growing because of the increase in oil price, the global warming and some environmental policies that governments implements (congestion charges…).

Think is among the pioneers to develop proper electric cars but the problem remains with too low production level. That is why it can be difficult for SMEs to deal with car construction since it requires huge amounts of money. SMEs can learn from and be inspired by the idea of the Think concept, and how a company can patent and sell to bigger players, such the Think Mobility Concept or the battery leasing.

Concluding remarks

Today Think Global is a pioneer in producing and distributing electric cars and selling the idea of "a new way of moving"[8]. It is still a small company with a low production level and has yet to become profitable. But the management of the company strongly believes in the electric car market and is determined that the production will increase and finally reach a profitable level.

Knowing that it is difficult for small players when it comes to the car industry, we have several reasons to believe that the company is going to succeed by the next years. First, according to a survey done by Yahoo in 2006 (yahoo.com 2006), the market is now ready for electric cars. Indeed, 78% of the people interviewed think that there is a need to act in favor of the environment. Moreover 85% of them believe that US is too dependent on foreign oil and 76% think that electric vehicles can help lower US energy consumption. This survey also showed that 42% of respondent planed to buy alternative fuel vehicle within two years. This indicates that there is a large opportunity for the company to launch its car, at least on the American market.

Then, buying an electric vehicle has real benefits for customers since it help them to save money when oil prices are continuing to rise.
Finally, the company has a real competitive advantage with its Mobility Concept.

The company has just presented its car at the Motor Show in Geneva and it was very well received by consumers. People showed a true interest in the car, indicating that there is a large demand for sustainable solution for transportation and hopefully flourishing days for Think Global.

---

[8] Jan Olaf Willums

Chapter 3

FIN

Esther Rädel & Christine Marie Lundbye Clausen

Introduction

The Case

This paper aims at providing a thorough case study of FIN (finoslo.com), a Norwegian high fashion company, specializing in ecological, ethical fashion. The look of their collections so far has been described as "Typical Scandinavian, stylish, classical and with a modern twist" (Fredriksen 2008).

Data Collection

Two interviews with Nikolai Christiansen Perminow were conducted, one on the 22nd of February 2008, just prior to the first collection being made available in stores, and a second interview conducted on the 28th of April, after the release of the first collection to the public. Both interviews were conducted in English and lasted from 1½-2 hours. Notes were taken during both interviews and the second interview was recorded as well. Secondary data includes the company website, code of conduct, and general research about the fashion industry and legislations.

Storyline

FIN is a high fashion company located in Oslo, Norway. The company specializes in combining luxurious fashion with environmentally and socially responsible methods of production. The foundation of FIN was laid in 2004, when the business graduate from BI Oslo Nikolai Christiansen Perminow and the sociology graduate from the University in Oslo Eivind Pytte Ødegård decided to start their own consulting company EtikkTakk (etikktakk.no).The aim of EtikkTakk was to spread the awareness of the area of expertise of Eivind, also the combined interest of the two high school friends; CSR driven business. The decision was not only made on grounds of common interest, but also due to their current job situation at the time. In order to profit from funding and support network, the founders got an office at IKADA (ikada.no), an incubator office building funded by Innovasjon Norge (innovasjonnorge) hosting several offices for start-up ventures. IKADA provides start-up companies with the physical conditions needed to start an own business, at no cost to the company in the first year of its existence, with the cost increasing to market price gradually over the next two years. EtikkTakk's consulting activities strengthened Nikolai and Eivind's realization of the opportunities of "The Green Trend". The development and success of cosmetic and food companies having realized this trend and developed a business model around it such as "The Body Shop " lead them to the conclusion that clothing are going to be the next sector where environmental issues will play an important role. In 2005, the environmental awareness trend, with its large number of potential customers, led to the start-up of a new company: "Bedre!" (bedrehandel.no). Bedre! was founded along with journalist Nicolai Benjamin Herlofson, whom Nikolai and Eivind had met at IKADA. The new company Bedre! manufactured, and still manufactures, organic cotton T-shirts sold on a relatively large scale to organizers of different events like concerts, musicals and festivals. The company was successful and the three founders established a number of valuable contacts with organic manufacturers and suppliers. After a while, the three friends felt that the challenge and innovative aspect of manufacturing T-shirts was relatively minor. They needed a bigger challenge. The realization of the Green Trend combined with already established contacts with suppliers, and a simultaneous interest to enter the high fashion industry, and explore its potential, lead to the creation of FIN in November 2006. Even though the traditional way of entering this industry is through a designer background, the founders made good use of their abilities and diverse backgrounds to come up with a business plan focusing on an, for this industry, innovative degree of CSR. Profiting from their established relations with organic manufacturers in India and Peru, their business plan

includes not only the environmentally friendly textiles but also improved conditions for locals, and working in well chosen production factories. CSR is integrated throughout the whole supply chain. With this business plan in hand, they were able get financing and despite initial difficulties, found a designer able to create a collection with an expression in line with the companies values.

Today FIN has successfully sold their second collection to retailers and their first collection is already in stores, having been received well by the public. The company is now preparing their third collection, Spring/Summer 2009. The company's creations have already been featured in prestigious fashion magazines such as Vogue UK.

Key Business Model Concepts

FIN operates in the high fashion industry. High Fashion is the term used to describe ready-made clothing aimed at the upper-mid price range. High Fashion is typically found in boutiques and at selected retailers, matching the mid- to high-range customer profile. As an example, FIN compares themselves with renowned Scandinavian high fashion brands such as Filippa K and Malene Birger. As none of the three founders have a design background, they chose to hire a designer, Per Åge Sivertsen, to create the look for their collection. Per Åge is now hired on equal terms with the three founders. FIN manages to keep costs at a reasonable level, by being actively involved in every step of the supply chain. They go directly to the suppliers and manufacturers, and avoid middlemen and unnecessary agents. FIN considers their many contacts and global network their biggest asset, and as such, all supplier names and details about production are treasured trade secrets. The origin of their materials however, is not a secret. Buttons are bought from Germany and Spain. The majority of the organic cotton used in FIN's creations is grown and woven in India and Turkey. India is also where the wild silk is harvested, spun and woven and most of the cutting, making and trimming (CMT units) also takes place here. Alpaca yarn is produced, spun and woven in Peru. The Spring/Summer '08 and Fall/Winter '08 collections also feature non-organic silk from China, woven and printed in France as well as lamb's wool from third party suppliers. FIN aims to be able to replace these non-organic fabrics with own alternatives in the near future. The CMT units receive the patterns from FIN, cut out the fabric (cut), stitch the garments (make) and add details such as zippers, buttons, etc. (trim). FIN has already increased their number of CMT units from three to five. In order to be able compete on quality; FIN moves the fabric to where the expertise is. CMT units are selected based on specialty, CSR profile and reliability, rather than geographical location. Due to the small quantities needed by the newly started company, FIN can do this with little added cost compared to the benefit gained in terms of quality, flexibility and reliability.

The finished garments are imported to Amsterdam, Netherlands. Here the company FashionWheels repacks and ships the garments to retailers throughout the world (fashionwheels.nl). Currently, FIN is represented in stores throughout Norway, Sweden, Denmark, France, the Netherlands, Germany, Belgium, Greece, Ireland, Canada, North America and Australia, with North America being the fastest growing market.

Only 5% of the company's total sales take place in Norway, and although a flagship brand store is planned in Oslo, the company aims to become truly global. Currently, they have activities in more than twenty countries. According to them the world has developed into a global market place and it is no different to call a supplier in Delhi, than one in Bergen.

CSR Profile and Reputation

FIN has coined the term *ECO Lux* to describe the company code of conduct and ethical profile, as stated on the company website:

> *"In our path, towards unique results, every step is of equally importance. We carefully select our material, to achieve the finest expression. The use of organic cotton provides us the luxury of environmentally friendly textiles. Handspun wild silk gives us beautiful textures. Organic alpaca gives us the rarest and most precious fiber available.*
>
> *To recognize the hard work that has gone into producing the fabric in our cloths, we use Fairtrade certified cotton. To reduce CO2 levels worldwide, we invest in climate credits to reach the global goal of carbon neutrality. To seal it, we let our eminent designer, Per Åge Sivertsen, add passion into his creations"*

Although FIN aims to be as environmentally friendly as possible, they do not consider themselves to be purists. In keeping with their overall line of thinking, they strive to be sustainable. During this early phase, they have to compromise on certain points in order to make their collections as appealing as possible to the customers. Using non-organic wool and cotton in some of their first styles may be necessary in order to get the variety that the customers desire.

While the CSR focus is vital to FIN's ideology, too rigid adherence to such ideals could prove detrimental to their design's appeals, and therefore have less of an impact in the fashion world. Fortunately, this compromise did not

harm their essential reputation as a pioneer of ethics in the fashion industry. The clothes, although not yet 100% organic, are still carbon neutral and/or Fair Trade. They were well received by both retailers and the consumers. In the end, the versatility the ECO Lux concept provides, adds value that other brands have yet to match.

In an imperfect world, compromises are necessary to sustain the flexibility required to attain FINs goal of making enough money to make a difference.

Social and Environmental Dimension of CSR Driven Innovation

The Novelty of the Product

FIN considers themselves a "first mover" in their field, and they have received considerable media and business interest due to their company profile. One may argue that organic clothing is nothing new, however, organic cotton on the runway is, and the company can already boast celebrity fans and having been featured in several editions of Vogue Magazine. FIN's choice to promote fashion, form and style with ethical considerations being a value-adding feature, is indeed novel. FIN does not offer a "normal" line of products; all their products must adhere to their *ECO Lux* policy. As long as it's "Fin", it's *ECO Lux* and will always be manufactured according to their environmental and social policies. FIN's dedication to, and concern for, the entire supply chain, gives them an admirable CSR reputation. This is especially due to the fact that they are actively involved in every stage of the production, for example by sending agents out to check up on suppliers. Furthermore, their dedication to the supply chain gives them the ability to control the quality of the raw materials and textiles, which in turn provides the customer with superior quality as well
a guarantee of responsible manufacturing methods.

The Social/Environmental Core Mission

FIN literally stands for what is referred to as a social innovation. FIN's entrepreneurs all share the strong belief that a successful business model should contain a high degree of corporate social responsibility (CSR). Through the company's both ethically focused yet profitable operations, FIN's founders hope to become a pioneer in the fashion industry, raising awareness for the many advantages and evident profitability of adapting a holistic, socially responsible approach.

Milestones

Timeline

2004: High School friends Nikolai Christiansen Perminow and Eivind Pytte Ødegård ran the consulting company EtikkTakk together and moved into the incubator office cluster IKADA.

2005: At IKADA, the high school friends got to know Nicolai Benjamin Herlofson. The three men decided to start the organic T-shirt company Bedre!.
2006, January: The first idea of FIN evolved as a project under Bedre!.
2006, November: FIN was founded as a separate company.
2007: Designer Minna Hannela created the first test collection.
2007: Per Karsten Ims decided to invest heavily in FIN.
2007: Fin UK Ltd. was founded in London, UK to handle the management of logistics in the EU.
2007: First collection, designed by designer duo Arne & Carlos in cooperation with Per Åge Sivertsen was sold to retailers (arne-carlos.com).
2008: Second collection, Fall/Winter 2008, designed exclusively by current in-house designer Per Åge Sivertsen, was well received by the public and sold to over 50 retailers worldwide, more than doubling the amount of retailers selling FIN clothing.
2008, March: First collection was made available to the public at over 20 retailers worldwide.
2008, April: FIN is currently working on their third collection, Spring/Summer 2009.

Innovation Profile

Need Identification and Marketing

The three founders of FIN were inspired to create Bedre! and subsequently FIN due to the increasing awareness of what they refer to as "The Green Trend". Some of the issues involved in the green trend include: Increased concern over CO2 emissions, recycling, reducing waste and pollution, increased focus on business ethics and a consumer preference for "pure" natural ingredients. Already prominently visible in the media, through cosmetics, food, electric appliances, cars, providing general public awareness; it was only a matter of time before the fashion industry would follow in the footsteps of the green trend.

FINs policy is to compete with high fashion directly and on high fashion's terms, and as such the marketing is pretty much the same as with any other high fashion company. Agents are hired to promote and sell the brand to boutiques and the company strives to be visible at fashion shows and fairs. Due to the innovative aspect of FIN's business concept, along with the expectations of the green trend becoming "the next big thing", FIN have enjoyed more attention than other, more conventional, fledglings in the industry.

Organizing the Innovation

FIN had the advantage of already having an office at IKADA when the company was founded. The IKADA incubator, funded by Innovasjon Norge, provides office space, including telephone, Internet and other office must-haves for start-up companies, for a maximum of three years. The office space will be fully sponsored the first year, partly sponsored the second year, while being full market price the third year. New companies would normally have to apply and be evaluated by a committee to be granted access, but since the founders already had their previous companies approved, there was no need to re-apply just to be allowed to stay. The free office space definitely gave FIN an economic advantage in the beginning. In order to deal with logistics and handling in the EU, a company, Fin UK Ltd. was created to handle the paperwork needed in order to import goods. From a warehouse in Amsterdam, the Dutch company FashionWheels handles the repackaging and redistributing of the actual goods. FIN also deals directly with local suppliers, bypassing middlemen where possible, but the names of these suppliers are closely guarded trade secrets. Furthermore, the company often utilizes the services of free-lance companies for graphical design, translations, etc.

FIN also employs several agents, promoting the brand, sending samples to and meeting potential customers, attending fairs, networking and contacting media. Although there have been some issues with the efficiency of the agents compared to direct communication with the retailers, FIN has been utilizing their expanding network to the fullest. They have been able to continuously draw upon new human resources, getting access to better agents, new locations, gaining knowledge of specialized manufacturers and products, and being recognized by the media and subsequently being sought out by interested parties. In preparation of the planned 2010 launch of the first brand concept store, located in Oslo, the entrepreneurs will be moving to a new temporary office in May 2008, before settling into their permanent headquarters.

Technical Aspects and Knowledge Management

FIN draws both from the individual expertise brought by the entrepreneurs and the experience gained while working with Bedre!. The company bases its strategy on a background of industry “smarts”, network connections and the theoretical sociological framework provided by Eivind’s background along with their shared dedication to CSR. Their ECO Lux concept has been a positive asset for the company and set a path for future development; it functions both as a guideline for which paths to follow, and as a constant goal for improvement. FIN’s most valuable asset is their knowledge; their involvement in their supply chain, their established connections, suppliers

and manufacturers are, to the best of their ability, kept confidential. Since you can't copyright a supply chain, all FIN can do, is keep their secret long enough to continue their growth and avoid copycats.

Economic Aspects

FIN had or better still has the advantage of being located at IKADA. Furthermore a private investor, Per Karsten Ims, owning 40% of FIN, plays an essential role for the company. It is a well known fact that this investor is dedicated to their concept, and has agreed to provide FIN with sufficient funding in the start-up and growth phase. Funding is still limited, and the company has to overcome their current key challenge, of keeping costs low.
A benefit of working in the fashion industry, is the ability to prolong the marketing of seasonal goods by targeting different geographical regions as the year progresses. Materials are carefully chosen adhering to their concepts and code of conduct, and purchased at a relatively low price for the high fashion industry. One of the company's main strengths is their ability to negotiate with their business partners. The difference in price between materials such as organic cotton and more widely mass produced cotton is not that great. Despite the stagnating US economy, FIN has experienced rapid growth in the US market. In other operational areas, the economy has actively benefitted FIN; the IT boom in India has caused a lack of educated textile workers, increasing the demand for a skilled workforce and naturally improving the living standard through higher wages, giving FIN more bargaining power to focus on other areas that require improvement. Focusing on growth rather than profit for the time being, the company hopes to keep up their current growth rate (300% yearly), breaking even in 2010.

The Entrepreneurs

Entrepreneur Team

The entrepreneur team is made up of four people, each contributing with a different educational model, adding several perspectives on the CSR implementation of the business model. The entrepreneurs are as follows: The business graduate with specialty in marketing and branding, Nikolai Christiansen Perminow and his high school friend the sociologist with a specialty in corporate social responsibility, Eivind Pytte Ødegård, the journalist Nicolai Benjamin Herlofson, and the fashion designer Per Åge Sivertsen.

Personal Drive and Emotions

Nikolai describes in the second interview how the four entrepreneurs share a burning dedication to the company and to ethical trade. They do not even think about considering to do anything else, and will single-mindedly follow their dream for as long as possible; To create the first distinct Norwegian

high fashion brand equal to successful Swedish and Danish brands. Nikolai describes this as their main motivational drive.

Creating a new company from scratch is no easy task and at times, working close together with a tightly packed schedule, the founders have been "quite annoyed by each other" but they all shared the ability to work through their differences and focus on the challenges that lay ahead. Emotional support was present in the form of committed co-entrepreneurs, the rush of adrenaline you get when you have a feeling that what you are doing just *needs* to be done, as well as the recognition from the outside that what you are doing is worthwhile, important and expected. But most importantly, as Nikolai points out, you have to believe in yourself and what you are doing. "Naive" is not usually a trait associated with entrepreneurs, but according to FIN, it was a trait they all to a certain extent share, and that proved vital for their existence. The ability to look ahead, keep their chin up, to keep going despite bleak outlooks, is part of what made them be where they are today. The company experienced what Nikolai describes as a four-day rush of hysteria, where they in a frenzy of fashion fairs, unpaid bills, trips to India and constant phone calls to get more funding, feared that they would go completely broke. With all their energy spent, the relief of finally getting funding was like "a hard landing". Their persistence and dedication to their idea, was what the investors saw, and chose to reward.

Profit Considerations

Policy regarding use of profits and ownership returns

The four entrepreneurs share the dedication and willingness to invest their own time, money and effort. This is why the four are paid a relatively meager salary, to keep costs low. FIN is still in the start-up phase and has as of yet not reached their break-even point, spending all current resources on expansion. If future development will be as promising as projected, future returns on investment will be split in term of ownership. The senior designer, Per Åge Sivertsen, does not yet have a share of the company, but this may be subject to change.

Tension between social and financial motives

FIN has proven that making money on ethics is possible even for a small company. While it's natural to assume that their dedication to ethical manufacturing would get in the way of financial motives, FINs have managed to walk a fine line and meet both needs. FIN has chosen to compete in terms of design and exclusiveness. This approach requires a wide variety of fabrics and textiles. FIN are uncompromising in their values, but accept that certain concessions may be required in order to achieve their core mission; to be a socially responsible, ethical, environmentally friendly as well as a very profitable company.

Stakeholder Relationship

Stakeholder Influence

FIN is a privately traded company. The three founders, owning 40% shared equally amongst each other, share the costs as well as the risks. They all share in the decision making process, and are all board members of the company. Per Karsten Ims, owning 40% of the company has substantial power as well. Along with the owners of the company, other direct suppliers, governments and other institutions have to be seen as having a legitimate interest in the company and its operations. In regards to environmental concerns, there are several institutions supporting the use of non-mass produced environmentally friendly material for the fashion industry. Due to their *ECO Lux*/CSR business concept FIN and the company is an example where the stakeholder approach is more applicable than a pure shareholder approach. Governments of countries where FIN operates, are holding a stake partly due to FINs environmentally friendly, socially responsible profile. Due to their significant impact on local communities, they are one of the most important stakeholders. Since the majority of FIN's operations take place in developing countries, factory owners, workers, their community and the local government all benefit from FINs operations. The way FIN operates demonstrates their awareness of the influence local governments have. Wages are considered carefully and overall more collective benefits are provided to the communities as a whole.

Fair-trade and environmental organizations are holding a stake in FIN as well. Those organizations support and observe firms providing fair trade goods. Customers are relying on such organizations and their testimonials rather than simply trusting a new name. Being a "fair-trader" is often perceived as a marketing tool and is especially hard to follow up for the consumer.

Social/Environmental Impact

With FINs ideology regarding sustainability, the company aims to make use of organic materials and environmentally friendly methods of manufacture as well as being CO2 neutral throughout the entire value chain. As a consequence of their ideology, FIN does not focus purely on increasing minimum wages when making arrangements with manufacturers in developing countries. In accordance with FINs code of conduct, the employees must be adults, work voluntary, be paid a salary they can live off and they must work in a safe environment. These things are taken for granted in the western world, but is not a given in some of the countries in which FIN operates. Part of the fair trade premium must be used to improve the local community, for example by funding education, making improvements in infrastructure or arranging social events. The focus is on

the community, not the individual. An individualistic approach may even prove to be detrimental to a company's success. With wage levels significantly exceeding local standards, employees may well experience alienation and jealousy from other locals, which could ultimately lead them seek employment elsewhere.

Risk Analysis

As every start-up FIN has to consider several risks. In high fashion, two collections are typically produced every year. Due to development, production time, promoting and selling to retailers, a company will typically have to design and sell two collections before the consumer will even be able to find the first collection in the stores. This initial hurdle represents a considerable barrier to a fashion company's early expansion: retailers have to be willing to run the risk of buying two seasons of a completely unknown brand. Furthermore, as space in boutiques is limited, the retailers have to either expand or get rid of some of their existing brands, in order to make room. This is an entry barrier for any high fashion company, but none the less an important one to be able to overcome. These issues dictate a strong need for good market communications and customer relations, since investors may be discouraged by meager sales and decide to cut funding.
Another issue is their dependency of their designer, a risk that FIN also shares with other, more conventional, high fashion companies. FIN markets the company on being a luxurious, stylish, fashionable and ethical fashion brand. If the designer however is unable to follow the emerging trends and create best-selling styles, the many unsold pieces of non-violent organic silk shirts may be as ethical as anyone could ever want, but they still represent a loss.

Having established a valuable and large network already is one of the company's greatest assets, and they have been featured in the media, getting the company ever more attention and praise. However, such a reputation based approach may prove to be a vulnerability as well as an advantage. With increased media interest and focus on the company's values and code of conduct, they are subject to a high degree of scrutiny. Therefore it is of paramount importance that FIN retains their impeccable image.

Future Perspectives

Capabilities

The company's network can be enhanced and expanded further. Today FIN already operates in several countries and has proven their ability to operate globally, albeit on a small scale. Having an in-house designer sharing not only the company's core values but also designing the fashion in line with

the company's vision enhances their capability to not only be a pioneer, but also to establish a renowned brand. Nevertheless, there are limitations. Even though the company could utilize their network to increase production, maintaining their current procedures on a larger scale could prove exponentially more costly, due to the currently low volumes. It is not guaranteed that advantages from economies of scales will cover additional costs.

Vision

FINs overall goal is to establish a globally renowned fashion brand, which is strongly associated with their ECO Lux concept and the degree of CSR in their operations. In order to reach that goal, FIN plans to expand their business in order to gain a more significant social and environmental impact. As mentioned, their current yearly growth rate is 300%, and the company is focusing all their efforts on maintaining this rate. Increasing the number of units sold (doubling the sales every season) will result in more bargaining power and that in turn will grant them more control over their supply chain. This is not only essential to a guaranteed level of CSR, but also to actualize the production of future in-house developed patterns, prints and weaving procedures.

Due to the desires of the board, a Norwegian concept store is in the works and will also serve as the new headquarters of the company. Already a global company, FIN intends to concentrate their efforts on their current markets and their current expansion activities. As the fashion industry is cyclic, FIN will continue to focus on designing a new collection, selling it, promoting the business concept, networking and getting new business connections, then repeating the cycle to continue the expansion and eventually reach break-even.

Inspiration for Other SMEs

Picking up on the green trend and combining it with their common interest and dedication to CSR, FIN managed to design a business model that, if they continue their current development, will be hugely successful. If this can be achieved, FIN has proved that a fashion company can be ethical *and* profitable. If FIN manages this, they will not only be a pioneer in the fashion industry, but a role model for any future entrepreneur with an interest in CSR.

The Market- and Policy Context

CSR related topics have been on the agenda in the fashion industry for many years. Looking at the past decade though, four major topics emerge: fashion with a statement (T-shirt sloganism), fair trade, the green wave and issues pertaining to modes of adaptation.

Fashion with a statement
T-shirts with statements (also known as T-shirt sloganism) have been around since the 60's with flower power and the peace movement. In those times it was associated with radicalism and protests, today consumers are wearing their cause on a tailored sleeve because caring is fashionable. One can purchase a t-shirt for supporting any cause and crisis in the world: cancer, famine, AIDS, climate change etc. The trend is typically fronted by celebrities, like Bono, Kate Moss and other famous names in fashion and movies (Gaidatzi 2005). Designers have also coupled product and cause, like AIDS lipsticks and pink bags symbolizing support of the breast cancer foundation.

Fair Trade
Consumers are to a larger extent looking for socially conscious fashion lines, wanting to look good and feel good at the same time. Consumers are demanding more transparency from fashionable clothing with high traceability (Lean 2007). Katherine Hamnett, one of U.K.'s top designers, dropped their traditional suppliers for manufacturers that guarantee fair wages and benefits for their workers. In this way she believes that the company can contribute to trade rather than aid. She claims that: "People are always talking about making poverty history. This delivers." (Time Magazine 2005)

Green wave
Following the many alarming IPCC reports and Al Gore together with the IPCC winning the Nobel Peace Price, fashion business is claiming that: *Green is the new black.* (Hush 2007). The green wave is accompanied by the discovery and development of alternative fabrics, such as hemp, ecological cotton, corn fiber and soy. During the Milan fashion week 2007, innovative fabrics were a driving force.

Adapting to the changing climate
Finally; it appears that the fashion industry is about to realize that it has to adapt to changes in the climate around the world. The traditional seasonal collections that have been the basis of the fashion business may become meaningless because of increasing unpredictability of the weather and warmer winters in general (Agins 2007). This might involve a great loss for the industry as the winter months are the most lucrative and consumers are willing to pay more for winter clothing. The next generation of designers is in this respect being offered classes in sustainable development, ecology and ethical production and degrees in eco-design (e.g. New Academy of Art in Milan).

The current CSR trend in fashion is apparent in almost any industry and is part of a larger consumer movement on organic food, fair trade labels and corporate social responsibility. Consumers are willing to compromise on price for products that are environmentally friendly and which they believe come from companies that treat their workers fairly (Domeisen 2006). Fashion with consciousness is a growing industry serving a market of *educated, affluent and style-conscious buyers who are looking for products that reflect a social conscience but do not compromise on quality* (Domeisen 2006). FIN belongs to the high fashion industry, which is an industry where not only is the customer paying for perfect quality and latest fashion, but also for a brand that can express their symbolic needs and representations (Djelic and Ainamo 1999). By purchasing high fashion clothing made with environmentally and socially responsible methods of production, the consumer can express both economic class and reflect social consciousness.

Competitors

FIN compares themselves to the high fashion designer brands Swedish Filippa K and Danish Malene Birger. These are two well established brands in the high fashion market that are gaining grounds around the world. Filippa K, founded in 1993, now consists of 650 retailers in Scandinavia, Europe and North- America. The Filippa K philosophy is based on the concepts of style, simplicity and quality. At Filippa K, quality means not only that the product should exceed our customers' expectations, but they also have to be manufactured under good conditions (Filippa K homepage). The company has an inherent concern for the environment and is well known in the business for its long term CSR commitment. Through, what the company calls high quality dialogues; it has build up long-term relationships with its suppliers making it possible to continuously update codes of conduct and environmental standards.

Recently Filippa K announced that it will continue its CSR commitment by engaging in collaboration with the Dutch organization Fair Wear Foundation. At the same time, Filippa K has launched a new product; Nordic Eco Label, which is certified with the Swan label. Conclusively, it is evident that FIN and Filippa K are based upon many of the same thoughts and that the brands are build on the same foundation; classical, high quality fashion for the consumer with a social conscience. However, Filippa K has a far more established brand when it comes to suppliers, retailers and end-consumers.

Malene Birger is another competitor of FIN. Also very well known in the fashion industry, but the CSR strategy is not as wowed into the entire business model as Filippa K and FIN. The founder Malene Birger is a special Ambassador to UNICEF Denmark and each year she designs t-shirts where all the proceeds go to children in the world who are in need. Rather

than building a business model around CSR or incorporating it closer to the daily business, Malene Birger is taking a more traditional approach, designing t-shirts with statements and donating to charity.

Even though it is evident that companies that engage in doing business with socially- and environmentally methods of productions are having profitable times, it is crucial that what is produced is a product that the consumers really want. As one of the designers at Edun puts it: "It doesn't matter how well we treat our workers. If people don't like our clothes, they won't buy them." (Time Magazine 2005). The goal might be to replace trade with aid, but the bottom line should still be exquisite design.

Conclusion

The case of FIN and the three entrepreneurs along with their committed investors and enthusiastic designer shows, that it does not take selfless super humans to create something that will make a difference in thousands of people's lives. Even with the newest theories of innovation in hand, many students of innovation across different educational backgrounds, still view "social driven innovation" as mainly regulation-driven opportunities or marketing tools. Making a difference is still viewed as task for government organizations, not for the private business sector. Before investigating this case, we shared that conviction. In light of FINs' apparent success, we are pleasantly surprised that we seem to have been proven wrong. We hope that the case of FIN will inspire other potential entrepreneurs to follow suit and endeavor to found their own CSR driven companies which can compete in their own industry's field. Making a difference by enabling the consumers to make an uncompromising, but radical, difference compared to current consumer patterns, is not only an admirable quest, but may also prove to be a very profitable one.

Chapter 4

Ocean Saver

Esther Rädel & Christine Marie Lundbye Clausen

Introduction

The Case

This paper aims at providing a thorough case study of OceanSaver AS, a Norwegian company that has developed a new ballast water treatment and corrosion control system for ships. The OceanSaver technology deals with the increasing problem of invasive species being carried aboard ships in the ballast water tanks.

Human vessels, especially ships have through history been the source of biological pollution; the black rat was introduced to Europe from Asia, carrying along with it the bubonic plague which killed millions. When introduced to a new environment, an otherwise harmless organism may cause serious damage to a different biotope. OceanSaver AS has already won two prestigious awards for their new technology; in 2006, the company won the international Seatrade Award for "Countering Marine and Atmospheric Pollution"(seatrade-global.com) and the national environmental award "Glassbjørnen" in the category "Product" (grip.no).

Data Collection

An extensive interview with Leif Erik Caspersen, OceanSaver AS' area sales manager, was conducted on the 15th of February 2008. Notes, which were later compiled into one document, were taken during the interview. Secondary data includes company brochures, a presentation DVD given to us during the interview, as well as various Internet and external sources.

OceanSaver- the Storyline

In February 2004, what was later to be known as OceanSaver AS, the company was established as "Foss & Varenhed Enterprises". The name was changed in November the same year to OceanSaver AS. The purpose of the company was to develop a new type of ballast water treatment system, also known as a "BWTS". With extensive background in the shipping industry, the four founders Stein Foss, Aage Bjørn Andersen, Gunnar Bærheim and Kjell Varenhed, had a unique insight into the shipping industry, which many of their competitors coming from the water purification industry, did not. According to OceanSaver AS, this knowledge was a key factor in determining the final construction for - and technology used in - the OceanSaver BWTS. During the 80ies, OceanSaver AS' chief engineer Kjell Varenhed worked with fruit transportation, and experienced first-hand how nitrogen-saturated atmospheres, replacing the oxygen in the air, were used in ships' cargo holds to prevent decay. This experience led to the discovery that nitrogen-supersaturated[9] water caused less corrosion to steel than normal sea water would. Fellow founder Aage Bjørn Andersen, who holds a Master of Science in Naval Architecture from Newcastle University, was the one to come up with the idea of utilizing a naval phenomenon called cavitation[10] to eliminate organisms in ballast water.

OceanSaver AS is a 100% owned subsidiary by MetaFil AS and has through that company acquired a patent, developed by Anders Jelmert at the Institute of Marine Research in Norway, using nitrogen supersaturation in order to eliminate oxygen-dependent organisms in ballast water and prevent regrowth. The OceanSaver BWTS is currently one of the few approved

---

[9] ***Supersaturation*** is the term used to describe a solution that contains more of a substance than it could contain under normal circumstances. The substance can be added using heat, or in most cases, under increased pressure. As an example, a soda is supersaturated with carbon dioxide to create the sparkling effect.

[10] ***Cavitation*** is a term used to describe the phenomenon where small bubbles in a liquid rapidly implode, creating a shockwave. Cavitation is often an undesirable phenomenon in the naval industry as it decreases the efficiency of propellers, increases noise, and may even damage the ship.

technologies for the treatment of ballast water on board ships. OceanSaver AS launched its BWTS in 2007, the system is fully developed and four ships are currently equipped. As of February 2008, orders for another ten systems have already been made by shipping company Leif Höegh & Co AS.

Key Business Model Concepts

OceanSaver AS operates in the marine industry, an industry in which all four founders have a considerable background. The company relies on their reputation within the industry as well as the increased government focus and subsequent policies on environmental issues, in order to sell their BWTS. The criteria set by The International Convention for the Control and Management of Ships Ballast Water & Sediment in 2004, was adopted by the International Marine Organization (IMO). It outlines the standards of ballast water treatment systems and discharge, by which members must adhere. "*The Convention will enter into force 12 months after ratification by 30 States, representing 35 per cent of world merchant shipping tonnage*," (imo.org 2004). OceanSaver AS estimates that by 2016, forty thousand ships will need to install some kind of ballast water treatment system. In the company's own words they are "riding on the Green Wave".

The combination of using cavitation along with nitrogen supersaturation, also referred to as "Hydro Dynamic Cavitation technology", is the core of the OceanSaver BWTS. It OceanSaver BWTS provides a three-step method of eliminating organisms; conventional filtering, cell damage by shockwave and suffocation by displacement of oxygen. Using these two technologies in combination has proven to result in very high organism termination rates with very low energy consumption. Nitrogen is a harmless non-toxic gas that comprises the bulk of our atmosphere, and as the level of oxygen is restored to the water during discharge, the treatment will have no ill effects on the environment. As an additional benefit, the effect of corrosion to the coating in the ballast tanks is lessened considerably, reducing the cost of maintenance and the risk of accidents due to hull deterioration.

CSR Profile Reputation

Due to the founders' background and recognition in the national and international marine industry, OceanSaver AS is perceived as a reliable and trustworthy partner. As OceanSaver AS' partners currently include Fednav Limited, Leif Höegh & Co AS, StatoilHydro, Innovation Norway, Kongsberg Innovasjon AS, Campus Kjeller AS and Sumitomo Corporation, little doubt is left of the company's capabilities and ambitions.

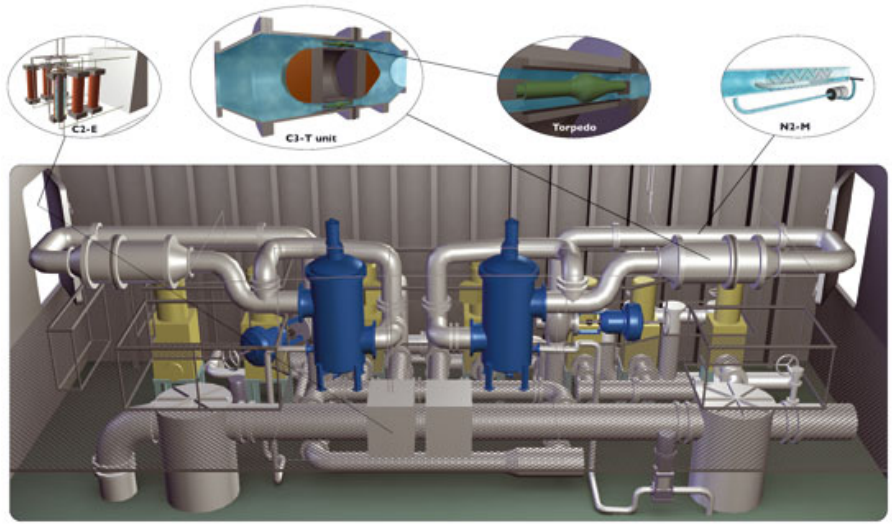
The environmental focus of their BWTS paired with the company's innate understanding of, and experience with, the marine industry, has already led

the company to receive two environmental awards and has given them considerable media attention. The efficiency of the technology has been verified by Det Norske Veritas(DNV), confirming it to be compatible with the current international environmental standards.

Social/Environmental Dimension of the CSR Driven Innovation

The Novelty of the Product

Unlike some of their competitors, OceanSaver's BWTS uses no toxic chemicals, like for example chlorine, to treat the water. As nitrogen and oxygen can both be extracted directly from the atmosphere, no large storage tanks for chemicals are needed. Oxygen is re-injected into the discharge, thus the discharged water is completely harmless to the environment. The OceanSaver BWTS has an additional advantage to more traditional water treatment, in that the treatment addresses both the problem of invading species and the issue of corrosion control, giving it an economical advantage, albeit a minor one. Due to the modular design, the system can be installed in most vessels, regardless of their size and construction type.



An Ocean Saver system as depicted on the official website

The Environmental Core Mission

As stated on their webpage: "OceanSaver AS aims at being one of the first companies in the world offering a high quality, approved Ballast Water Treatment system to the marine industry" (oceansaver.com).

More than that, the OceanSaver BWTS provides a non-toxic way of addressing the problem of invading species. The consequences that invasive species carried in ballast water already has had, is substantial. Unlike for example chemical pollution, the consequences of invasive species, is irreversible. As one example clearly illustrates: "*The Mnemiopsis leidyi* (a type of jellyfish)*, introduced to the Black and Azov Seas in the early 1980s has wiped out the anchovy and sprat fisheries causing a loss in the region of US $ 200 mill. annually. This invader has now established itself in the Caspian Sea and is now even causing concern even in the Baltic region"* (oceansaver.com).

OceanSaver AS aims at providing a flexible solution, their modular design fitting into a wide range of vessels operating in the industry. Complying with all current and upcoming regulations on the area, the cost saving aspect of the technology along with the undisruptive water treatment makes it an appealing and affordable choice.

Milestones

February 2004: Criteria set by The International Convention for the Control and Management of Ships Ballast Water & Sediments adopted by IMO.
February 2004: Foss &Varenhed Enterprises founded.
November 2004: Company renamed to OceanSaver AS.
December 2006: IMO resolution 215 (82) Performance Standard for Protective Coatings adopted (IMO PSPC)
April 2006: OceanSaver AS received Seatrade Award and Glassbjørnen Award.
August 2007: OceanSaver® Ballast Water Treatment System launched

Innovation Profile

Need Identification and Marketing

Along with the criteria set by The International Convention for the Control and Management of Ships Ballast Water & Sediments, the need for ballast water treatment systems on board tankers was created.

Along with the efficiency and reliability of the system, one of the most valuable marketing tools to the company is the cost saving aspect of using the OceanSaver BWTS. Back in the early days, tankers used solid ballast in the form of rocks, sand or metal, in order to balance out the load of the ship. Ship owners reduced costs by switching to ballast water which was faster to adjust. This saved the ship owner time in the harbor, hence he was more efficient. The introduction of water ballast tanks was initially a temporary one; a short-term solution to reduce loading times of tankers. Due to the founders' background in the industry, they realize just how important

loading times are for ship owners. With that knowledge, they created a system that was fast enough to match current ballast water pumping systems. Along with water ballast, comes the problem of corrosion. Corrosion of ships' ballast tanks can have severe consequences, as seen in the "Erika" case (bbc.com). Ballast tanks for water therefore have to be maintained rigorously. These maintenance cost were at a later point successfully reduced by the introduction of coatings. This cost reduction however diminished with the increased size of vessels to transport larger quantities at once. In combination with stricter regulations concerning the safety of tanks led to an increase in costs for coatings. For example, additional costs need to be covered due to the necessary dry-docking for the coating process and the financial losses due to that off-hire time.

The OceanSaver BWTS requires a huge initial investment but has the side effect of reducing corrosion significantly and provides the customer with costs savings due to less maintenance needed. Ships owners using integrated OceanSaver BWTS are „ *Reducing costs while improving vessel safety and protecting the environment*" (oceansaver.com).

Profiting from their experience in the industry, OceanSaver AS has utilized agents, the media and their industry connections to spread the knowledge of their product. OceanSaver AS has been successful in creating a positive image; they have been featured positively in the media, and have chosen influential and respected partners to be the first to integrate their BWTS, creating a mouth-to-mouth attention in from within the industry, surrounding their product.

Organizing the Innovation (including external partnerships)

The development of the OceanSaver BWTS required a lot of research and development, OceanSaver AS had to acquire of external patents and the whole project amounted to very high investment costs. The extensive research done before the launch of OceanSaver BWTS took five years. Finally, deliveries of the system are now realizable. OceanSaver AS is supported by a number of partners: Innovation Norway, Statoil, Norwegian ship owner Leif Höegh & Co, Canadian ship owner Fednav Limited and the Japanese trading company Sumitomo Corporation.

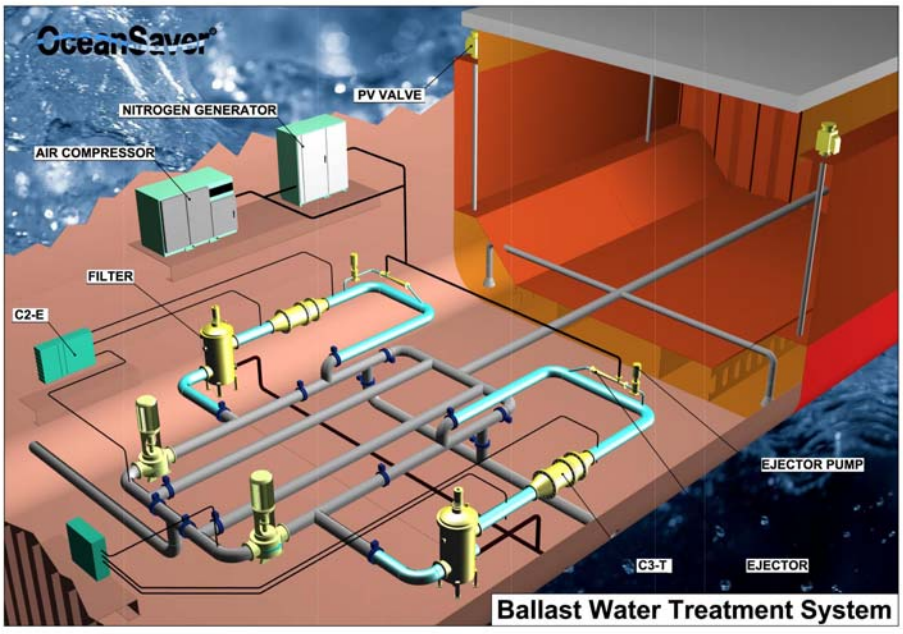
Technical Aspects and Knowledge Management

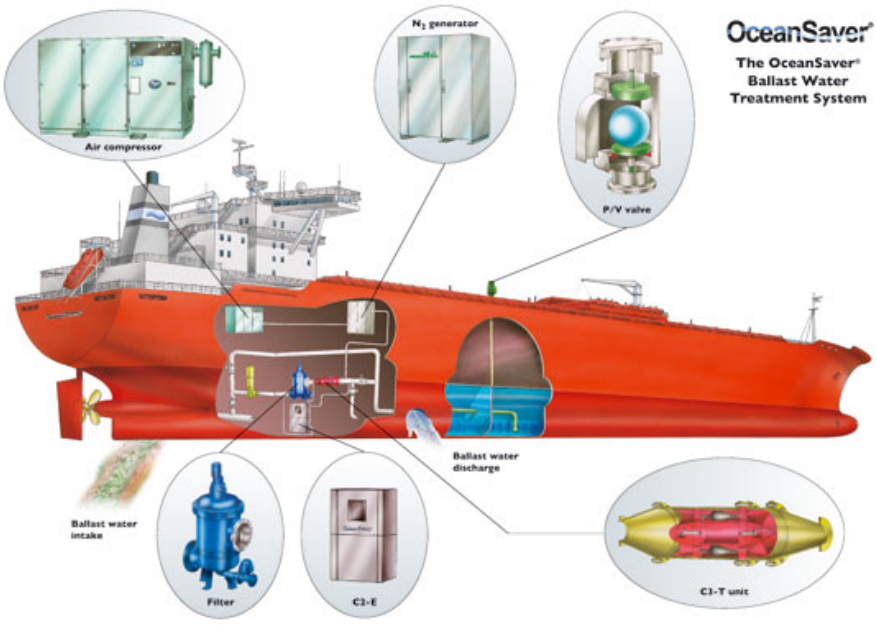
The founders and key employees of the company have long and diverse background from worldwide Marine Supply business. OceanSaver BWTS system is also named OceanSaver® and is a registered trademark. Furthermore the company granted several patents in order to protect their innovation.

As described on the company website, the OceanSaver BWTS patented series of components, supersaturating the water, and crushing organisms by cavitation power:

"*… a small portion of ballast water, less than 1.5% of the specified system flow rate, is fed into the C2-E system and exposed to an electrodialytic process before being re-injected into the flow together with nitrogen (N2). The C2-E systems are comprised of feeding and injection piping, a constant current power supply unit in addition to the electrodialytic cell module. The C3-T unit's efficiency is seen as being superior compared to other cavitation devices in creating implosion pressures up to 1000 bar and implosion frequencies of more than 100 kHz.*

Unlike conventional cavitation devices, the C3-T concept ensures proximity between system surfaces, particles and organisms and the energy-zone of the imploding bubbles. This represents a major advantage as the released energy can be targeted for its specific use – that of destroying organisms.
Nitrogen, produced onboard by a membrane-based nitrogen generator, is injected to the flow in a two stage process. A portion of the water is taken from the main flow and mixed or supersaturated with nitrogen by an ejector (N2-M). The flow is then immediately re-injected to the main flow where it joins the activated water from the C2-E system" (oceansaver.com).





Economic Aspects

Although OceanSaver faced a financial crisis in the summer 2007, they managed to pull in financial support from Statoil. Currently, the company has a stockholder equity of NOK65 million. This was achieved due to promising economic aspects. OceanSaver AS established themselves in an industry that allows them to utilize the first mover advantage in a very profitable way. This is due to the fact that rivalry faced by the company is relatively low. Direct competition does due to the complexity of the Ocean Saver BWTS not exist and substitutes may not comply with rules and regulations in the long-run. As stated by Leif Erik Caspersen, 60 competitors operated in the industry when the company was founded and this number decreased over time by almost two thirds. He estimates that of these 25 remaining competitors only half will be able to compete for the same target group as OceanSaver AS. The rivalry in the industry will not be enhanced by either the bargaining power of buyers or suppliers. The bargaining power of buyers is kept low by regulation requirements and the one from suppliers by low switching costs. The modular design paired with in house expertise allows the company to get their resources from many competitive suppliers at a low price. OceanSaver AS recognized the economic advantages in the long run for the innovative product and managed therefore to generate sufficient funding.

The Entrepreneurs

Entrepreneur Team

Four entrepreneurs originally founded the company. Stein Foss, Aage Bjørn Andersen, Gunnar Bærheim and Kjell Varenhed.

Stein Foss has a technical and commercial background. Since 1983 he has been successful in the shipping industry. First repairing sailing ships and later with marketing and sales of turnkey system supply contracts in the global industry.

Aage Bjørn Andersen, Director and head of Research and Development, has worked with the environmental challenges of the off-shore and shipping industry since 1991. He has an academic background from the University of Newcastle and the Technical University of Trondheim. He graduated in 1987 with a Master of Science degree in Naval Architecture.

Gunnar Bærheim, Technical Director, holds a Master of Science degree in Mechanical Engineering from the Technical University of Trondheim (NTH, Norway) as well as a Business Candidate degree. He has been responsible for the Marine Insulation Division of Teknisk Isolering.

Kjell Varenhed, Technical Manager, is a Chief Engineer and specialized within Marine Nitrogen systems already in the mid 80s.

Key Personnel

The key employees mentioned here do not only add their own individual expertise to the company, they are also shareholders, sharing the personal drive and decision power with the entrepreneurs.

Rolf Lessner, the financial director, is also a veteran in the marine industry. He is a Bachelor of MBA and member of National Association of Certified Accountants in Norway. Furthermore, he has worked a consultant of financial services.

Leif Erik Caspersen, the area sales manager, is a market communication specialist from BI Norwegian School of Management. He has worked in several manager positions in the off-shore and corrosion protection industry during the last 15 years.

Pawel Kowal, project engineer, holds a Master of Science degree in Ocean Engineering and Ship Technology from the Technical University of Gdansk (Poland), specializing in marine power plants and marine piping systems.

Operational director, Jo Inge Bommen, holds a degree in mechanical engineering. Alike his fellow co-workers he has a background in the marine industry, installing, designing and commissioning technical applications.

Finally, Sverre Strømme, the project manager, has worked several years as an engineer in the merchant navy.

Profit Considerations

Policy regarding use of profits and ownership returns

The company's shareholders believe in this innovation and after the investments will pay off, get their share according to the amount of ownership. Careful retained earnings considerations will guarantee to further utilize the company's expertise and research and development to maintain the top notch technology. Besides the aforementioned professional partners, the founders and key- employees hold shares in OceanSaver AS.

Environmental and Financial Motives

OceanSaver AS faced most of the tensions between environmental and financial motives during the research and development phase, as is common with most start-ups; high research and development costs, but no sales guarantee. Although still not breaking even, OceanSaver AS has generated sufficient funding and is about to enter the growth phase with regulations in their favor promising high returns on investments. It is the impression of the authors, that the environmental challenge is clearly a focal theme for the innovators, the main motivation for creating the OceanSaver BWTS appears to be the increasingly mature market for, and favorable regulations associated with, environmentally friendly ballast water treatment systems.

Stakeholder Relationship

Stakeholder Influence

The several stakeholders, meaning anyone who holds a vested interest in the company's success or failure, are in OceanSaver AS' case the key employees and employees, their customers and environmental institutions such as IMO.

OceanSaver AS' shareholders literally believe in the project "*Ocean Saver*". The shareholding companies share the goal of reducing the environmental damages done by the handling of ballast water and want to be actively involved in making a difference. OceanSaver AS utilizes a technology that does not, like their main competitors, use any chemicals or other harming contaminants. Both unique characteristics of the technology, cavitation and supersaturation, are perceived as strong selling points and in combination seen as an evolutionary step forwards when it comes to BWTS's. Not only is

it a new technology, it is perceived as one that is policy supported and going to be *really* profitable in the near future. The long Norwegian marine tradition is considered as an additional valuable asset, for getting this technology onto the market.

The public interest and recognition, or need identification for a technology like OceanSaver BWTS is represented by institutions such as the IMO resolution 215 (82), adopted in December of 2006. The IMO resolution is a result of the lack of vessel safety and the increased concern of how the threat of invasive species could further harm our environment.

The most important rules and regulations taken into consideration when developing the tailor able BWTS are to be found in the following conventions.

- BWM convention
- PSPC schemes (Performance Standard for Protective Coatings)
- International Convention for the Control and Management of Ships Ballast Water & Sediments

Environmental Impact

Thousands of marine species are carried in ships' ballast water every day. After being pumped into the vessel, bacteria and other microbes, small invertebrates and the eggs, cysts and larvae of various species are carried around the globe until released at destination of the ship.

Normally, when thinking of "pollution" we think of oil spills, black smoke and stinking toxic chemicals reducing green acres to barren wasteland. However, biological ocean pollution poses a terrifying threat to our mother earth. Biological pollution is dissimilar to regular chemical pollution in that it is irreversible. When thousands of tiny species settle down and proliferate in the ocean, they might damage indigenous species and local industry, and they cannot be easily contained. While microbes and shellfish may seem harmless, the threat of invasive species is the fourth most dramatic source of pollution in our oceans.

When carried in ballast tanks, the survival of most species is reduced by several factors, such as mother species being too large to get through the pumps, the conditions during transportation and the survival in a new habitat. However, despite these conditions, there are still many organisms that invade new habitats and pose a threat to the original species (globallast.imo.org 2008). The current estimate is that 7000 different species are carried in ballast water.

Corrosion and its possible terrifying and extremely damaging outcomes to our oceans led to the extensive research also in this field. Research led to the inclusion of the C3-T unit into the ballast water treatment system. The unit serves the purpose of nitrogen super-saturation of the ballast water during filling the ship. This has the effect of eliminating oxygen, the cause for corrosion. This has been so far solved and regulated by applying coating to the inside of the tanks, but the enormous maintenance costs and hire-off time during dry-docking have led to dramatic environmental catastrophes like the "Erika" case. The mitigation of corrosion is more important than ever and the nitrogen super-saturation in combination with traditional coatings is an evolutionary step to reduce corrosion in the long run.

The Market- and Policy Context

Cleaning of ballast water is currently high on the political agenda of both UN accredited International Maritime Organization IMO and on the agendas of several Governments, including the Norwegian. Total emission of ballast water in Norway is 50 million ton a year, and approximately 30 million ton a year is dumped in the three petroleum-ports at Sture, Mongstad and Kårstø. In 2004, 400 exotic species were registered in North Western European ports, mostly from the Pacific Ocean (sjofartsdir.no).
The Norwegian government has implemented a maritime strategy that supports future growth and development of the Norwegian maritime industries but also involves cleaning of ballast water (regjeringen.no).

Other actors

The market for ballast water cleaning is at present attracting several competitors to Ocean Saver:
Alfa Laval became the first company that got approval of their cleaning technology of cleaning of ballast water in the summer of 2007 (offshore.no) and is therefore the largest competitor to OceanSaver. Their product is called PureBallast and they already have mounted it on some ships (pureballast.alfalevel.tripnet.se).
Another large competitor is OptiMarin AS, which also is world leading in this industry. They are located in Stavanger, Norway, and where the first company in the world to have mounted their system in an operating vessel (optimarin.com).
BallastTech-NIVA AS has made the first test centre in the world for landtesting new technology in line with the requirements of IMO. It's placed outside Oslo (niva.no).

Future Perspectives

Rules and regulations are in OceanSaver AS' favor. The company has just started to sell and incorporate their innovative technology into vessels. Most

of their shareholders represent their background in the marine industry and the connections they utilized due to their experiences. Being the first mover in this specific field provides them with a great advantage. Even though other ballast water treatment systems may enter the market in the near future customers are not likely to change supplier due to the enormous switching costs associated with installing a BWTS. Their networking abilities combined with the top of the art technology and rules and regulations on their side promises a bright future to OceanSaver AS and the oceans on our globe.

Inspiration for other SMEs

OceanSaver AS has been able to utilize their background knowledge and industry insight to realize where the demand was going to be. Despite long R&D time, they have been able to move there fast enough to be able to produce a competitive product, with long-term perspectives, and still be one of the first movers. Having a clear mission, being dedicated and especially arduous, will make sufficient funding possible, especially if both economic and environmental benefits are convincing to potential investors and other stakeholders. These are definitively characteristics of the company, which we hope will be inspiring for others in order to protect our environment, and prove that this can be done in a successful and profitable way.

Chapter 5

Concluding comments

Atle Midttun

Seen in relation to mainstream CSR literature, the cases in this chapter illustrate how CSR may be moved on a stage from a reactive or proactive support function to inclusion in the strategic core. The two modalities of CSR (CSR as a support function and CSR as strategic core) entail two widely different business models. In much of mainstream CSR literature, CSR represents a concern that needs to be addressed, while the main value drivers are elsewhere. In strategic CSR-driven innovation, social and environmental issues are not simply concerns that have to be taken into account, they also become targets for strategic engagement.

The fundamental difference between supportive and strategic CSR implies that while there may be much to learn from proactive CSR-oriented mature firms in terms of CSR implementation, the CSR-oriented innovators are strikingly more advanced at the core strategic level. The syntheses between public and private interests in CSR-oriented innovation entail different demands with respect to core competencies (Hammel and Pralahad 989; 1994) and value engagements (Fombrun 2000; Peters 1985), and also entail a need to represent creative tension between commercial and social factors within the company as well as within stakeholder engagement.

As our cases have illustrated, CSR-driven entrepreneurship represents a double challenge: to simultaneously provide a public good in an idealistic mode, yet finance it in the private, commercial market. This represents a challenging balancing act in which the entrepreneur has to balance what traditionally is seen as contradictory orientations. It involves seeking win-win solutions where both engagements are possible, and not reverting to one-sided idealism or one-sided commercialism behind a nice CSR facade.

In many ways, Think, OceanSaver and FIN Design are pioneers in redefining new roles for business in society. In this respect, their practices as presented in this chapter contribute to an emerging literature on CSR-driven innovation and a social and environmental entrepreneurship that points beyond the traditional understanding of the modern firm and its regulatory environment. As early as the mid-1990s, Rosabeth Moss Kanter (1999) pointed out the potential for social entrepreneurship studies of inner city projects in the USA in which companies engaged to solve public problems. She argued that firms should use social issues as a learning laboratory for addressing social needs. In the context of developing countries, Pralahad

(2006) has focused on the economic potential of the base of the pyramid, arguing that the four billion can be the engine of the next round of global trade and prosperity, as well as a source of innovation. With a similar goal, engaging the third world in economic development, Mohamed Yunus and Grameen Bank have promoted innovation in financial thinking through development of bottom-up micro-finance engagement of entrepreneurship (Yunus & Jolis,1999), which has led to a wave of innovation in this area in the finance industry.

The environmental field has also seen similar engagements which go beyond conventional business models. With innovation in eco-efficiency (Fussler and James 1996; Beveridge 2005) and clean tech venturing (Pernick 2007; Clean Tech Forum 2008), entrepreneurs are targeting issues of societal concern through private business engagement, cf. Think, OceanSaver and FIN Design. The common factor in all these approaches is that they conceptualize new business models where social and environmental dimensions are aligned with business engagement and where the traditional division between public and private goods is transcended, leading to what we have termed "societally and commercially sustainable goods".

CSR-focused entrepreneurship also transcends the traditional boundaries of the political economy. Whereas the socialist model organizes the entire economy under politically governed public production and the welfare state model combines public production with carefully regulated private production, strategic CSR directly combines societal preferences with private commerce in the market, although often engaging closely with idealistic NGOs. Hence CSR-oriented innovation has the potential of becoming an important supplement to the political provision of public goods (Midttun 2008): Firstly, because CSR-based innovation is capable of overcoming the limited capability to scale up political governance across national borders; secondly, because the freedom of private entrepreneurship enables it in many cases to take on new and controversial challenges more easily than where this is dependent on political decision-making.

It must be borne in mind, however, that in spite of growing, new, social and environmental entrepreneurship, there are other business models that focus on a narrower business agenda. To succeed, CSR-driven innovation is dependent on public engagement, whether voiced politically or through active civil initiatives. As Think, OceanSaver and FIN Design have shown, it is the role of the CSR entrepreneur to find the creative solutions to couple this agenda to an operative business model while remaining dependent upon positive public sentiment.

References

Agins, Teri. 2007. “Fashion: a closet for all seasons”. *The Wall Street Journal Asia,* 7 September

Berdichevsky, Gene, Kurt Kelty, JB Straubel and Erik Toomre. 2006. *“The Tesla roadster Battery System,”* [Online] Available from URL: < www.teslamotors.com/display_data/TeslaRoadsterBatterySystem.pdf>, [Accessed 2008 June 5]

Beveridge, Ross. and Simon Guy. 2005. 'The rise of the ecopreneur and the messy world of environmental innovation', *Local Environment* 10(6): 665-676

Bolduc, Douglas, 2007. “Coachbuilders Looking to go Electric”, *Automotive News Europe*, 12 (25): 8-8

Bolduc, Douglas. 2007. “Electric Car Makers Vows to Overcome Past Failures“, *Automotive News Europe*, 12 (17): 20-20

Bolduc, Douglas. 2008. “Think To Launch a New Car in 2008”, *Automotive News*, 12 (15/16): 18-18

Christensen, Clayton M. 2003. *The innovator's dilemma: when new technologies cause great firms to fail,* Boston, Mass. : Harvard Business School Press

Djelic, Marie-Laure and Antti Ainamo. 1999. “Coevolution in the Fashion Industry.” *Organization Science*, 10: 13-14

Domeisen, Natalie, 2006. Why is the United Nations Working in Fashion? *International TradeForum*, 3: 13-14

Fombrun, Charles J. and Naomi A. Gardberg 2000, "Opportunity platforms and safety nets: Corporate citizenship and reputational risk". *Business and Society Review*, 105 (1): 85-107

Frank, Michael. 2007. “New Division of Tesla Motors to Develop and Market Battery Packs for Clients in Automotive”, *Automotive Industries*, 187 (5): 23-23

Fredriksen, Ingrid. 2008. *Anmeldelse: FIN*. [Online] Available from URL: http://www.henne.no/php/art.php?id=510168 [Accessed 2008 June 1].

Fussler, Claude and Peter James. 1996; *Driving Eco-Innovation: A Breakthrough Discipline for Innovation and Sustainability*, Pitman Publishing: London

Gaidatzi, Dimi. 2005. "Forget Black: fashion's going green". *Financial Times-Weekend*, 14 May

Hamel, Gary and C.K. Prahalad. 1989 "Strategic Intent", *Harvard Business Review*, Spring (1): 36-62

Hamel, Gary and C. K. Prahalad. 1994. *Competing for the Future*, Harvard Business School Press, Boston.

Hush, Kelli. 2007. Fashion Police *Sydney Morning Herald*. 8 November

Kanter, Rosabeth Moss. 1999. "From Spare Change to Real Change". Harvard Business review, 77 (3): 122-132

Kaul, Inge, Isabelle Grunberg and Marc A. Stern. 1999. *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press

Kobe, Jerry. 1999. "*Forward Thinking*", Automotive Industries, [Online] Available from URL: http://findarticles.com/p/articles/mi_m3012/is_/ai_54051140?tag=artBody;col1, [Accessed 2008 June 5]

Midttun, Atle. 2007. "C(S)R and innovation, compatibility or contradiction? Towards a dynamic reinterpretation of C(S)R" . *Journal of Corporate Governance*, 7 (4): 401-413

Midttun, Atle. 2008 a. "Partnered Governance: aligning corporate responsibility and public policy in the global economy". *Journal of Corporate Governance*, 8 (4): 406-418

Midttun, Atle. 2008 b. "Samfunnsansvar som innovasjonsstrategi" *MAGMA*: *Tidsskrift for økonomi og ledelse*, 5: 65-86

Otter, Alastair. 2007. "Watchdogs worry that ethical fashion labels may camouflage labor abuse". *The Star*, 15 February

Pernick, Ron. 2007. *The Clean Tech Revolution*, New York: Collins

Peters, Tom and Nancy Austin. 1985. *A Passion for Excellence: the leadership difference,* New York: Random House

Porter, Michael and Mark R. Kramer. 2006. "Strategy and Society". *Harvard Business Review,* 84 (12):78-92

Reed, John. 2007. "Jump-Start in electric race", *Financial Times*, December 10

Samuelson, Paul A. 1954. "The Pure Theory of Public Expenditure". *Review of Economics and Statistics,* 36 (4): 387–389.

Samuelson, Paul A. and William D. Nordhaus. 2005. *Macroeconomics* Boston, Mass: McGraw-Hill/Irwin

Stiglitz, Joseph E. 1999. "Knowledge as a Global Public Good" in Inge Kaul, Isabelle Grunberg and Marc A. Stern *Global Public Goods: International Cooperation in the 21st Century,* Oxford: Oxford University Press

Schumpeter, Joseph. A. 1989. *Essays : on entrepreneurs, innovations, business cycles, and the evolution of capitalism*; edited by Richard V. Clemence ; with a new introduction by Richard Swedberg New Brunswick, N.J. : Transaction Publishers

Tulder, Rob van and Alex van der Zwart. 2005. *International business-society management: Linking Corporate Responsibility and Globalization*, London: Routledge

Wene, Clas-Otto. 2000. *Experience curves for energy technology policy* / International Energy Agency, Paris : OECD

Woody, Todd. 2007. "*Have You Driven a Fjord Lately?"* [Online] CNNMoney. Available from URL: http://money.cnn.com/magazines/business2/business2_archive/2007/08/01/100138830/index.htm [Accessed 2008 June 5]

Yunus, Muhammad and Alan Jolis. 1999. *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. PublicAffairs, London

Zadek, Simon. 2004. "The Path to Corporate Responsibility" *Harvard Business Review,* 82 (12): 125-132

Online Sources:

Alfa Laval, 2008, ”*PureBallast*”, [Online] Available from URL: <http://pureballast.alfalaval.tripnet.se/>, [Accessed 2008 June 6]

AP. 2007. “*Norwegian company rises from ashes of failed Ford experiment*”, [Online] Available from URL: http://www.msnbc.msn.com/id/17580503/**,** [Accessed 2008 June 5]

BBC News, 2000, “*The Scandal of the Erika”* [Online] Available from URL: http://news.bbc.co.uk/2/hi/programmes/correspondent/883110.stm, [Accessed 2008 June17]

CampusKjeller, 2008 [Online] Available from URL: <www.campuskjeller.no> [Accessed 2008 June 5]

Cleantechnetwork. 2008. [Online]. Available from URL: <http://cleantechnetwork.com/index.cfm?pageSRC=WashingtonDCForum>. [Accessed 2008 September 14]

DNV, 2008 [Online] Available from URL: <www.dnv.com>, [Accessed 2008 June 5]

Fednav Group. 2008 [Online] Available from URL: <http://www2.fednav.com/anglais/home.html>, [Accessed 2008 June 17]

Globallast Partnerships, 2008, “*Welcome to Globallast*” [Online] Available from URL: http://globallast.imo.org, [Accessed 2008 June17]

Grip, 2007, “ *Vinnere av Glassbjørnen 2007*” [Online] Available from URL: http://www.grip.no/glassbjornen/, [Accessed 2008 June17]

Höegh, 2008. [Online] Available from URL: <www.hoegh.com> [Accessed 2008 June 5]

Innovasjon Norge, 2008 [Online] Available from URL: <www.innovasjonnorge.no> [Accessed 2008 June 5]

International Maritime Organisation, 2008 [Online] Available from URL: <http://www.imo.org/home.asp> [Accessed 2008 June 17]

International Maritime Organization, 2004, "*Alien invaders in ballast water - new Convention adopted at IMO*": [Online] Available from URL: http://www.imo.org/About/mainframe.asp?topic_id=848&doc_id=3475 [Accessed 2008 June17]

Kongsberg Innovasjon, 2008. [Online] Available from URL: <www.k-i.no>, [Accessed 2008 June 5]

Niva, 2007, "*BallastTech-NIVA AS først i verden med testing av renseteknologi for ballastvann*", [Online] Available from URL: <http://www.niva.no/symfoni/infoportal/PUBLIKASJON.NSF/.vieInterForsideNIVA/574343A81A991B8AC125728A004F6BF9?OpenDocument>, [Accessed 2008 June 6]

OceanSaver. 2008. "*OceanSaver – Ballast and corrosion control*" [Online] Available from URL: : <http://www.oceansaver.com/>, [Accessed 2008 June 5]

Offshore, 2007, "Ny renseteknologi godkjent i FNs sjøfartsorganisasjon", 10.07.08, [Online] Available from URL: <http://www.offshore.no/nyheter/sak.aspx?Id=18169>, [Accessed 2008 June 6]

OptiMarin, 2008, "About OptiMarin", <http://www.optimarin.com/visartikkel.asp?id=895>, [Accessed 2008 June 6]

Regjeringen, 2007, "*Norsk maritim næring skal være verdens mest miljøvennlige*", [Online] Available from URL: <http://www.regjeringen.no/nb/dep/nhd/Pressesenter/pressemeldinger/2007/-Norsk-maritim-naring-skal-vare-verdens-.html?id=482329&epslanguage=NO>, [Accessed 2008 June 6]

Seatrade Awards. *Winners*, 2006 [Online] Available from URL: <http://www.seatrade-global.com/awards/awards_retro_winners.html>, [Accessed 2008 June17]

Sjøfartsdirektoratet, 2007, "Sjøsikkerhetskonferansen 2007", Available from URL: <http://www.sjofartsdir.no/no/Publikasjoner/Navigare/Sjosikkerhetskonferansen_2007/>, [Accessed 2008 June17]

Statoil Hydro, 2008 [Online] Available from URL: < www.statoilhydro.com> [Accessed 2008 June 5]

Sumitomo Corporation, 2008 [Online] Available from URL: <www.sumitomocorp.co.jp/english>, [Accessed 2008 June 5]

THINK. 2008a. *Environment* [Online] Available from URL: <http://www.think.no/think/content/view/full/192> [Accessed 2008 September 8]

THINK. 2008b. [Online] Available from URL: <http://www.think.no/think/content/view/full/290> [Accessed 2008 September8]

THINK. 2008c. *Think city* [Online] Available from URL: <http://www.think.no/think/content/view/full/278> [Accessed 2008 September 8]

Total. 2008 . *ERIKA shipwreck: First report by the Sea Accidents Investigation Office* [Online] Available from URL: <http://www.total.com/en/press/press_releases/pr_2000/000114_ERIKA_shipwreck_1422.htm> [Accessed 2008 September 9]

Yahoo. 2006. *Autos green centre, consumer survey* [Online] Available from URL: <http://autos.yahoo.com/green_center-community/> [Accessed 2008 June 5]

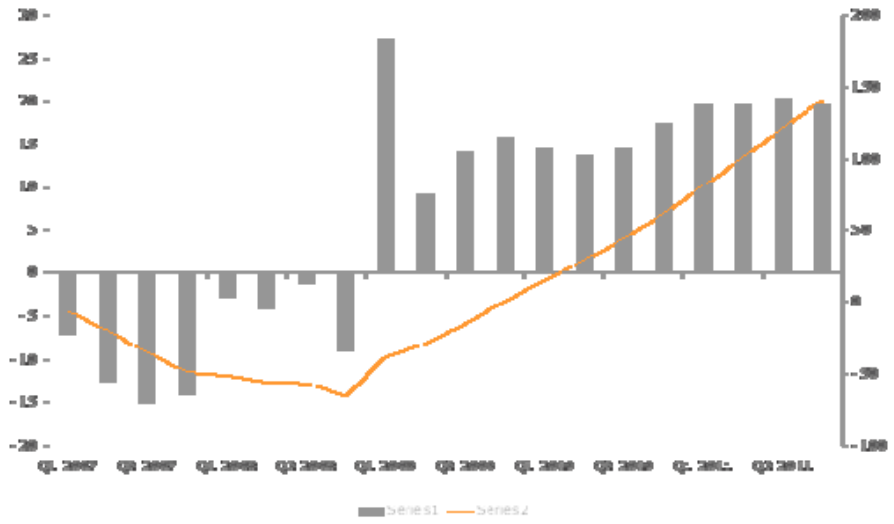
Power Point presentations and documents from THINK Global:

All presentations have been provided by the company. They are either presentations used by *Jan Olaf Willums* when lecturing at BI or professional presentations to made to promote the company.
Company Industry, Think Technology AS
Think, Climate Challenge and Sustainable mobility
The Eco-Friendly Advantages of Electric Vehicles
Electric Vehicle Breakthrough Technology
Distribution Plan
Think City Presentation, technical characteristics of the car
Financing Early Stages Companies, presentation by Jan Olaf Willums for the Entrepreneurship Master Program at BI
Think Global, presentation by Jan Olaf Willums for the Entrepreneurship Master Program at BI
Think Again, presentation for a case study at BI for the Innovation and Sectoral Application lecture
Think City, presentation for Entrepreneurship Program at Harvard Business School

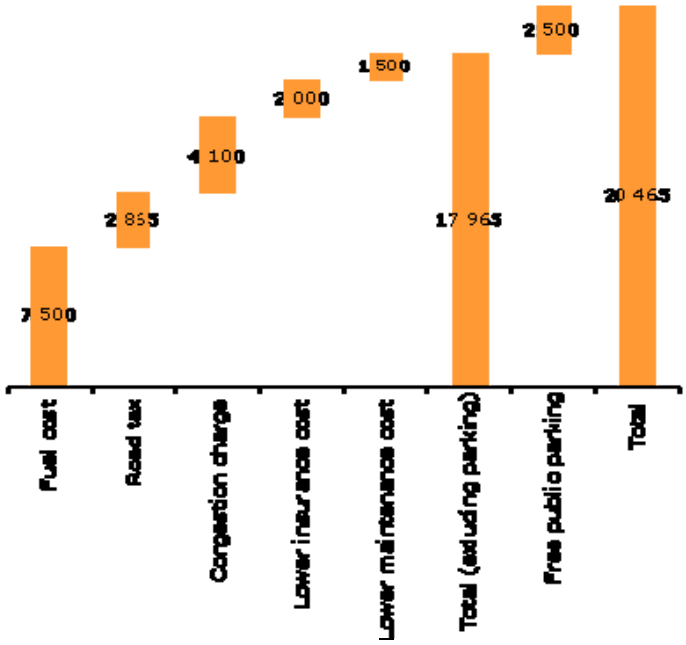
Appendixes

Think

App. 1 Forecasted Expected Cash Flow for the company until 2011



App. 2 Cost savings for electric car users (in $ per year)



OceanSaver

Pictures of the battery