

Strategizing for Environmentally Sustainable Praxis: The Case of “Green Operations”

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Abstract

The paper investigates how a strategic idea to operate offshore service vessels in an environmentally sustainable way was transformed into practical realities. The research case was a campaign to reduce the consumption of diesel-fuel, in the paper referred to as the case of “green operations”. Our findings were seven key practices for realizing environmentally sustainable praxis. The practices were the creation and promotion of a strategic idea, concretizing how the idea could be transformed into practical realities, the construction of a goal-oriented and innovative contractual arrangement, encouraging the enactment of fuel-saving operations whenever possible, acknowledging middle managers on board the offshore service vessels as key strategy makers, and organizing the campaign as a competition among the vessels in carrying-out the most fuel-saving “green operations”. Finally, but not in the least, corporate managers following-up, supporting, and facilitating strategic activities, were identified as crucial.

Key words: Strategizing, strategy practices, environmentally sustainable praxis.

Introduction

Firms must continually upgrade and improve to stay competitive in hostile, ever-changing environments in order to stay competitive. This paper investigates and reports on such efforts, more precisely on a campaign launched by a Norwegian shipping company servicing the offshore petroleum industry. The strategic idea of the campaign was to be realized by carrying out fuel-saving operations on board its vessels.

In the research on organizational strategy making the dominating focus has been on analytical activities related to decision making, implicitly presupposing that implementation of the strategic idea or decision into realities is more or less a straightforward task (Johnson et al., 2007). The focal point has been on strategic analysis and strategy formulation, primarily as a top management activity, paying less attention to how formulated strategic ideas or visions are put into action. More recently implementation of strategic ideas into organizational realities has been realized to be even more demanding than strategy formulation, as reflected among others in the emerging strategy-as-practice perspective (for example Whittington 2006; Jarzabowski et al., 2007; Johnson et. al., 2007).

The purpose of this paper is to uncover how a strategy idea is constructed and realized. The guiding research question is: *How is a strategic idea for operating offshore service vessels in an environmentally sustainable way strategized into organizational praxis?* This is an important question

because our present knowledge about transforming a strategic idea into organizational realities is limited. Contributions to further knowledge about organizational strategizing is of importance for any organization struggling to improve its competitive position, not the least for companies operating within the shipping industry subject to strong international competition while simultaneously under pressure to operate in a more environmentally sustainable way (Skjølsvik et al. 2000; Norway, 2008; Dalsøren et al., 2009; Norwegian Government Report, 2011-2012; Behring, 2012).

In the paper we report on a study to examine strategy practices in preparing and implementing a strategic idea for operating offshore service vessels environmentally sustainable. Activities and challenges during the processes, from the introduction of the strategic idea to realization of environmentally sustainable operation of the vessels are reported, as well as the underlying practices developed; i.e. how the organizational actors learn and develop ways of acting.

The remaining part of the paper is organized as follows. First we briefly describe the theoretical perspectives regarding organizational strategy making. Then we describe the methodological approach for exploring the stated research question empirically. Thereafter we present the case constituting the empirical basis for the research, followed by a presentation of our findings. Finally we discuss our findings, and identify contributions and avenues for further research.

Theoretical perspectives

The theoretical foundation of the paper is a practice-orientation towards organizational strategizing (Golsorkhi et al.; Golsorkhi, Rouleau, Seidl and Vaara 2011), also referred to as strategy-as-practice (Whittington 1996). The practice-perspective can be regarded as an alternative to the mainstream strategy research due to its attempt to shift attention away from merely focusing on the effects of strategies on performance to a more comprehensive, in-depth, analysis of strategy and strategizing; i. e. on the actors involved and their doings.

A practice-orientation towards organizational strategizing is particularly supposed to contribute to advancing our knowledge about how actors involved conceive and perform activities in their efforts to pursue strategic tasks in their actual context. This provides not only for an organizational perspective into strategy, but also a strategic angle for examining the process of organizing, thereby connecting strategic management research with practice-oriented organizational studies. At the same time a practice-orientation towards organizational strategizing is taking serious that implementation of strategic ideas into organizational reality constitutes may be the most demanding challenge in strategy work (Whittington 1996; Jarzabowski et al. 2007; Johnson et a. 2007; Golsorkhi et al. 2011), suggesting that contributions to further knowledge about organizational strategizing are of significant theoretical as well as practical importance.

In this paper the main focus is on practices in preparing and implementing environmentally sustainable praxis on board the vessels. Praxis refers to micro-daily activities, constituting socially accomplished flows or streams of activities that are strategically consequential for realizing the idea to operate offshore service vessels in environmentally sustainable ways. Strategy practices are understood as practices in turning a strategic idea into organizational praxis, while the actors or

practitioners are strategists who perform praxis and carries practice (Jarzabokwski et al., 2007). We investigate practices applied on board the vessels as well as at the onshore management level aimed at realizing the strategic idea to operate offshore service vessels in an environmentally sustainable way. In addition we investigate key practitioners involved in the strategy making processes, onshore as well on board the vessels, including cooperation between onshore and offshore practitioners during the ongoing strategy making processes. The role of offshore middle managers as micro-organizational practitioners in realizing environmentally sustainable praxis is subject to particular investigation, including mobilizing offshore middle management as campaigners in the strategy making processes.

Method

An exploratory case-study approach was found adequate for the actual research. The main reason for choosing an exploratory case-study approach was the lack of a priori knowledge about the actual problem, making it almost impossible to advance well-grounded a priori hypothesis. A multiple case research design (Yin, 2004; Ghauri and Grønhaug, 2010) encompassing four vessels as units of observation, was chosen. The four observation units were selected on the basis of the number of fuel-saving operations carried out so far in the campaign, i.e., as per the end of year 2010 when the research process started, where two vessels were below average and two vessels were on the upper end of the scale at that stage in the campaign. In-depth interviews with onshore as well as offshore middle managers and crews were used together with secondary data.

The planning and execution of interviews were as follows. A first meeting was scheduled with the project leader of the campaign. The purpose of this meeting was to obtain an overview of the fuel-saving campaign as well as to establish a relationship with the company for obtaining access to the four vessels sampled. Before as well as after this meeting with the project leader, secondary data was collected for obtaining more information about the campaign from internal company documents and annual reports, as well as newspaper accounts.

On the basis of the data from the conversation with the project leader as well as information obtained from secondary data sources, a semi-structured interview guide was developed. The interview guide contained questions about the strategic idea as such, about what constituted a typical fuel-saving operation, how the operations were carried out, and about the actors involved in initiating and carrying out fuel-saving operations. The guide also included questions about cooperation and interactions between the actors during the strategy making processes, both internally in the company as well as with the contractors of the vessels. Furthermore, the interview guide included questions about challenges in enacting fuel-saving operations, as well as capability requirements for operating offshore service vessels in an environmentally sustainable way.

Appointments for conducting interviews on board were arranged in cooperation with the project leader for the campaign and scheduled to take place when the sampled vessels were approaching a port that was convenient for the researchers. Because some of the vessels did not often approach adjacent ports, the first interview on board a vessel was conducted early in 2011 and the last one late in the same year. When appointments were made for conducting interviews the researchers met

on board the vessels at the agreed time, welcomed by one of the managers, who in turn introduced us to the rest of the management team before sitting down for interviews. One of the interviews was conducted in the captain's cabin, one on the bridge, and two others in the vessel lounges, as was most convenient for a ship in full operation preparing for the next assignment. The interview in the captain's cabin was with the captain himself as the only interviewee, while the interview on the bridge was with the whole management team of the vessel in question, including the captain, the chief mate, the chief engineer, and the steward. Regarding the two other interviews, one was with the captain and the chief mate, and the other with just the chief mate. The interviews lasted for one to three hours, followed by guided tours around the vessels that also included short conversations with the crews.

After the interviews with the management and crews on board the vessels a final interview lasting for a whole day was conducted with onshore management, reviewing, discussing, and verifying significant findings. The interviews were tape-recorded and transcribed, in addition to notes taken during the interviews.

The case

The case constituting the empirical basis for the research was a fuel-saving campaign initiated by a Norwegian shipping company servicing the petroleum industry. The reason for choosing this campaign as a research case was the innovative and forward-thinking underlying the campaign, as well as the successful strategizing of the idea to operate offshore service vessels in an environmentally sustainable way into organizational praxis. The campaign started in the 4th quarter of 2009, motivated among others things by a Norwegian tax law allowing shipping companies tax deductions for initiatives to reduce environmental emissions. Seven-eight years ago the environmental focus within the offshore shipping industry was on reducing and reporting garbage as well as establishing systems for grading waste with a particular focus on toxic materials, and with little or no attention to damaging emissions to air or on global climate changes. From around 2007 onwards an emergent focus on emissions to air appeared, in the beginning primarily on NO_x and less on CO₂. A key reason for little or no focus on CO₂ was that diesel fuel consumed by a vessel was paid for by the customers contracting a vessel, and not by the offshore shipping companies themselves.

The vaguely stated aspiration of the campaign was to reduce the total consumption of diesel fuel used by the vessels by some percent, initially without a specifically stated goal. After a while, however, the ambition level was raised to a 10-20 % reduction, or up to 20,000 tons (equaling 23,000,000 liters) a year. The reduction in fuel consumption was to be achieved by carrying out fuel-saving operations, in this case referred to as "green operations." A "green operation" was defined as a savings of 500 liters (or 0.5 m³) of diesel fuel in a specific operational achievement during a day (www.company.no, a). Seven categories of "green operations" were identified. The seven categories of fuel-saving "green operations" stated various ways in which such operations could be carried out for reducing environmentally damaging emissions. By carrying out fuel-saving operations on board the vessels the company tried to build a competitive advantage and brand itself as a "green" shipping company in a commercially profitable way.

In 2011 the company extended the campaign by introducing a new environmental concept for the company's fleet. The concept was named Climate Neutral Operations (CNO). The intention was to compensate for the fleet's exhaust emissions as well as to introduce the opportunity for their customers to contract climate-neutral ships (www.company.no/climate-neutral-network), implying that the cost reductions due to a decrease in the use of diesel fuel were to be shared equally between the customer contracting the vessel and contributions to the Norwegian Rainforest Foundation, as further outlined in Appendix I.

The shipping company that initiated the campaign was established in the 1960s as a family company and is today owned and controlled by the founder's family. The company has approximately 1800 employees and a total fleet of 50 offshore service vessels altogether, comprising construction service vessels, anchor handling vessels, as well as platform supply vessels. The number of crew members on board the vessels varies from 20 up to 50 during certain operations, including representatives of the contractor of the vessel.

In order to manage the fuel-saving campaign a project leader was hired from outside the company. The project leader reported to the managing director and worked in close cooperation with the top management team of the shipping company that consists of managers responsible for operations, technical affairs, chartering, and the offshore crews. The management team on board a vessel includes the captain, the chief mate, the chief engineer, and the steward. In the rest of this paper these managers and their deputies are referred to as offshore middle managers.

The campaign was organized as an internal competition among vessels, and "green operations" carried out were recorded on a daily basis and reported to the project leader. The project leader reported accumulated "green operations" carried out by each vessel on a quarterly basis. The number one vessel for a quarter was awarded a small amount to its welfare fund. In addition, the crews on board the three best vessels were awarded T-shirts marked with a "green operations" symbol. Furthermore, a vessel that managed to achieve the target of 200 fuel-saving operations during a year receive a green flag to be hung from the mast showing that her crew has a strong focus on "green operations" in their day-to-day work.

The environmental efforts of the company have been recognized at the national as well as the international level. The Norwegian Minister of Environmental and International Development expressed in an announcement that he was impressed by the shipping company's environmental work. He also emphasized the importance of taking the initiative to add a commercial viewpoint on such an important and forward-thinking environmental model as the CNO-concept, which is ahead of both the current market and regulatory requirements.

Results of the fuel-saving campaign

The results of the fuel-saving campaign from when it was initiated on the 1st of October 2009 up till and including 2012 are shown in Table 1. Inspection of the table reveals that a total of 922 fuel-saving operations were carried out during the 4th quarter of 2009, resulting in a savings of 2,600 m³ of diesel fuel, or a percentage reduction in fuel savings of 5.6 % (www.company.no, a). This equals

emissions from 28,140 cars a year. The rainforest area that might be preserved as a result of “green operations” carried out equals 922,000 m², an area of about the same size as 140 football fields.

During 2010 a total of 6,552 fuel-saving operations were registered, resulting in 18,476 m³ of diesel fuel saved (www.company.no, b). This constitutes a quarterly average of 1,638 fuel-saving operations, equaling 4,619 m³ of diesel fuel, or about the same as emissions from about 200,000 cars a year. The CO₂ contained in a rainforest area of this size equals the entire annual amount of CO₂ emissions from the company` fleet of offshore service vessels. The fuel savings achieved for 2010 were about 10 % of the total amount of diesel fuel used for operating the fleet of vessels compared to prior to when the campaign was launched.

During the year 2011 a total of 13,560 fuel-saving operations were registered, equaling 33,168 m³ of diesel fuel saved, corresponding to a quarterly average number of 3,390 fuel-saving operations carried out. This equals 8,846 m³ of diesel fuel, or a reduction of 19.1 % of the total amount of diesel fuel used for operating the company`s fleet of vessels compared to when the campaign was launched (www.company.no, b). The CO₂ contained in a rainforest area of this size equals almost the double of the annual amount of CO₂ emissions from the company`s fleet of offshore service vessels.

During the year 2012 a total of 18,122 fuel-saving operations were registered, equaling 44,327 m³ of diesel fuel saved, corresponding to a quarterly average number of 4,531 fuel-saving operations carried out (www.company.no, c). This equals 11,822 m³, or a reduction of 25, 5 % of the total amount of diesel-fuel used for operating the company`s fleet of vessels compared to when the campaign was launched.

TABLE 1. RESULTS OF THE FUEL-SAVING CAMPAIGN

Average per quarter	4th quarter of 2009	Quarterly average for 2010	Quarterly average for 2011	Quarterly average for 2012
Number of fuel-saving operations	922	1,638	3,390	4,531
Fuel savings (m³)	2,600	4,619	8,846	11,822
Fuel savings in %	5.6	10	19.1	25.5

In addition to the fuel savings and consequent reduction in operational costs, the maintenance costs have been reduced because of less wear and tear on the engines of the vessels.

Findings

In this section we report the findings from our investigation, including key strategy practices in preparing and implementing environmentally sustainable praxis. The findings are organized as

follows. Practices in preparing the campaign (A), and practices related to the implementation of environmentally sustainable praxis (B) respectively, are identified and included under headlines that emerged during the research process. In addition practices that are related to the entire strategy making processes (C), from creating and promoting the strategic idea to the realization of new performative organizational praxis, are also stated. A summary of the key strategy making practices identified is incorporated (See Table 3).

Preparing the campaign

A stronger focus on environmental aspects concerning emissions to the air combined with governmental issues for encouraging environmental initiatives within the shipping industry was the emerging background for the “green operations” campaign launched in the 4th quarter of 2009.

“Seven-eight years back the environmental focus within the offshore shipping industry was on reducing and reporting garbage as well as establishing systems for grading waste with a particular focus on toxic material, and with little or no attention to damaging emissions to air and on global climate changes.” (Project leader)

A tax law allowing shipping companies tax deductions for initiatives to reduce environmental emissions constituted the most important *raison d'être* for initiating the campaign, as confirmed below:

“Initially, the idea to reduce damaging emissions was financially based, and not an initiative to operate in a 'green' way.” (Project leader)

The strategic idea to operate offshore vessels in an environmentally sustainable way resonated with prevailing institutional and societal trends as well as with ongoing ideas regarding reductions in diesel fuel consumption.

“This focus on environmental aspects is something that recently has become more imperative.Some years ago this was not so important and we did not think of it at all. To stop an engine was not in question.” (Captain 1)

The initial challenge facing the company was to make sense of prevailing institutional and societal trends regarding environmental sustainability, and to create and concretize ideas of how to encounter the emerging environmental challenges in an innovative way. The launching time was, therefore, vital for making the campaign a success, as confirmed by the following statement:

“If the campaign had been launched at an earlier stage it would probably not have become so successful.” (Project leader)

The campaign was promoted by the top management as well as the project leader, internally as well as externally towards customers, the media, and other external stakeholders. It quickly became a salient issue within the offshore shipping industry, recognized at the national as well as the international level. Promotion of the idea towards customers for making them stakeholders in the

campaign was a particularly important activity, initially focusing mainly on the cost savings to be achieved by the customers through carrying out “green” fuel-saving operations. Early on the customers were, however, hesitant stakeholders in the campaign. Later the customers to a larger extent became supporters of the campaign, as verified below:

“More recently they have become more interested and supportive of carrying out fuel-saving operations.” (Captain 1)

The customers gradually realized the innovative idea behind the campaign, reflecting the prevailing institutional trends regarding environmental issues. Creating and promoting a strategic idea for which the time was right, therefore, appeared as a vital practice in making the “green operations campaign” a success.

To sum up, the first strategy practice identified is the following:

Practice 1: Creating and promoting a strategic idea that resonated with prevailing institutional and organizational trends and values regarding environmental sustainability.

A further key activity in preparing the campaign was to concretize how to transform the idea to operate offshore service vessels in an environmentally sustainable way into organizational praxis, thus bridging the gap between the strategic idea and how to enact fuel-saving operations on board the vessels. For the initiation of this process an invitation was sent to offshore middle managers inviting them to come up with proposals for how the “green operations” idea might be transformed into practical reality. As a response to the invitation, approximately 150 proposals for how diesel fuel might be saved came up.

On basis of the incoming proposals, the project leader in cooperation with the middle managers, evaluated and reduced the incoming proposals to seven main categories which constitute a repertoire, or “menu”, how the idea to operate offshore service vessels in an environmentally sustainable way might be realized. The repertoire of seven categories of fuel-saving “green operations” were: anchoring, drift, reducing transit speed, “green” dynamic positioning, stopping the main engine, optimizing trim, and reducing electrical consumption.

TABLE 2. REPERTOIRE OF FUEL-SAVING “GREEN OPERATIONS”

Categories of “green operations”

- Anchoring (anchoring the vessel, thereby providing for use of only one or two of the four engines)
- Drift (letting the vessel drift instead of running all four engines)
- Reducing transit speed
- “Green” dynamic positioning (using the dynamic positioning system in energy-efficient ways)
- Stopping the main engine
- Optimizing trim (running the vessel at a speed that consumes the least diesel-fuel)
- Reducing electrical consumption (for example by turning off the main deck light)

The success of this cooperative and evaluative process is reported below:

“We also did a lot of this before, but now it has been systemized.... Those people at the main office have been clever in involving us in the processes. The concretizing processes have bridged the strategic idea and how to operate in an environmentally sustainable way at the micro-organizational level.” (Captain 2)

Therefore, the second practice identified is:

Practice 2: Establishing a repertoire for how to act to transform the strategic idea into practical realities, in cooperation with offshore middle managers.

A further key activity in preparing the campaign was the construction of a goal-oriented and innovative contractual arrangement that supported the strategic idea. The contractual arrangement established stated that 50 % of the cost-savings obtained through carrying out “green operations” should be to the benefit of the customer contracting the vessel, and the other 50 % of the savings should be assigned to the Norwegian Rainforest Foundation. Through this new contractual arrangement the customers were made financial benefactors of the campaign. At the same time the idea to operate in an environmentally sustainable way was linked to the preservation of rainforests. In collaboration with its customers the company was to compensate for its environmentally damaging emissions by investing in and supporting projects that were certified for CO₂ cuts in accordance with the United Nations climate quotas.

In 2011 the contractual arrangement was extended to include climate-neutral shipping contracts, identified as the CNO concept (Climate Neutral Shipping) (See Appendix A). In the CNO concept the company invites their customers to become even more involved in the company’s environmental work. Because of the savings to be achieved from carrying out fuel-saving operations, it would actually be more expensive for their customers to contract a ship without environmental measures than a vessel operating under the CNO concept. Thus the CNO concept established climate-neutral shipping as a commercially profitable measure for the company as well as for their customers by combining environmental sustainability and commerciality. So, the third strategy practice identified is the following:

Practice 3: Constructing a goal-oriented and innovative contractual arrangement that supported the strategic idea to operate in an environmentally sustainable way.

B. Implementation of environmentally sustainable operative praxis

As previously stated, carrying out “green operations” whenever an opportunity for such operations arose was not an obvious issue at an early stage in the strategizing processes. First and foremost the customer contracting a vessel had to agree with initiating a fuel-saving operation. Executing fuel-saving operations, therefore, also involved campaigning for the “green operations” idea as an economic as well as environmental issue to the offshore representative of the customers on a day-to-day basis, despite the fact that half of the cost savings obtained due to reduced diesel fuel consumption was of direct financial benefit to them.

“In the beginning of the campaign it was not unusual that the customer was unwilling to support a proposal to carry out a fuel-saving operation. The customer was primarily interested in getting a job done, caring less about environmental issues.” (Captain 2)

Carrying-out fuel-saving “green operations”, therefore, demanded close contact with the customer on a day-to-day basis, as confirmed by the following statement.

“We discuss with the customer whenever there is an opportunity. There is a continuous dialog regarding what is going to happen during the day, particularly at the morning meeting, and then we decide if we for example can shut down one engine or more.” (Captain 1)

Strategizing the idea to operate offshore service vessels in an environmentally sustainable way into practical realities depended on micro-organizational capabilities in carrying out fuel-saving operations, while at the same time fulfilling operational obligations towards customers in accordance with contractual agreements. This implied increased demands on offshore middle managers in being alert to operational windows for executing “green operations,” as demonstrated below.

“Attention... you must have environmental aspects of the operations in mind all the time... We are running a heavy risk of accidents when we shut down one or more engines for saving diesel fuel. We must therefore take into consideration what kind of operation we are going to carry out. Is this 'green operation' within an acceptable risk level to do? If not, we don't do it.” (Captain 2)

Operating vessels sustainably also demanded extensive knowledge of environmental emissions in the actions carried out for reducing the consumption of diesel fuel. The extensive knowledge required is confirmed by the following statement.

“The chief mate or his deputies must have an overview of all aspects related to optimizing emissions from the engines as well as other energy-saving efforts on board a vessel.” (Captain 1)

The enactment of “green operations” demanded attention to how many, and which, of the engines to be used for the scheduled operations, including balancing different operational parameters. These challenges presuppose close cooperation between the captain and the chief mate on the bridge as well as the chief engineer in the engine-room for operating a vessel in the “greenest,” most energy-efficient, way. The demand for close cooperation between the captain and the mates on the bridge and the engineers running the engines is shown below.

“What kind of 'green operation' to be carried out usually requires input from the chief mate or his deputies regarding estimated savings of diesel fuel related to carrying out one kind of 'green operation' or the other.” (Captain 3)

As the top manager on board a vessel the captain, in close cooperation particularly with the chief mate and the chief engineer, had to have his “hands on” operational activities while at the same time acting as strategy maker by conducting fuel-saving operational activities whenever an opportunity for suspending the normal way of operating the vessel arose. This is confirmed the following statement.

"I must be in close interaction with the operational activities for knowing what is going on at any time. I must do that." (Captain 1)

Thus, carrying out fuel-saving operations implied carefully scheduling of activities to be carried out for the next twelve to twenty-four hours, including safety and risk assessments. This presupposes offshore middle managers who are prepared to seize any opportunity for carrying out fuel-saving operations while at the same time fulfilling operational duties in a safe way. Compared to what had been the ordinary way of operating an offshore service vessel, executing fuel-saving operations required balancing between the actual operations to be carried out and risk assessments of the scheduled operations, as well as taking into account environmental effects of one kind of fuel-saving compared to another. Carrying out fuel-saving operations also implied that "the normal" way a vessel was to be operated had to be changed. Being capable of changing the operational routines on board an offshore service vessel constituted a key element in transforming the strategic idea to operate offshore service vessels in an environmentally sustainable way into realities. So, the fourth strategy practice identified is:

Practice 4: Encouraging the enactment of fuel-saving operations whenever operationally possible, including unfreezing of ostensible operative routines and refreezing of new performative routines.

Moreover, the above discussion shows that the close collaboration between middle managers on board, in cooperation with the customers, played a vital role in carrying out fuel-saving operations. Offshore middle managers constituted key organizational actors in promoting and implementing the strategic idea and were recognized as such within the organizational system. So, the fifth strategy practice identified is:

Practice 5: Acknowledging middle managers on board the offshore service vessels as the key organizational strategy makers.

A further key practice was to organize the "green operations" campaign as a competition among vessels in the company's fleet. The internal competition was structured such that the "green operations" carried out were recorded on a daily basis and reported to the project leader. The project leader further reported accumulated "green operations" for all vessels on a quarterly basis. The number one vessel to conduct fuel-saving operations for a quarter was awarded a small amount of cash to its welfare fund. In addition the crews on board the three best vessels were awarded T-shirts marked with a "green operations" symbol. Furthermore, a vessel that managed to achieve the target of two hundred fuel-saving operations during a year received a green flag to be hung from the mast showing that her crew has a strong focus on fuel-saving operations in their day-to-day work.

The internal competition among the vessels in executing fuel-saving operations encouraged offshore middle managers and their crews to maintain momentum in the strategizing processes, continually looking for new ways of operating the vessels in an environmentally sustainable way, as confirmed below.

"Carrying out fuel-saving operations has become an internal competition where one does not want to appear too low on the quarterly reports as regards 'green operations' carried out." (Captain 1)

The social pressure to carry out fuel-saving “green operations” is confirmed by the following statement underlining the strong competition between the shifts on board a vessel in achieving the most fuel-saving operations.

“I want to be on the best shift in carrying out fuel-saving operations.” (Chief mate 4)

Therefore, the sixth strategy practice identified is:

Practice 6: Organizing the campaign as a competition among the vessels in carrying out the most fuel-saving “green operations.”

C. Practices throughout all the strategizing processes

Corporate leadership of the campaign constitutes the final vital practice in realizing environmentally sustainable operative praxis identified. Key activities in this respect are leadership of the campaign throughout the entire strategy making process. A crucial practitioner was the project leader of the campaign, supported by the top management team of the company. The project leader follows up, supports, and facilitates the campaign on a continuous basis, and integrates the various activities and actions associated with the campaign into a coherent and collective process.

Corporate activities include among other things to facilitate the establishment of a repertoire for how to act to transform the strategic idea into activities, in cooperation with offshore middle managers. It also includes the construction of a goal-oriented and innovative contractual arrangement that supported the strategic idea to operate in an environmentally sustainable way. It further implies continuous following-up, support and facilitating of the strategy making processes, including providing appraisals for carrying out “green operations”. In addition, the project leader promotes the campaign internally as well as externally, i.e., towards customers, the media, and other external stakeholders. Therefore, corporate leadership of the strategy making processes constituted a key practice in facilitating the strategic idea into environmentally sustainable praxis, as identified below:

Practice 7: Corporate leadership of the strategizing processes, including following-up, supporting, and facilitating the strategy making processes on a continuous basis, from the introduction of the strategic idea to the realization of environmentally sustainable organizational praxis.

Below the identified practices are summarized.

Summary of findings

Our research identified seven practices in strategizing of environmentally sustainable praxis on boards offshore service vessels. Creating and promoting a strategic idea that resonated with prevailing institutional and organizational trends, was the first key practice in preparing the “green operations” campaign. Bridging the gap between the strategic idea and how “green” fuel-saving operations might be carried at the micro-organizational level, in cooperation with offshore middle managers, was the second preparatory practice. Constructing a goal-oriented and innovative

contractual arrangement that supported the strategic idea to operate in an environmentally sustainable way was the third preparatory practice.

A key practice in implementing environmentally sustainable operative praxis was encouraging enactment of fuel-saving operations whenever operationally possible. Further, acknowledging middle managers on board the vessels as crucial practitioner in transforming the strategic idea into reality, as well as organizing the campaign as a competition among the vessels in carrying out the most fuel-saving “green operations”, were the next two key practices in implementing environmentally sustainable praxis.

Finally, our findings point to that strategizing of environmentally sustainable praxis on board the vessels demanded corporate leadership throughout the entire strategy making processes, from the introduction of a strategic idea to the realization of new organizational praxis.

TABLE 3. STRATEGY PRACTICES IN STRATEGIZING ENVIRONMENTALLY SUSTAINABLE ORGANIZATIONAL PRAXIS

<p>Practices in preparing the campaign</p> <p>Practice 1: Creating and promoting a strategic idea that resonated with prevailing institutional and organizational trends and values regarding environmental sustainability.</p> <p>Practice 2: Establishing a repertoire for how to act to transform the strategic idea into practical realities, in cooperation with offshore middle managers.</p> <p>Practice 3: Constructing a goal-oriented and innovative contractual arrangement that supported the strategic idea to operate in an environmentally sustainable way.</p>
<p>Practices in implementing environmentally sustainable operative praxis</p> <p>Practice 4: Encouraging the enactment of fuel-saving operations whenever operationally possible, including unfreezing of ostensible operative routines and refreezing of new performative routines.</p> <p>Practice 5: Acknowledging middle managers on board the offshore service vessels as the key organizational strategy makers.</p> <p>Practice 6: Organizing the campaign as a competition among the vessels in carrying out the most fuel-saving “green operations.”</p>
<p>Practices throughout all the strategizing processes</p> <p>Practice 7: Corporate leadership of the strategizing processes, including following-up, supporting, and facilitating the strategy making processes on a continuous basis, from the introduction of the strategic idea to the realization of environmentally sustainable organizational praxis.</p>

Discussion and Implications

The guiding research question was how a strategic idea for operating offshore service vessels in an environmentally sustainable way was strategized into praxis. Our findings reveal that realizing environmentally sustainable operation constitutes a multilevel and multifaceted challenge demanding a set of strategy practices, including preparatory practices, implementation practices, as well as corporate following-up the strategizing processes on a continuous basis. The initial strategizing challenge encountered was creating and promoting a strategic idea, or vision, that resonated with prevailing institutional and organizational trends and values regarding environmental

sustainability within the offshore shipping industry (Skjølsvik et al., 2000; Norway, 2008; Dalsøren, 2009; Norwegian Governmental Report, 2011-2012; Behring, 2012). The idea to operate the fleet of offshore service vessels in an environmental-friendly way appealed to environmental sustainability as a driving force (Alvesson, 2011), in addition to financial and operational goals. It was “infused with values beyond the technical requirements of the task at hand” (Selznick, 1957: 17). The finding indicates that innovative strategic ideas that resonate with prevailing organizational and institutional values stand a better chance of becoming organizational reality than if they did not.

Strategic ideas are, however, often not realized because organizational practitioners do not know how to transform the ideas into practical realities (Beer et al., 1990). Here the strategic idea to operate offshore service vessels in an environmentally sustainable way was realized by developing relevant actions, or a repertoire of seven categories of fuel-saving operations, which were institutionalized and practiced. Taking advantage of offshore middle managers` operational knowledge constituted key element in developing and realizing the strategies.

The construction of a goal-oriented and innovative contractual arrangement that supported the strategic idea constituted a further key preparatory practice. The contractual arrangement constructed contributed to a triple bottom line: 1) a “green,” environmentally sustainable image for the shipping company as well as their customers, 2) an improved competitive position for the company due to lower operating and maintenance costs, while at the same time providing for financial benefits for the customers because of reduced diesel fuel costs, and, 3) honored rewards to the actors on board the vessels.

The customers were locked-in as business partners in the organizational strategizing processes through sharing the financial savings obtained equally between customers and contributions to the Norwegian Rainforest Foundation. This approach towards organizational strategizing corresponds with Schaffer and Thomson`s (1992) statement that a successful change begins with results. Here, however, the results were reputational *as well as* financial, and shared between external and company internal stakeholders. Environmental sustainability and commerciality constituted mutually reinforcing drivers of the strategizing processes (Moir and Kennerley, 2010), contributing to financial as well as reputational benefits both for the customers and for the company, in addition to appreciative rewards to the micro-organizational practitioners on board the vessels.

In the research case offshore managers were encouraged to enact “green” fuel-saving operations whenever operationally by unfreezing of ostensible operative routines and refreezing of new performative routines (Feldman and Pentland 2003). Acknowledging offshore middle managers as key strategy practitioners constitutes a vital practice in realizing the stated idea. Realizing environmentally sustainable praxis rested above all on offshore managers in carrying out “green operations”. Offshore middle managers` roles and responsibilities as organizational strategy makers were further reinforced by organizing the campaign as an internal competition among the vessels in carrying out the most fuel-saving operations. The internal competition contributed to creating and maintaining momentum in realizing environmentally sustainable praxis on board the vessels.

Last, but not least, our findings confirm the importance of corporate leadership of organizational strategizing processes, in line with Jarzabowski et al. (2007) and Johnson et al. (2007). Corporate managers following-up, supporting, and facilitating the campaign throughout all of the strategy

making processes, constituted a crucial practice for sponsoring and maintaining momentum in strategizing of an evolving stream of fuel-saving “green operations” over time, from the introduction of the strategic idea, to following-up, supporting, and facilitating the strategy making processes on a continuous basis.

Contributions and Further Research

The research contributes to advance present knowledge about how organizational actors develop and practice activities to realize a strategic idea. The research suggests that organizational strategy making must involve micro-organizational practitioners as well as take advantage of their local knowledge, confirming the vital role of middle managers as frontline actors in organizational strategy making processes. The case study further demonstrates the importance of financial arrangements supporting organizational strategizing efforts, aligning the organizational strategizing efforts and business models. Our findings also indicate that organizational strategizing efforts should be linked to the extra-organizational level (Whittington 2006), suggesting that strategic ideas that resonate with prevailing institutional and organizational trends and values stand a better chance of becoming organizational reality than if they did not.

The study indicates that successful application of the stated strategy practices presupposes contextual understanding and sensitivity. In the research case the idea to operate the fleet of offshore service vessels in an environmentally sustainable manner resonated with prevailing institutional and organizational trends and values. The findings should, therefore, not be blindly copied by other organizations. Before trying to implement the present findings, detailed knowledge of the new context is required. As stated by Weich (1990; Tsoukas 2006), good strategy-theorizing, like good strategies, invites change agents to “rewrite” their experiences as regards what constitute successful strategy practices, reflecting idiographic organizational contexts. So, just as thoughts and actions are intimately connected, so is theorizing on organizational strategizing and strategy making.

The study indicates several areas for further research. One is the role of visions as guides in organizational strategizing processes, investigating what makes a vision a powerful driver in transforming a strategic idea into organizational reality. Another area for further research is the role of middle- and first-line managers as practitioners in organizational strategizing processes, including practices in mobilizing them as campaigners in realizing stated strategic ambitions. A third area is on ambidextrous challenges related to organizational strategizing, investigating challenges in balancing innovations and implementation of the stated innovations into organizational praxis. An additional area for research is the organizational and institutional values as drivers of organizational strategizing efforts.

APPENDIX I

Seven categories of “green operations” were defined through which a vessel could streamline its environmental performance and focus its efforts on operating the vessel in a more environmentally sustainable way. The seven categories were:

- Anchoring
- Drift
- Reducing transit speed
- “Green” dynamic positioning
- Stopping the main engine
- Optimizing trim, and
- Reducing electrical consumption

A registration system was established for the registration of fuel-saving operations, and each vessel was supposed to report “green operations” on a daily basis, and to submit a quarterly report to the main office.

The CNO concept

In the CNO concept the company invites their customers to be involved at three levels of the company’s environmental CNO work:

- The customer is given an overview of a vessel’s CO₂ accounts.
- The shipping company introduces measures to reduce fuel-consumption on the ships, and for each “green operation” registered there is a direct result in terms of reduced CO₂, NO_x, and other exhaust emissions. Moreover, the company pays the Norwegian Rainforest Foundation for the preservation of 1000 m² of rainforest a year for each fuel-saving operation carried out.
- In collaboration with its customers, the company compensates for its emissions by investing in and supporting projects that are certified for CO₂ cuts in accordance with the United Nations climate quotas.

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